

AZIMUTH OR TRUE BEARING.

LATITUDE 11°.			DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 11°.		
Hour Angle.			60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.			
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.	0 /	
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	0 00	
	10	1 39	1 34	1 31	1 27	1 22	1 18	1 14	1 11	1 07	1 03	1 00	1 00	0	10	1 03	
	20	3 18	3 10	3 01	2 53	2 44	2 36	2 29	2 21	2 13	2 07	2 00	2 00	0	20	1 59	
	30	4 56	4 43	4 31	4 18	4 06	3 53	3 42	3 31	3 20	3 10	3 07	3 07	0	30	2 59	
	40	6 33	6 16	5 59	5 42	5 27	5 10	4 55	4 40	4 26	4 11	4 03	4 03	0	40	3 58	
	50	8 08	7 47	7 25	7 05	6 45	6 26	6 07	5 49	5 31	5 13	5 03	5 03	0	50	4 56	
1	00	9 42	9 16	8 51	8 27	8 04	7 40	7 18	6 56	6 34	6 13	5 52	5 52	1	00	5 49	
	10	11 12	10 43	10 14	9 47	9 19	8 53	8 27	8 02	7 38	7 13	6 49	6 49	1	10	6 49	
	20	12 41	12 08	11 35	11 04	10 35	10 04	9 35	9 06	8 39	8 11	7 44	7 44	1	20	7 44	
	30	14 06	13 30	12 55	12 20	11 47	11 13	10 41	10 10	9 38	9 08	8 38	8 38	1	30	8 38	
	40	15 28	14 49	14 10	13 33	12 56	12 20	11 45	11 10	10 36	10 03	9 30	9 30	1	40	9 30	
	50	16 47	16 05	15 23	14 44	14 04	13 25	12 46	12 09	11 32	10 56	10 21	10 21	1	50	10 21	
2	00	18 03	17 18	16 34	15 51	15 09	14 28	13 47	13 06	12 27	11 48	11 11	11 11	2	00	11 11	
	10	19 15	18 28	17 41	16 55	16 11	15 27	14 43	14 01	13 19	12 38	11 58	11 58	2	10	12 08	
	20	20 22	19 34	18 45	17 57	17 11	16 25	15 38	14 54	14 10	13 26	12 44	12 44	2	20	13 07	
	30	21 27	20 36	19 45	18 56	18 07	17 19	16 31	15 44	14 58	14 12	13 27	13 27	2	30	14 08	
	40	22 28	21 35	20 43	19 51	19 01	18 10	17 20	16 31	15 43	14 55	14 08	14 08	2	40	15 09	
	50	23 26	22 31	21 37	20 43	19 51	18 59	18 07	17 16	16 27	15 37	14 48	14 48	2	50	16 09	
3	00	24 19	23 23	22 27	21 32	20 38	19 45	18 52	17 59	17 08	16 16	15 26	15 26	3	00	16 09	
	10	25 09	24 11	23 15	22 18	21 23	20 27	19 33	18 39	17 46	16 54	16 01	16 01	3	10	17 09	
	20	25 54	24 56	23 58	23 01	22 04	21 08	20 12	19 17	18 22	17 28	16 34	16 34	3	20	18 09	
	30	26 37	25 37	24 38	23 40	22 42	21 45	20 48	19 52	18 55	18 00	17 05	17 05	3	30	19 09	
	40	27 15	26 15	25 15	24 16	23 18	22 19	21 21	20 23	19 26	18 30	17 34	17 34	3	40	20 09	
	50	27 50	26 50	25 49	24 49	23 50	22 50	21 51	20 53	19 55	18 57	18 00	18 00	3	50	21 09	
4	00	28 21	27 21	26 19	25 19	24 19	23 19	22 19	21 20	20 21	19 22	18 25	18 25	4	00	21 09	
	10	28 50	27 48	26 46	25 45	24 45	23 44	22 44	21 45	20 45	19 46	18 46	18 46	4	10	22 09	
	20	29 14	28 12	27 10	26 09	25 08	24 08	23 07	22 05	21 06	20 05	19 07	19 07	4	20	23 09	
	30	29 35	28 33	27 31	26 30	25 29	24 27	23 26	22 25	21 24	20 24	19 24	19 24	4	30	24 09	
	40	29 53	28 52	27 49	26 47	25 46	24 44	23 43	22 42	21 41	20 39	19 39	19 39	4	40	25 09	
	50	30 08	29 06	28 04	27 02	26 01	24 58	23 56	22 55	21 54	20 53	19 52	19 52	4	50	26 09	
5	00	30 20	29 19	28 15	27 13	26 12	25 10	24 08	23 06	22 05	21 04	20 02	20 02	5	00	26 09	
	10	30 29	29 27	28 24	27 23	26 21	25 19	24 18	23 15	22 14	21 13	20 11	20 11	5	10	27 09	
	20	30 35	29 33	28 31	27 29	26 27	25 26	24 24	23 22	22 20	21 18	20 17	20 17	5	20	28 09	
	30	30 37	29 35	28 33	27 32	26 31	25 29	24 27	23 25	22 25	21 23	20 21	20 21	5	30	29 09	
	40	30 37	29 36	28 34	27 33	26 32	25 31	24 28	23 27	22 26	21 24	20 23	20 23	5	40	30 09	
	50	30 34	29 33	28 31	27 31	26 30	25 28	24 26	23 27	22 25	21 24	20 23	20 23	5	50	31 09	
6	00	30 28	29 27	28 27	27 26	26 26	25 25	24 23	23 23	22 22	21 21	20 20	20 20	6	00	31 09	
	10	30 19	29 19	28 19	27 19	26 18	25 19	24 18	23 17	22 17	21 17	20 16	20 16	6	10	32 09	
	20	30 08	29 08	28 09	27 09	26 09	25 09	24 09	23 09	22 09	21 09	20 10	20 10	6	20	33 09	
	30	29 53	28 54	27 55	26 56	25 57	24 58	23 58	22 59	22 00	21 00	20 01	20 01	6	30	34 09	
	40	29 36	28 38	27 39	26 41	25 42	24 44	23 45	22 46	21 47	20 49	19 50	19 50	6	40	35 09	
	50	29 16	28 19	27 21	26 23	25 25	24 28	23 30	22 31	21 33	20 35	19 37	19 37	6	50	36 09	
7	00	28 54	27 58	27 01	26 04	25 07	24 09	23 11	22 14	21 17	20 20	19 23	19 23	7	00	36 09	
	10	28 28	27 33	26 37	25 41	24 45	23 48	22 51	21 55	20 59	20 03	19 06	19 06	7	10	37 09	
	20	28 01	27 07	26 11	25 16	24 21	23 25	22 29	21 33	20 38	19 43	18 48	18 48	7	20	38 09	
	30	27 31	26 37	25 43	24 48	23 54	23 00	22 05	21 10	20 16	19 21	18 27	18 27	7	30	39 09	
	40	26 58	26 06	25 12	24 19	23 25	22 32	21 38	20 44	19 51	18 58	18 05	18 05	7	40	40 09	
	50	26 23	25 31	24 38	23 46	22 53	22 02	21 09	20 17	19 25	18 32	17 40	17 40	7	50	41 09	
8	00	25 45	24 53	24 02	23 11	22 20	21 29	20 37	19 46	18 56	18 05	17 14	17 14	8	00	41 09	
	10	25 04	24 15	23 24	22 34	21 45	20 55	20 05	19 15	18 25	17 35	16 46	16 46	8	10	42 09	
	20	24 21	23 32	22 43	21 55	21 07	20 18	19 29	18 41	17 53	17 05	16 16	16 16	8	20	43 09	
	30	23 36	22 48	22 01	21 14	20 27	19 39	18 52	18 06	17 18	16 32	15 45	15 45	8	30	44 09	
	40	22 47	22 02	21 16	20 30	19 44	18 59	18 13	17 28	16 43	15 57	15 12	15 12	8	40	45 09	
	50	21 57	21 13	20 28	19 44	19 00	18 16	17 32	16 48	16 05	15 21	14 38	14 38	8	50	46 09	
9	00	21 04	20 22	19 39	18 55	18 13	17 32	16 49	16 06	15 25	14 43	14 01	14 01	9	00	46 09	
	10	20 09	19 26	18 47	18 06	17 25	16 44	16 05	15 24	14 44	14 03	13 24	13 24	9	10	47 09	
	20	19 12	18 32	17 53	17 14	16 35	15 56	15 18	14 39	14 01	13 23	12 44	12 44	9	20	48 09	
	30	18 12	17 35	16 57	16 20	15 43	15 06	14 29	13 53	13 17	12 40	12 04	12 04	9	30	49 09	
	40	17 10	16 35	15 59	15 24	14 46	14 14	13 40	13 05	12 30	11 56	11 22	11 22	9	40	50 09	
	50	16 06	15 33	15 00	14 26	13 53	13 20	12 47	12 15	11 43	11 11	10 39	10 39	9	50	51 09	
10	00	15 01	14 29	13 58	13 27	12 56	12 25	11 55	11 24	10 54	10 24	9 54	9 54	10	00	51 09	
	10	13 52	13 23	12 54	12 25	11 57	11 29	11 00	10 33	10 05	9 37	9 09	9 09	10	10	52 09	
	20	12 42	12 17	11 50	11 23	10 57	10 31	10 05	9 39	9 14	8 48	8 23	8 23	10	20	53 09	
	30	11 32	11 07	10 43	10 19	9 55	9 32	9 08	8 45	8 22	7 59	7 36	7 36	10	30	54 09	
	40	10 19	9 57	9 35	9 13	8 52	8 31	8 10	7 49	7 28	7 07	6 47	6 47	10	40	55 09	
	50	9 05	8 45	8 26	8 07	7 48	7 30	7 11	6 52	6 34	6 16	5 57	5 57	10	50	56 09	
11	00	7 49	7 32	7 16	6 59	6 43	6 27	6 10	5 55	5 40	5 23	5 08	5 08	11	00	56 09	
	10	6 32	6 19	6 05	5 51	5 38	5 23	5 10	4 57	4 44	4 31	4 18	4 18	11	10	57 09	
	20	5 15	5 04	4 53	4 42	4 31	4 20	4 09	3 58	3 48	3 37	3 26	3 26	11	20	58 09	
	30	3 57	3 48	3 40	3 31	3 23	3 15	3 07	2 59	2 51	2 43	2 35	2 35	11	30	59 09	
	40	2 39	2 33	2 27	2 22	2 16	2 11	2 06	1 59	1 54	1 49	1 44	1 44	11	40	60 09	
	50	1 19	1 17	1 14	1 11	1 08	1 06	1 03	1 00	0 58	0 55	0 52	0 52	11	50	61 09	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	61 09	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 12°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 12°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /	
		00	00	00	00	00	00	00	00	00	00	00	00	00	00
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
0	10	10 51	9 58	9 12	8 32	7 57	7 25	6 58	6 33	6 10	5 50	5 31	5 14	5 00	10 20
0	20	20 53	19 17	17 54	16 39	15 33	14 35	13 42	12 54	12 10	11 31	10 54	10 20	10 00	20 30
0	30	29 39	27 34	25 43	24 04	22 34	21 13	20 00	18 53	17 51	16 55	16 03	15 15	15 00	30 40
0	40	36 58	34 38	32 31	30 36	28 50	27 15	25 46	24 23	23 09	21 58	20 53	19 53	19 00	40 50
0	50	42 57	40 32	38 18	36 13	34 19	32 33	30 53	29 22	27 56	26 37	25 21	24 11	23 00	50 00
1	00	47 48	45 24	43 08	41 01	39 02	37 10	35 26	33 47	32 14	30 47	29 25	28 08	27 00	10 10
1	10	51 44	49 23	47 11	45 03	43 03	41 10	39 23	37 40	36 04	34 32	33 06	31 43	30 30	20 20
1	20	54 56	52 41	50 31	48 27	46 29	44 36	42 48	41 05	39 26	37 52	36 22	34 56	33 40	30 30
1	30	57 33	55 24	53 20	51 19	49 24	47 33	45 46	44 03	42 24	40 49	39 17	37 49	36 30	40 40
1	40	59 42	57 39	55 40	53 45	51 52	50 05	48 19	46 37	44 50	43 25	41 53	40 25	39 00	50 50
1	50	61 28	59 32	57 38	55 45	53 59	52 14	50 32	48 52	47 15	45 42	44 10	42 42	41 10	00 00
2	00	62 56	61 05	59 18	57 31	55 47	54 05	52 26	50 49	49 14	47 42	46 12	44 44	43 10	10 10
2	10	64 09	62 25	60 41	58 59	57 19	55 40	54 05	52 30	50 57	49 27	47 58	46 31	45 00	20 20
2	20	65 11	63 31	61 52	60 13	58 37	57 03	55 29	53 57	52 27	50 58	49 31	48 06	46 30	30 30
2	30	66 03	64 27	62 52	61 17	59 45	58 13	56 43	55 14	53 46	52 18	50 53	49 30	48 00	40 40
2	40	66 45	65 13	63 42	62 12	60 41	59 13	57 46	56 19	54 53	53 29	52 05	50 43	49 10	50 50
2	50	67 20	65 51	64 24	62 56	61 30	60 05	58 40	57 16	55 52	54 30	53 08	51 47	50 10	00 00
3	00	67 48	66 23	65 02	63 35	62 11	60 48	59 26	58 04	56 43	55 23	54 03	52 44	51 10	10 10
3	10	68 12	66 49	65 28	64 06	62 45	61 25	60 05	58 46	57 27	56 08	54 51	53 33	52 10	20 20
3	20	68 29	67 11	65 51	64 33	63 14	61 55	60 38	59 20	58 03	56 47	55 31	54 15	52 40	30 30
3	30	68 43	67 27	66 10	64 53	63 37	62 21	61 05	59 50	58 35	57 20	56 06	54 52	53 20	40 40
3	40	68 54	67 39	66 25	65 10	63 57	62 41	61 28	60 14	59 01	57 48	56 34	55 22	54 00	50 50
3	50	68 59	67 48	66 35	65 22	64 10	62 57	61 45	60 34	59 22	58 11	56 59	55 48	54 10	00 00
4	00	69 03	67 52	66 42	65 31	64 20	63 10	61 59	60 49	59 39	58 28	57 18	56 09	54 40	10 10
4	10	69 03	67 54	66 46	65 38	64 27	63 18	62 09	60 59	59 51	58 43	57 33	56 25	55 00	20 20
4	20	69 01	67 53	66 46	65 38	64 30	63 22	62 15	61 08	60 00	58 53	57 45	56 37	55 10	30 30
4	30	68 56	67 49	66 43	65 36	64 30	63 24	62 17	61 11	60 05	58 58	57 52	56 46	55 10	40 40
4	40	68 49	67 43	66 38	65 33	64 27	63 23	62 18	61 12	60 06	58 59	57 56	56 51	55 10	50 50
4	50	68 38	67 34	66 31	65 26	64 22	63 18	62 14	61 10	60 05	58 59	57 57	56 52	55 10	00 00
5	00	68 26	67 23	66 20	65 17	64 14	63 11	62 08	61 04	60 01	58 57	57 54	56 51	55 10	10 10
5	10	68 12	67 09	66 06	65 06	64 03	63 01	61 59	60 56	59 53	58 51	57 48	56 46	55 10	20 20
5	20	67 55	66 54	65 53	64 52	63 49	62 48	61 47	60 45	59 43	58 41	57 39	56 37	55 10	30 30
5	30	67 36	66 36	65 35	64 35	63 34	62 33	61 32	60 31	59 30	58 28	57 27	56 27	55 10	40 40
5	40	67 16	66 16	65 16	64 15	63 15	62 15	61 14	60 15	59 14	58 13	57 12	56 12	55 10	50 50
5	50	66 53	65 53	64 54	63 54	62 54	61 55	60 55	59 55	58 56	57 55	56 55	55 55	54 10	00 00
6	00	66 28	65 29	64 30	63 31	62 31	61 32	60 32	59 33	58 34	57 35	56 35	55 35	54 10	10 10
6	10	66 01	65 02	64 03	63 04	62 06	61 07	60 07	59 09	58 10	57 12	56 12	55 13	54 10	20 20
6	20	65 31	64 34	63 35	62 36	61 37	60 38	59 40	58 42	57 44	56 45	55 46	54 47	53 10	30 30
6	30	64 59	64 00	63 03	62 04	61 06	60 08	59 09	58 11	57 13	56 15	55 17	54 19	53 10	40 40
6	40	64 25	63 27	62 29	61 30	60 33	59 34	58 37	57 39	56 41	55 43	54 45	53 48	52 10	50 50
6	50	63 48	62 50	61 52	60 54	59 56	58 59	58 01	57 03	56 06	55 08	54 10	53 13	52 10	00 00
7	00	63 08	62 10	61 13	60 15	59 17	58 20	57 22	56 25	55 27	54 30	53 33	52 36	51 10	10 10
7	10	62 26	61 28	60 30	59 32	58 35	57 37	56 40	55 42	54 45	53 49	52 51	51 55	50 10	20 20
7	20	61 41	60 42	59 45	58 47	57 50	56 52	55 55	54 58	54 01	53 04	52 07	51 11	50 10	30 30
7	30	60 53	59 55	58 57	57 59	57 01	56 04	55 07	54 09	53 13	52 17	51 20	50 24	49 10	40 40
7	40	60 00	59 02	58 04	57 06	56 09	55 12	54 14	53 18	52 22	51 25	50 29	49 33	48 10	50 50
7	50	59 05	58 06	57 09	56 11	55 13	54 16	53 20	52 22	51 26	50 30	49 34	48 38	47 10	00 00
8	00	58 04	57 07	56 09	55 11	54 14	53 17	52 20	51 23	50 27	49 31	48 36	47 40	46 10	10 10
8	10	57 01	56 03	55 05	54 07	53 10	52 13	51 16	50 19	49 24	48 28	47 33	46 38	45 10	20 20
8	20	55 54	54 55	53 58	53 00	52 02	51 05	50 09	49 12	48 17	47 21	46 26	45 32	44 10	30 30
8	30	54 41	53 42	52 45	51 47	50 49	49 52	48 56	48 00	47 04	46 10	45 15	44 21	43 10	40 40
8	40	53 23	52 25	51 27	50 28	49 32	48 34	47 39	46 43	45 48	44 54	44 00	43 07	42 10	50 50
8	50	52 00	51 01	50 03	49 06	48 09	47 13	46 17	45 21	44 27	43 33	42 39	41 46	40 10	00 00
9	00	50 31	49 32	48 35	47 37	46 40	45 44	44 49	43 54	43 00	42 07	41 14	40 21	39 10	10 10
9	10	48 55	47 57	46 59	46 02	45 05	44 10	43 15	42 21	41 28	40 36	39 43	38 52	37 10	20 20
9	20	47 14	46 15	45 18	44 21	43 25	42 30	41 37	40 42	39 50	38 59	38 07	37 17	36 10	30 30
9	30	45 24	44 26	43 29	42 33	41 37	40 44	39 51	39 00	38 08	37 16	36 25	35 37	34 10	40 40
9	40	43 26	42 29	41 32	40 37	39 44	38 50	37 58	37 07	36 16	35 27	34 39	33 51	32 10	50 50
9	50	41 19	40 23	39 29	38 34	37 42	36 50	35 59	35 08	34 21	33 33	32 45	31 59	30 10	00 00
10	00	39 05	38 10	37 16	36 23	35 32	34 42	33 53	33 05	32 18	31 31	30 46	30 02	28 10	10 10
10	10	36 41	35 47	34 56	34 05	33 14	32 26	31 39	30 53	30 08	29 24	28 40	27 58	26 10	20 20
10	20	34 07	33 15	32 26	31 36	30 49	30 03	29 18	28 34	27 51	27 10	26 29	25 49	24 10	30 30
10	30	31 23	30 33	29 46	28 55	28 15	27 32	26 49	26 09	25 29	24 50	24 11	23 34	22 10	40 40
10	40	28 27	27 42	26 58	26 15	25 33	24 52	24 13	23 36	22 59	22 23	21 47	21 14	20 10	50 50
10	50	25 23	24 41	24 01	23 21	22 43	22 07	21 30	20 56	20 23	19 51	19 18	18 48	17 10	00 00
11	00	22 08	21 30	20 54	20 18	19 45	19 13	18 41	18 10	17 40	17 12	16 44	16 18	15 10	10 10
11	10	18 44	18 11	17 40	17 09	16 40	16 12	15 45	15 18	14 54	14 29	14 05	13 42	13 00	20 20
11	20	15 11	14 43	14 17	13 52	13 28	13 06	12 44	12 22	12 01	11 41	11 22	11 03	10 10	30 30
11	30	11 30	11 09	10 49	10 30	10 12	9 53	9 36	9 20	9 05	8 50	8 34	8 20	7 10	40 40
11	40	7 43	7 29	7 16	7 02	6 50	6 38	6 27	6 15	6 05	5 54	5 45	5 34	4 10	50 50
11	50	3 53	3 45	3 38	3 33	3 26	3 20	3 14	3 09	3 03	2 58	2 52	2 43	1 10	00 00
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East: and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East

AZIMUTH OR TRUE BEARING.

LATITUDE 12°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 12°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		0	0	0	0	0	0	0	0	0	0	0	0		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	4 58	4 43	4 29	4 16	4 04	3 53	3 43	3 33	3 23	3 15	3 06	2 58		10
	20	9 50	9 20	8 54	8 29	8 05	7 43	7 22	7 03	6 45	6 27	6 11	5 55		20
	30	14 30	13 48	13 09	12 33	11 59	11 27	10 57	10 28	10 01	9 36	9 12	8 49		30
	40	18 57	18 04	17 15	16 28	15 45	15 03	14 25	13 48	13 12	12 39	12 08	11 38		40
	50	23 06	22 04	21 06	20 10	19 19	18 30	17 43	16 59	16 16	15 36	14 57	14 21		50
1	00	26 55	25 46	24 40	23 39	22 40	21 44	20 51	19 59	19 11	18 25	17 41	16 59	1	00
	10	30 24	29 11	27 59	26 51	25 47	24 46	23 47	22 51	21 57	21 05	20 15	19 28		10
	20	33 34	32 16	31 01	29 49	28 41	27 34	26 31	25 30	24 32	23 36	22 43	21 50		20
	30	36 25	35 05	33 47	32 32	31 20	30 11	29 04	27 59	26 57	25 58	24 59	24 04		30
	40	38 59	37 36	36 16	35 00	33 46	32 34	31 24	30 17	29 12	28 09	27 08	26 10		40
	50	41 15	39 53	38 32	37 14	35 58	34 44	33 33	32 24	31 16	30 11	29 08	28 06		50
2	00	43 18	41 55	40 34	39 15	37 58	36 44	35 31	34 20	33 12	32 04	30 59	29 55	2	00
	10	45 06	43 43	42 23	41 04	39 47	38 31	37 18	36 06	34 56	33 48	32 41	31 36		10
	20	46 42	45 20	44 00	42 41	41 25	40 09	38 55	37 43	36 32	35 23	34 15	33 08		20
	30	48 07	46 47	45 27	44 09	42 52	41 36	40 23	39 11	37 59	36 50	35 41	34 34		30
	40	49 23	48 03	46 45	45 27	44 11	42 56	41 43	40 29	39 18	38 08	36 99	35 51		40
	50	50 28	49 10	47 53	46 36	45 21	44 06	42 53	41 41	40 30	39 19	38 10	37 02		50
3	00	51 27	50 09	48 53	47 37	46 23	45 10	43 57	42 44	41 34	40 23	39 14	38 06	3	00
	10	52 17	51 01	49 46	48 31	47 18	46 05	44 53	43 42	42 31	41 21	40 12	39 04		10
	20	53 01	51 47	50 32	49 19	48 06	46 54	45 43	44 32	43 22	42 13	41 04	39 56		20
	30	53 39	52 25	51 13	50 01	48 49	47 38	46 27	45 17	44 07	42 58	41 50	40 42		30
	40	54 10	52 59	51 48	50 36	49 26	48 15	47 05	45 56	44 47	43 38	42 31	41 23		40
	50	54 37	53 27	52 17	51 07	49 57	48 48	47 38	46 30	45 22	44 14	43 06	41 99		50
4	00	54 59	53 50	52 41	51 32	50 23	49 15	48 06	46 58	45 51	44 44	43 37	42 30	4	00
	10	55 16	54 09	53 00	51 53	50 45	49 37	48 30	47 23	46 16	45 10	44 03	42 57		10
	20	55 30	54 24	53 16	52 09	51 03	49 56	48 49	47 42	46 37	45 30	44 25	43 20		20
	30	55 39	54 33	53 27	52 21	51 16	50 10	49 04	47 59	46 53	45 47	44 42	43 36		30
	40	55 45	54 40	53 35	52 30	51 25	50 20	49 15	48 10	47 05	46 01	44 56	43 52		40
	50	55 48	54 44	53 40	52 35	51 31	50 27	49 22	48 19	47 14	46 10	45 06	44 02		50
5	00	55 47	54 44	53 41	52 36	51 33	50 29	49 26	48 23	47 19	46 16	45 12	44 09	5	00
	10	55 43	54 41	53 37	52 34	51 32	50 29	49 26	48 23	47 21	46 17	45 14	44 12		10
	20	55 35	54 33	53 31	52 29	51 27	50 25	49 23	48 21	47 19	46 17	45 14	44 12		20
	30	55 25	54 24	53 22	52 21	51 19	50 17	49 16	48 14	47 13	46 11	45 10	44 08		30
	40	55 11	54 11	53 10	52 09	51 09	50 07	49 07	48 06	47 04	46 04	45 03	44 02		40
	50	54 55	53 56	52 55	51 55	50 55	49 54	48 54	47 54	46 54	45 53	44 52	43 51		50
6	00	54 36	53 36	52 37	51 37	50 37	49 37	48 38	47 38	46 38	45 38	44 38	43 39	6	00
	10	54 14	53 15	52 15	51 16	50 17	49 18	48 19	47 19	46 20	45 21	44 20	43 21		10
	20	53 49	52 50	51 51	50 52	49 53	48 55	47 57	46 58	45 59	45 00	44 01	43 02		20
	30	53 21	52 23	51 24	50 26	49 28	48 30	47 32	46 33	45 34	44 36	43 38	42 40		30
	40	52 49	51 52	50 54	49 56	48 58	48 00	47 03	46 05	45 07	44 09	43 11	42 14		40
	50	52 16	51 19	50 21	49 23	48 27	47 29	46 32	45 34	44 37	43 40	42 42	41 45		50
7	00	51 39	50 41	49 45	48 47	47 51	46 54	45 57	45 00	44 03	43 06	42 10	41 13	7	00
	10	50 58	50 01	49 05	48 08	47 12	46 16	45 19	44 23	43 26	42 30	41 34	40 38		10
	20	50 15	49 19	48 21	47 25	46 30	45 34	44 39	43 42	42 46	41 50	40 55	40 00		20
	30	49 27	48 32	47 36	46 40	45 43	44 49	43 54	42 57	42 03	41 08	40 14	39 18		30
	40	48 37	47 42	46 46	45 51	44 56	44 01	43 06	42 11	41 16	40 22	39 28	38 34		40
	50	47 43	46 48	45 53	44 58	44 03	43 09	42 15	41 20	40 26	39 33	38 40	37 47		50
8	00	46 45	45 50	44 56	44 01	43 07	42 14	41 20	40 26	39 33	38 40	37 48	36 55	8	00
	10	45 43	44 49	43 55	43 01	42 08	41 14	40 22	39 29	38 36	37 44	36 52	36 00		10
	20	44 37	43 43	42 50	41 57	41 04	40 12	39 19	38 27	37 36	36 44	35 54	35 02		20
	30	43 28	42 35	41 41	40 49	39 57	39 05	38 14	37 22	36 32	35 41	34 51	34 01		30
	40	42 13	41 20	40 29	39 36	38 46	37 54	37 04	36 13	35 23	34 34	33 45	32 56		40
	50	40 54	40 02	39 11	38 19	37 30	36 39	35 50	35 01	34 12	33 23	32 35	31 47		50
9	00	39 30	38 39	37 49	36 59	36 09	35 20	34 31	33 43	32 56	32 09	31 22	30 35	9	00
	10	38 02	37 12	36 22	35 32	34 44	33 56	33 09	32 23	31 37	30 50	30 05	29 20		10
	20	36 28	35 36	34 50	34 02	33 16	32 29	31 43	30 57	30 13	29 28	28 45	28 01		20
	30	34 49	34 01	33 14	32 28	31 42	30 56	30 12	29 29	28 45	28 02	27 20	26 39		30
	40	33 04	32 18	31 33	30 47	30 04	29 19	28 37	27 55	27 14	26 32	25 52	25 12		40
	50	31 14	30 30	29 46	29 02	28 21	27 39	26 58	26 18	25 38	24 58	24 20	23 42		50
10	00	29 19	28 36	27 55	27 13	26 33	25 54	25 14	24 36	23 58	23 21	22 45	22 09	10	00
	10	27 17	26 37	25 57	25 18	24 40	24 03	23 26	22 50	22 15	21 40	21 05	20 31		10
	20	25 11	24 33	23 56	23 19	22 43	22 08	21 34	21 01	20 27	19 55	19 23	18 51		20
	30	22 58	22 23	21 48	21 15	20 42	20 10	19 38	19 07	18 37	18 06	17 37	17 08		30
	40	20 41	20 09	19 37	19 06	18 36	18 07	17 38	17 10	16 42	16 14	15 49	15 22		40
	50	18 19	17 49	17 21	16 53	16 27	16 00	15 34	15 09	14 44	14 20	13 56	13 33		50
11	00	15 51	15 26	15 01	14 36	14 13	13 49	13 28	13 06	12 44	12 23	12 02	11 42	11	00
	10	13 19	12 58	12 37	12 17	11 57	11 37	11 18	10 59	10 41	10 23	10 05	9 49		10
	20	10 45	10 26	10 09	9 53	9 37	9 21	9 04	8 50	8 35	8 21	8 08	7 53		20
	30	8 06	7 52	7 40	7 27	7 14	7 03	6 51	6 39	6 29	6 17	6 07	5 56		30
	40	5 26	5 16	5 08	4 59	4 51	4 43	4 34	4 27	4 19	4 13	4 05	3 58		40
	50	2 43	2 38	2 34	2 30	2 26	2 22	2 17	2 13	2 10	2 07	2 03	1 59		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 12°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 12°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		00	00	00	00	00	00	00	00	00	00	00	00		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
0	10	2 51	2 43	2 36	2 29	2 24	2 17	2 11	2 06	2 01	1 55	1 50	1 45	0	10
0	20	5 40	5 26	5 12	4 59	4 46	4 34	4 22	4 11	4 00	3 50	3 40	3 31	0	20
0	30	8 26	8 04	7 44	7 25	7 07	6 49	6 32	6 15	5 59	5 44	5 29	5 14	0	30
0	40	11 09	10 41	10 14	9 49	9 25	9 02	8 39	8 18	7 57	7 36	7 17	6 58	0	40
0	50	13 46	13 13	12 40	12 10	11 39	11 10	10 44	10 17	9 50	9 26	9 02	8 38	0	50
1	00	16 17	15 38	15 01	14 25	13 49	13 16	12 44	12 12	11 43	11 13	10 45	10 17	1	00
1	10	18 42	17 57	17 14	16 35	15 55	15 17	14 41	14 05	13 31	12 57	12 24	11 53	1	10
1	20	21 00	20 12	19 25	18 40	17 56	17 14	16 33	15 53	15 15	14 38	14 01	13 26	1	20
1	30	23 10	22 18	21 28	20 38	19 51	19 05	18 21	17 37	16 56	16 15	15 34	14 54	1	30
1	40	25 12	24 17	23 24	22 32	21 40	20 51	20 04	19 16	18 31	17 45	17 04	16 21	1	40
1	50	27 06	26 08	25 13	24 17	23 23	22 31	21 41	20 51	20 02	19 15	18 29	17 45	1	50
2	00	28 53	27 52	26 55	25 57	25 00	24 06	23 13	22 20	21 29	20 40	19 51	19 03	2	00
2	10	30 31	29 29	28 29	27 29	26 31	25 35	24 39	23 44	22 51	21 59	21 08	20 17	2	10
2	20	32 03	30 59	29 57	28 56	27 56	26 57	26 00	25 03	24 08	23 15	22 21	21 29	2	20
2	30	33 27	32 22	31 19	30 17	29 15	28 15	27 16	26 18	25 21	24 25	23 29	22 36	2	30
2	40	34 44	33 39	32 34	31 31	30 28	29 26	28 27	27 27	26 28	25 31	24 34	23 38	2	40
2	50	35 54	34 48	33 44	32 39	31 35	30 33	29 31	28 31	27 31	26 32	25 34	24 37	2	50
3	00	36 58	35 51	34 46	33 41	32 37	31 34	30 32	29 30	28 29	27 28	26 30	25 31	3	00
3	10	37 56	36 49	35 43	34 38	33 33	32 30	31 27	30 24	29 23	28 22	27 22	26 22	3	10
3	20	38 47	37 41	36 36	35 29	34 24	33 20	32 17	31 14	30 11	29 10	28 09	27 09	3	20
3	30	39 35	38 28	37 22	36 16	35 11	34 06	33 03	31 59	30 56	29 55	28 52	27 51	3	30
3	40	40 16	39 09	38 03	36 57	35 52	34 47	33 43	32 40	31 37	30 34	29 32	28 30	3	40
3	50	40 53	39 46	38 41	37 35	36 30	35 25	34 20	33 16	32 13	31 11	30 07	29 05	3	50
4	00	41 24	40 18	39 13	38 06	37 01	35 57	34 53	33 49	32 45	31 42	30 39	29 36	4	00
4	10	41 51	40 45	39 41	38 35	37 29	36 25	35 21	34 17	33 14	32 11	31 07	30 05	4	10
4	20	42 14	41 08	40 04	38 59	37 54	36 50	35 46	34 42	33 38	32 35	31 32	30 29	4	20
4	30	42 33	41 27	40 23	39 18	38 14	37 10	36 06	35 03	33 59	32 55	31 53	30 50	4	30
4	40	42 47	41 43	40 39	39 34	38 30	37 27	36 23	35 20	34 16	33 13	32 10	31 07	4	40
4	50	42 58	41 55	40 51	39 47	38 43	37 40	36 37	35 33	34 30	33 27	32 24	31 21	4	50
5	00	43 06	42 02	40 59	39 55	38 52	37 50	36 46	35 43	34 40	33 37	32 35	31 32	5	00
5	10	43 09	42 06	41 04	40 01	38 58	37 56	36 53	35 50	34 47	33 45	32 43	31 39	5	10
5	20	43 10	42 07	41 05	40 02	39 00	37 58	36 56	35 53	34 51	33 50	32 47	31 45	5	20
5	30	43 06	42 04	41 03	40 01	38 59	37 58	36 55	35 54	34 51	33 50	32 49	31 45	5	30
5	40	42 59	41 58	40 56	39 56	38 55	37 53	36 52	35 51	34 49	33 48	32 46	31 45	5	40
5	50	42 50	41 50	40 50	39 48	38 48	37 47	36 46	35 45	34 44	33 43	32 42	31 41	5	50
6	00	42 38	41 38	40 38	39 37	38 37	37 37	36 37	35 35	34 35	33 35	32 34	31 33	6	00
6	10	42 21	41 22	40 23	39 23	38 23	37 23	36 24	35 24	34 24	33 24	32 24	31 24	6	10
6	20	42 02	41 04	40 06	39 06	38 07	37 07	36 08	35 09	34 09	33 10	32 10	31 11	6	20
6	30	41 40	40 42	39 44	38 45	37 47	36 48	35 49	34 51	33 52	32 54	31 54	30 55	6	30
6	40	41 16	40 18	39 21	38 22	37 24	36 26	35 28	34 30	33 32	32 34	31 35	30 37	6	40
6	50	40 47	39 50	38 53	37 55	36 59	36 01	35 03	34 06	33 09	32 12	31 13	30 15	6	50
7	00	40 16	39 19	38 23	37 26	36 29	35 33	34 37	33 40	32 43	31 46	30 49	29 52	7	00
7	10	39 41	38 45	37 49	36 53	35 58	35 02	34 06	33 09	32 13	31 18	30 22	29 26	7	10
7	20	39 04	38 08	37 14	36 18	35 23	34 27	33 33	32 38	31 43	30 47	29 52	28 56	7	20
7	30	38 23	37 28	36 35	35 40	34 45	33 51	32 57	32 02	31 08	30 14	29 19	28 25	7	30
7	40	37 39	36 46	35 54	34 58	34 04	33 11	32 17	31 24	30 30	29 37	28 44	27 50	7	40
7	50	36 53	36 00	35 07	34 13	33 21	32 28	31 36	30 43	29 51	28 59	28 05	27 14	7	50
8	00	36 02	35 10	34 18	33 26	32 33	31 42	30 51	29 59	29 08	28 17	27 25	26 34	8	00
8	10	35 08	34 18	33 27	32 35	31 44	30 54	30 03	29 12	28 23	27 32	26 42	25 52	8	10
8	20	34 12	33 22	32 31	31 41	30 51	30 02	29 13	28 23	27 34	26 45	25 56	25 07	8	20
8	30	33 11	32 22	31 33	30 43	29 55	29 07	28 19	27 30	26 42	25 55	25 06	24 20	8	30
8	40	32 07	31 19	30 31	29 44	28 56	28 09	27 22	26 35	25 49	25 03	24 17	23 30	8	40
8	50	31 01	30 14	29 27	28 40	27 54	27 09	26 23	25 37	24 52	24 07	23 23	22 38	8	50
9	00	29 50	29 04	28 19	27 33	26 49	26 04	25 21	24 36	23 53	23 10	22 26	21 43	9	00
9	10	28 35	27 51	27 07	26 24	25 40	24 56	24 15	23 33	22 51	22 09	21 28	20 46	9	10
9	20	27 18	26 35	25 53	25 10	24 30	23 48	23 08	22 27	21 47	21 06	20 26	19 46	9	20
9	30	25 57	25 15	24 35	23 55	23 15	22 36	21 57	21 18	20 39	20 01	19 23	18 46	9	30
9	40	24 32	23 53	23 14	22 36	21 58	21 20	20 43	20 06	19 30	18 53	18 17	17 41	9	40
9	50	23 04	22 26	21 50	21 13	20 38	20 02	19 27	18 52	18 18	17 44	17 09	16 36	9	50
10	00	21 32	20 58	20 23	19 49	19 15	18 42	18 08	17 36	17 03	16 31	15 59	15 27	10	00
10	10	19 58	19 25	18 53	18 21	17 49	17 18	16 47	16 17	15 46	15 16	14 47	14 18	10	10
10	20	18 21	17 50	17 20	16 50	16 21	15 52	15 24	14 56	14 28	14 00	13 33	13 06	10	20
10	30	16 39	16 12	15 45	15 17	14 51	14 25	13 58	13 32	13 07	12 42	12 17	11 52	10	30
10	40	14 56	14 31	14 06	13 42	13 18	12 54	12 31	12 07	11 45	11 22	11 00	10 37	10	40
10	50	13 10	12 48	12 26	12 04	11 43	11 22	11 01	10 41	10 20	10 01	9 40	9 21	10	50
11	00	11 22	11 02	10 43	10 25	10 07	9 47	9 30	9 12	8 55	8 37	8 20	8 04	11	00
11	10	9 32	9 15	8 59	8 44	8 27	8 13	7 57	7 43	7 28	7 13	6 59	6 45	11	10
11	20	7 40	7 26	7 14	7 00	6 48	6 35	6 24	6 11	5 59	5 47	5 36	5 25	11	20
11	30	5 46	5 36	5 26	5 17	5 07	4 57	4 49	4 39	4 30	4 21	4 13	4 05	11	30
11	40	3 52	3 45	3 38	3 31	3 25	3 19	3 13	3 07	3 00	2 54	2 48	2 43	11	40
11	50	1 56	1 52	1 49	1 46	1 43	1 40	1 37	1 33	1 30	1 27	1 24	1 21	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 12°.				DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 12°.			
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.				
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.	m.			
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00			
	10	1 41	1 37	1 32	1 27	1 24	1 20	1 16	1 11	1 07	1 04	1 01	0	10			
	20	3 21	3 12	3 03	2 55	2 46	2 39	2 30	2 22	2 16	2 08	2 00	0	20			
	30	5 01	4 47	4 34	4 21	4 09	3 56	3 45	3 34	3 22	3 12	3 01	0	30			
	40	6 39	6 22	6 03	5 47	5 30	5 14	4 59	4 44	4 29	4 14	4 00	0	40			
	50	8 15	7 53	7 32	7 12	6 51	6 31	6 12	5 53	5 34	5 16	4 59	0	50			
1	00	9 51	9 24	8 58	8 34	8 10	7 46	7 23	7 00	6 38	6 18	5 57	1	00			
	10	11 22	10 52	10 23	9 54	9 27	8 59	8 34	8 07	7 42	7 18	6 53	1	10			
	20	12 52	12 17	11 45	11 13	10 42	10 12	9 42	9 13	8 44	8 17	7 49	1	20			
	30	14 17	13 40	13 04	12 30	11 56	11 21	10 48	10 16	9 44	9 13	8 43	1	30			
	40	15 41	15 01	14 21	13 43	13 06	12 29	11 53	11 18	10 43	10 09	9 36	1	40			
	50	17 00	16 16	15 35	14 54	14 14	13 35	12 56	12 17	11 40	11 03	10 27	1	50			
2	00	18 17	17 31	16 46	16 02	15 19	14 37	13 56	13 15	12 35	11 55	11 17	2	00			
	10	19 29	18 41	17 54	17 08	16 22	15 37	14 53	14 10	13 27	12 46	12 04	2	10			
	20	20 38	19 47	18 58	18 09	17 22	16 34	15 48	15 03	14 18	13 33	12 50	2	20			
	30	21 43	20 50	19 59	19 08	18 19	17 29	16 41	15 53	15 06	14 19	13 34	2	30			
	40	22 44	21 50	20 56	20 03	19 12	18 21	17 31	16 41	15 52	15 04	14 15	2	40			
	50	23 40	22 45	21 50	20 56	20 02	19 10	18 18	17 26	16 35	15 45	14 55	2	50			
3	00	24 34	23 37	22 40	21 45	20 50	19 56	19 02	18 08	17 16	16 24	15 33	3	00			
	10	25 23	24 25	23 28	22 31	21 35	20 39	19 44	18 49	17 55	17 01	16 09	3	10			
	20	26 09	25 10	24 11	23 13	22 15	21 19	20 22	19 27	18 31	17 36	16 42	3	20			
	30	26 51	25 51	24 51	23 52	22 54	21 56	20 58	20 01	19 05	18 09	17 13	3	30			
	40	27 29	26 28	25 28	24 28	23 29	22 30	21 32	20 33	19 35	18 39	17 41	3	40			
	50	28 03	27 02	26 01	25 01	24 00	23 01	22 01	21 02	20 03	19 06	18 08	3	50			
4	00	28 34	27 32	26 31	25 30	24 30	23 28	22 29	21 29	20 30	19 31	18 32	4	00			
	10	29 02	28 00	26 58	25 57	24 55	23 54	22 54	21 53	20 53	19 53	18 53	4	10			
	20	29 27	28 23	27 21	26 20	25 18	24 16	23 15	22 15	21 14	20 13	19 14	4	20			
	30	29 47	28 44	27 41	26 40	25 38	24 36	23 34	22 33	21 32	20 31	19 31	4	30			
	40	30 04	29 01	27 59	26 56	25 55	24 53	23 51	22 49	21 47	20 47	19 46	4	40			
	50	30 19	29 16	28 13	27 11	26 09	25 07	24 04	23 03	22 01	20 59	19 58	4	50			
5	00	30 29	29 27	28 25	27 22	26 21	25 18	24 16	23 14	22 11	21 10	20 09	5	00			
	10	30 37	29 35	28 33	27 31	26 28	25 27	24 24	23 23	22 20	21 19	20 17	5	10			
	20	30 42	29 40	28 38	27 37	26 34	25 32	24 30	23 28	22 27	21 24	20 23	5	20			
	30	30 45	29 42	28 41	27 39	26 38	25 35	24 33	23 32	22 29	21 28	20 27	5	30			
	40	30 43	29 42	28 41	27 39	26 38	25 36	24 34	23 32	22 31	21 30	20 28	5	40			
	50	30 40	29 39	28 38	27 36	26 35	25 34	24 32	23 31	22 30	21 29	20 27	5	50			
6	00	30 33	29 33	28 32	27 31	26 31	25 30	24 29	23 27	22 26	21 25	20 25	6	00			
	10	30 23	29 23	28 23	27 23	26 23	25 23	24 22	23 22	22 20	21 20	20 20	6	10			
	20	30 12	29 12	28 12	27 13	26 13	25 13	24 13	23 13	22 13	21 13	20 13	6	20			
	30	29 57	28 58	27 58	26 59	25 59	24 59	23 58	22 58	21 58	20 58	19 58	6	30			
	40	29 39	28 41	27 42	26 44	25 46	24 47	23 48	22 49	21 50	20 52	19 52	6	40			
	50	29 19	28 21	27 23	26 26	25 28	24 30	23 32	22 34	21 36	20 38	19 40	6	50			
7	00	28 55	27 58	27 02	26 05	25 08	24 11	23 13	22 16	21 19	20 22	19 25	7	00			
	10	28 30	27 34	26 38	25 41	24 46	23 50	22 53	21 57	21 00	20 04	19 08	7	10			
	20	28 02	27 07	26 11	25 16	24 21	23 25	22 30	21 35	20 40	19 44	18 49	7	20			
	30	27 31	26 37	25 43	24 48	23 55	23 00	22 06	21 11	20 17	19 22	18 28	7	30			
	40	26 58	26 04	25 11	24 18	23 25	22 31	21 38	20 45	19 51	18 58	18 06	7	40			
	50	26 22	25 29	24 37	23 45	22 54	22 01	21 09	20 17	19 25	18 33	17 41	7	50			
8	00	25 43	24 52	24 01	23 10	22 20	21 29	20 38	19 47	18 56	18 05	17 14	8	00			
	10	25 02	24 12	23 23	22 33	21 44	20 54	20 04	19 14	18 25	17 36	16 46	8	10			
	20	24 19	23 30	22 42	21 54	21 05	20 17	19 29	18 41	17 52	17 04	16 17	8	20			
	30	23 33	22 46	21 58	21 12	20 25	19 38	18 51	18 04	17 18	16 31	15 45	8	30			
	40	22 44	21 58	21 13	20 28	19 42	18 58	18 12	17 26	16 41	15 56	15 11	8	40			
	50	21 53	21 10	20 25	19 42	18 58	18 14	17 30	16 47	16 04	15 20	14 37	8	50			
9	00	21 00	20 17	19 35	18 53	18 11	17 29	16 47	16 06	15 24	14 42	14 01	9	00			
	10	20 05	19 24	18 43	18 03	17 23	16 43	16 02	15 22	14 42	14 02	13 22	9	10			
	20	19 08	18 29	17 50	17 12	16 32	15 54	15 16	14 38	14 00	13 22	12 43	9	20			
	30	18 08	17 30	16 54	16 17	15 40	15 04	14 27	13 51	13 15	12 38	12 03	9	30			
	40	17 06	16 31	15 56	15 21	14 46	14 12	13 37	13 03	12 29	11 54	11 21	9	40			
	50	16 02	15 29	14 56	14 23	13 50	13 18	12 45	12 13	11 41	11 10	10 38	9	50			
10	00	14 57	14 25	13 55	13 24	12 53	12 23	11 53	11 22	10 52	10 23	9 54	10	00			
	10	13 48	13 19	12 51	12 23	11 55	11 26	10 58	10 30	10 02	9 35	9 08	10	10			
	20	12 39	12 13	11 46	11 20	10 54	10 29	10 03	9 38	9 12	8 47	8 22	10	20			
	30	11 28	11 03	10 40	10 16	9 53	9 30	9 06	8 43	8 20	7 57	7 34	10	30			
	40	10 15	9 54	9 32	9 11	8 50	8 30	8 08	7 48	7 27	7 06	6 46	10	40			
	50	9 02	8 43	8 24	8 05	7 46	7 28	7 10	6 51	6 33	6 15	5 57	10	50			
11	00	7 47	7 30	7 14	6 58	6 42	6 25	6 10	5 54	5 38	5 23	5 07	11	00			
	10	6 31	6 17	6 03	5 49	5 36	5 23	5 09	4 56	4 43	4 30	4 17	11	10			
	20	5 14	5 02	4 51	4 41	4 30	4 19	4 08	3 57	3 47	3 36	3 26	11	20			
	30	3 56	3 47	3 39	3 31	3 23	3 15	3 06	2 58	2 51	2 43	2 35	11	30			
	40	2 38	2 32	2 27	2 21	2 16	2 10	2 04	1 59	1 54	1 49	1 44	11	40			
	50	1 19	1 16	1 13	1 10	1 08	1 05	1 02	1 00	0 57	0 54	0 52	11	50			
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00			

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 13°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 13°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	11 47	10 45	9 53	9 07	8 28	7 53	7 21	6 54	6 29	6 06	5 45	5 27		10
	20	22 34	20 44	19 09	17 44	16 31	15 25	14 26	13 34	12 46	12 02	11 23	10 46		20
	30	31 46	29 26	27 21	25 30	23 51	22 22	21 02	19 49	18 42	17 40	16 44	15 52		30
	40	39 17	36 44	34 23	32 16	30 21	28 36	27 00	25 31	24 10	22 54	21 44	20 39		40
	50	45 18	42 41	40 15	38 01	35 57	34 02	32 16	30 36	29 05	27 39	26 19	25 04		50
1	00	50 05	47 31	45 05	42 50	40 42	38 43	36 51	35 06	33 28	31 55	30 25	29 06	1	00
	10	53 54	51 26	49 04	46 51	44 44	42 44	40 50	39 03	37 20	35 43	34 12	32 44		10
	20	56 58	54 37	52 21	50 11	48 07	46 08	44 15	42 26	40 42	39 04	37 30	35 59		20
	30	59 26	57 12	55 03	52 59	50 58	49 03	47 10	45 23	43 39	42 00	40 25	38 53		30
	40	61 27	59 21	57 17	55 15	53 22	51 30	49 41	47 56	46 13	44 34	43 00	41 28		40
	50	63 05	61 06	59 09	57 15	55 24	53 35	51 49	50 07	48 27	46 49	45 15	43 44		50
2	00	64 27	62 34	60 42	58 53	57 07	55 23	53 40	52 00	50 23	48 47	47 15	45 44	2	00
	10	65 34	63 47	62 00	60 17	58 34	56 54	55 14	53 37	52 03	50 29	48 59	47 29		10
	20	66 30	64 47	63 06	61 26	59 48	58 12	56 36	55 02	53 30	51 58	50 30	49 02		20
	30	67 14	65 38	64 01	62 25	60 51	59 17	57 45	56 14	54 45	53 16	51 49	50 24		30
	40	67 52	66 18	64 46	63 14	61 43	60 14	58 44	57 16	55 49	54 23	52 58	51 34		40
	50	68 22	66 53	65 23	63 55	62 28	61 01	59 35	58 10	56 44	55 21	53 58	52 36		50
3	00	68 46	67 20	65 55	64 30	63 05	61 41	60 17	58 54	57 32	56 11	54 50	53 30	3	00
	10	69 05	67 42	66 19	64 58	63 36	62 14	60 53	59 32	58 13	56 54	55 35	54 16		10
	20	69 19	67 59	66 39	65 17	63 57	62 41	61 21	60 05	58 47	57 29	56 13	54 56		20
	30	69 29	68 12	66 55	65 37	64 20	63 04	61 48	60 31	59 15	58 00	56 44	55 30		30
	40	69 36	68 21	67 05	65 51	64 36	63 21	62 07	60 53	59 39	58 25	57 12	55 58		40
	50	69 39	68 26	67 12	66 00	64 47	63 34	62 21	61 09	59 57	58 44	57 32	56 20		50
4	00	69 38	68 28	67 16	66 05	64 55	63 43	62 32	61 22	60 11	59 00	57 49	56 40	4	00
	10	69 36	68 27	67 17	66 07	64 59	63 49	62 39	61 30	60 21	59 12	58 03	56 53		10
	20	69 30	68 22	67 14	66 07	64 59	63 51	62 43	61 35	60 27	59 19	58 12	57 04		20
	30	69 23	68 16	67 10	66 03	64 56	63 50	62 44	61 37	60 30	59 23	58 16	57 09		30
	40	69 12	68 07	67 02	65 56	64 52	63 46	62 40	61 35	60 29	59 24	58 18	57 12		40
	50	69 00	67 56	66 52	65 47	64 43	63 39	62 34	61 30	60 25	59 21	58 17	57 12		50
5	00	68 45	67 42	66 39	65 35	64 32	63 29	62 26	61 22	60 19	59 15	58 12	57 08	5	00
	10	68 28	67 26	66 24	65 22	64 20	63 17	62 14	61 12	60 09	59 06	58 04	57 01		10
	20	68 10	67 09	66 06	65 05	64 04	63 03	62 01	60 59	59 57	58 55	57 54	56 51		20
	30	67 49	66 48	65 47	64 46	63 45	62 45	61 44	60 43	59 42	58 41	57 39	56 38		30
	40	67 25	66 25	65 25	64 25	63 25	62 25	61 24	60 24	59 24	58 23	57 23	56 22		40
	50	67 00	66 01	65 01	64 02	63 02	62 03	61 03	60 03	59 03	58 03	57 03	56 03		50
6	00	66 33	65 34	64 35	63 36	62 37	61 38	60 38	59 39	58 40	57 41	56 42	55 42	6	00
	10	66 03	65 05	64 06	63 07	62 09	61 10	60 11	59 13	58 14	57 15	56 16	55 18		10
	20	65 32	64 34	63 35	62 37	61 38	60 40	59 42	58 44	57 45	56 47	55 49	54 50		20
	30	64 57	64 00	63 01	62 04	61 06	60 08	59 10	58 12	57 14	56 16	55 18	54 20		30
	40	64 21	63 23	62 26	61 27	60 30	59 32	58 34	57 37	56 39	55 42	54 44	53 47		40
	50	63 42	62 45	61 47	60 49	59 52	58 55	57 57	56 59	56 02	55 06	54 08	53 11		50
7	00	63 00	62 03	61 05	60 08	59 11	58 13	57 16	56 19	55 23	54 26	53 29	52 32	7	00
	10	62 16	61 18	60 20	59 24	58 27	57 30	56 32	55 36	54 39	53 42	52 46	51 49		10
	20	61 28	60 32	59 34	58 37	57 40	56 42	55 46	54 49	53 53	52 57	52 00	51 04		20
	30	60 38	59 41	58 43	57 46	56 49	55 53	54 55	53 59	53 04	52 07	51 11	50 15		30
	40	59 44	58 46	57 49	56 52	55 55	54 58	54 02	53 06	52 10	51 14	50 18	49 23		40
	50	58 46	57 50	56 52	55 55	54 58	54 02	53 05	52 09	51 14	50 18	49 22	48 27		50
8	00	57 46	56 48	55 50	54 53	53 57	53 00	52 04	51 08	50 13	49 17	48 22	47 27	8	00
	10	56 40	55 43	54 45	53 48	52 52	51 55	50 59	50 04	49 08	48 13	47 19	46 24		10
	20	55 30	54 32	53 35	52 38	51 42	50 46	49 49	48 54	47 59	47 04	46 11	45 17		20
	30	54 16	53 19	52 21	51 23	50 28	49 32	48 36	47 40	46 46	45 52	44 58	44 05		30
	40	52 57	51 59	51 02	50 04	49 09	48 13	47 18	46 23	45 28	44 35	43 41	42 49		40
	50	51 32	50 34	49 36	48 40	47 45	46 49	45 54	44 59	44 06	43 13	42 20	41 28		50
9	00	50 01	49 04	48 06	47 10	46 15	45 20	44 25	43 31	42 38	41 46	40 54	40 02	9	00
	10	48 24	47 28	46 30	45 34	44 39	43 45	42 51	41 58	41 06	40 14	39 23	38 32		10
	20	46 41	45 44	44 48	43 52	42 58	42 04	41 10	40 18	39 27	38 36	37 47	36 57		20
	30	44 50	43 53	42 58	42 03	41 09	40 16	39 24	38 33	37 43	36 53	36 04	35 16		30
	40	42 51	41 55	41 01	40 07	39 14	38 23	37 31	36 41	35 53	35 04	34 17	33 30		40
	50	40 45	39 50	38 57	38 04	37 13	36 22	35 32	34 43	33 56	33 09	32 23	31 38		50
10	00	38 30	37 36	36 44	35 53	35 03	34 14	33 26	32 39	31 54	31 09	30 25	29 41	10	00
	10	36 05	35 14	34 23	33 34	32 46	31 59	31 12	30 27	29 44	29 01	28 19	27 38		10
	20	33 34	32 43	31 53	31 06	30 21	29 36	28 52	28 09	27 29	26 48	26 09	25 30		20
	30	30 49	30 01	29 16	28 31	27 48	27 06	26 24	25 45	25 07	24 29	23 52	23 16		30
	40	27 56	27 11	26 28	25 47	25 07	24 29	23 51	23 14	22 38	22 04	21 30	20 56		40
	50	24 53	24 12	23 33	22 55	22 19	21 44	21 09	20 36	20 03	19 33	19 02	18 33		50
11	00	21 40	21 04	20 30	19 55	19 24	18 53	18 21	17 52	17 24	16 56	16 29	16 02	11	00
	10	18 20	17 48	17 18	16 49	16 22	15 54	15 28	15 03	14 39	14 15	13 52	13 29		10
	20	14 50	14 25	14 00	13 36	13 13	12 51	12 29	12 08	11 49	11 29	11 11	10 52		20
	30	11 14	10 54	10 35	10 17	10 00	9 42	9 26	9 10	8 55	8 40	8 26	8 12		30
	40	7 33	7 19	7 06	6 54	6 42	6 31	6 19	6 09	5 58	5 49	5 39	5 30		40
	50	3 47	3 41	3 34	3 27	3 22	3 16	3 10	3 05	3 00	2 55	2 50	2 45		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 13°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 13°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	5 09	4 54	4 39	4 25	4 13	4 01	3 49	3 39	3 29	3 20	3 11	3 03	1	10
	20	10 12	9 42	9 13	8 46	8 21	7 58	7 35	7 15	6 56	6 37	6 20	6 04		20
	30	15 04	14 20	13 38	12 59	12 23	11 49	11 17	10 47	10 18	9 51	9 25	9 01		30
	40	19 39	18 43	17 50	17 01	16 15	15 31	14 50	14 11	13 34	12 59	12 27	11 55		40
	50	23 54	22 48	21 47	20 49	19 53	19 02	18 13	17 26	16 42	15 59	15 20	14 41		50
1	00	27 49	26 36	25 27	24 22	23 20	22 21	21 24	20 31	19 40	18 52	18 06	17 22	1	00
	10	31 21	30 04	28 49	27 37	26 29	25 26	24 24	23 25	22 29	21 36	20 44	19 55		10
	20	34 33	33 12	31 53	30 38	29 25	28 17	27 11	26 07	25 07	24 08	23 13	22 19		20
	30	37 25	36 01	34 40	33 22	32 07	30 55	29 45	28 38	27 33	26 32	25 32	24 34		30
	40	39 58	38 33	37 10	35 50	34 33	33 19	32 07	30 57	29 50	28 45	27 42	26 41		40
	50	42 14	40 49	39 26	38 04	36 46	35 29	34 16	33 04	31 54	30 48	29 47	28 39		50
2	00	44 16	42 50	41 27	40 05	38 45	37 28	36 14	35 01	33 49	32 40	31 34	30 27	2	00
	10	46 02	44 37	43 14	41 53	40 33	39 16	38 00	36 46	35 34	34 24	33 15	32 08		10
	20	47 36	46 12	44 50	43 29	42 10	40 53	39 37	38 22	37 10	35 59	34 49	33 40		20
	30	48 59	47 36	46 15	44 55	43 37	42 20	41 03	39 49	38 36	37 25	36 15	35 05		30
	40	50 12	48 51	47 30	46 11	44 53	43 37	42 21	41 07	39 54	38 43	37 33	36 22		40
	50	51 15	49 56	48 37	47 19	46 02	44 45	43 31	42 17	41 04	39 53	38 42	37 32		50
3	00	52 11	50 52	49 35	48 18	47 02	45 47	44 33	43 20	42 08	40 56	39 45	38 36	3	00
	10	52 59	51 42	50 26	49 10	47 55	46 41	45 28	44 16	43 03	41 43	40 43	39 33		10
	20	53 40	52 25	51 10	49 56	48 42	47 29	46 17	45 05	43 54	42 43	41 33	40 24		20
	30	54 16	53 01	51 48	50 33	49 22	48 10	46 59	45 47	44 37	43 27	42 18	41 08		30
	40	54 45	53 32	52 20	51 08	49 57	48 46	47 35	46 25	45 16	44 06	42 57	41 48		40
	50	55 10	53 59	52 48	51 37	50 26	49 16	48 06	46 57	45 48	44 40	43 32	42 24		50
4	00	55 29	54 20	53 10	52 01	50 51	49 42	48 33	47 25	46 16	45 08	44 00	42 53	4	00
	10	55 45	54 37	53 27	52 19	51 10	50 03	48 54	47 47	46 39	45 32	44 25	43 19		10
	20	55 56	54 49	53 42	52 33	51 26	50 19	49 12	48 05	46 58	45 52	44 46	43 40		20
	30	56 04	54 57	53 51	52 44	51 37	50 31	49 25	48 19	47 13	46 07	45 02	43 57		30
	40	56 07	55 02	53 57	52 51	51 45	50 40	49 34	48 29	47 24	46 19	45 14	44 09		40
	50	56 08	55 03	53 59	52 54	51 49	50 45	49 39	48 35	47 31	46 26	45 22	44 18		50
5	00	56 05	55 01	53 57	52 53	51 50	50 46	49 42	48 38	47 35	46 30	45 27	44 23	5	00
	10	55 58	54 56	53 53	52 50	51 47	50 44	49 40	48 37	47 34	46 32	45 29	44 25		10
	20	55 49	54 46	53 45	52 42	51 41	50 38	49 35	48 33	47 31	46 29	45 26	44 24		20
	30	55 36	54 35	53 33	52 32	51 31	50 30	49 27	48 26	47 25	46 22	45 21	44 19		30
	40	55 21	54 21	53 20	52 19	51 19	50 18	49 16	48 15	47 14	46 12	45 12	44 11		40
	50	55 03	54 03	53 03	52 03	51 02	50 02	49 02	48 01	47 01	46 01	45 00	43 59		50
6	00	54 42	53 43	52 43	51 43	50 44	49 44	48 44	47 45	46 44	45 44	44 45	43 45	6	00
	10	54 18	53 20	52 20	51 22	50 22	49 25	48 24	47 24	46 25	45 26	44 26	43 26		10
	20	53 52	52 54	51 54	50 56	49 57	48 59	48 00	47 02	46 03	45 03	44 05	43 06		20
	30	53 22	52 24	51 26	50 28	49 30	48 31	47 34	46 35	45 37	44 39	43 41	42 42		30
	40	52 49	51 52	50 54	49 56	48 59	48 02	47 03	46 06	45 08	44 10	43 13	42 15		40
	50	52 14	51 16	50 19	49 23	48 25	47 28	46 31	45 34	44 37	43 39	42 42	41 45		50
7	00	51 35	50 38	49 41	48 45	47 48	46 52	45 55	44 58	44 02	43 05	42 10	41 13	7	00
	10	50 52	49 56	49 01	48 04	47 08	46 11	45 15	44 19	43 24	42 27	41 32	40 36		10
	20	50 08	49 12	48 16	47 21	46 25	45 29	44 33	43 39	42 43	41 47	40 52	39 57		20
	30	49 20	48 24	47 29	46 34	45 38	44 43	43 48	42 53	41 58	40 54	39 59	39 14		30
	40	48 27	47 33	46 38	45 43	44 48	43 53	42 59	42 04	41 10	40 17	39 23	38 29		40
	50	47 33	46 37	45 43	44 49	43 54	43 01	42 07	41 13	40 20	39 26	38 34	37 40		50
8	00	46 33	45 38	44 45	43 51	42 57	42 04	41 11	40 18	39 26	38 32	37 41	36 48	8	00
	10	45 30	44 37	43 43	42 50	41 56	41 05	40 12	39 20	38 28	37 35	36 45	35 53		10
	20	44 25	43 30	42 37	41 45	40 52	40 00	39 08	38 17	37 26	36 35	35 45	34 54		20
	30	43 12	42 20	41 27	40 36	39 44	38 53	38 01	37 11	36 21	35 31	34 42	33 53		30
	40	41 57	41 05	40 13	39 23	38 32	37 41	36 51	36 02	35 13	34 23	33 35	32 47		40
	50	40 37	39 45	38 55	38 05	37 15	36 26	35 37	34 48	34 00	33 12	32 25	31 38		50
9	00	39 12	38 22	37 32	36 43	35 54	35 06	34 18	33 31	32 43	31 57	31 11	30 25	9	00
	10	37 43	36 53	36 04	35 16	34 29	33 42	32 55	32 10	31 23	30 39	29 54	29 09		10
	20	36 08	35 21	34 33	33 47	33 00	32 14	31 29	30 45	30 00	29 16	28 34	27 51		20
	30	34 29	33 43	32 58	32 11	31 26	30 42	29 57	29 15	28 32	27 50	27 09	26 28		30
	40	32 44	31 59	31 15	30 30	29 46	29 05	28 23	27 41	27 00	26 20	25 41	25 00		40
	50	30 55	30 10	29 26	28 46	28 04	27 24	26 44	26 04	25 25	24 46	24 09	23 31		50
10	00	28 59	28 18	27 36	26 57	26 17	25 38	25 00	24 22	23 45	23 09	22 33	21 58	10	00
	10	26 58	26 19	25 40	25 02	24 25	23 49	23 12	22 37	22 03	21 28	20 55	20 22		10
	20	24 52	24 15	23 39	23 03	22 28	21 54	21 21	20 48	20 16	19 44	19 13	18 42		20
	30	22 41	22 06	21 33	21 00	20 26	19 56	19 25	18 55	18 25	17 56	17 28	16 59		30
	40	20 24	19 53	19 23	18 52	18 23	17 55	17 26	16 59	16 32	16 05	15 39	15 14		40
	50	18 03	17 36	17 08	16 41	16 15	15 49	15 24	14 59	14 35	14 11	13 49	13 26		50
11	00	15 38	15 13	14 49	14 26	14 02	13 40	13 18	12 56	12 35	12 15	11 55	11 35	11	00
	10	13 08	12 48	12 27	12 07	11 47	11 29	11 10	10 52	10 34	10 16	9 59	9 43		10
	20	10 35	10 18	10 01	9 44	9 30	9 14	8 59	8 44	8 30	8 15	8 02	7 48		20
	30	7 59	7 46	7 33	7 21	7 09	6 57	6 45	6 35	6 23	6 13	6 02	5 53		30
	40	5 20	5 12	5 03	4 55	4 47	4 39	4 31	4 24	4 16	4 10	4 03	3 55		40
	50	2 41	2 32	2 23	2 15	2 07	2 00	1 52	1 44	1 37	1 30	1 23	1 15		50
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 13°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 13°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	2 55	2 47	2 40	2 33	2 26	2 21	2 14	2 08	2 03	1 58	1 53	1 47		10
	20	5 48	5 33	5 18	5 05	4 53	4 40	4 28	4 16	4 04	3 54	3 44	3 34		20
	30	8 38	8 16	7 55	7 35	7 16	6 57	6 39	6 22	6 06	5 50	5 34	5 20		30
	40	11 24	10 56	10 28	10 02	9 37	9 13	8 49	8 27	8 05	7 44	7 24	7 04		40
	50	14 05	13 30	12 57	12 24	11 54	11 24	10 55	10 28	10 01	9 35	9 11	8 47		50
1	00	16 40	15 59	15 20	14 43	14 07	13 31	12 58	12 25	11 54	11 25	10 55	10 27	1	00
	10	19 07	18 21	17 37	16 55	16 14	15 35	14 57	14 20	13 44	13 10	12 36	12 04		10
	20	21 26	20 37	19 48	19 02	18 17	17 33	16 50	16 09	15 30	14 52	14 15	13 38		20
	30	23 38	22 45	21 53	21 02	20 13	19 25	18 40	17 55	17 12	16 30	15 48	15 09		30
	40	25 42	24 44	23 49	22 55	22 03	21 13	20 23	19 35	18 49	18 03	17 19	16 36		40
	50	27 37	26 37	25 39	24 43	23 47	22 54	22 02	21 11	20 21	19 33	18 45	17 59		50
2	00	29 24	28 22	27 21	26 23	25 25	24 28	23 34	22 41	21 48	20 57	20 07	19 18	2	00
	10	31 03	29 59	28 57	27 55	26 56	25 58	25 01	24 06	23 11	22 18	21 25	20 34		10
	20	32 34	31 29	30 25	29 23	28 21	27 21	26 23	25 25	24 28	23 33	22 38	21 45		20
	30	33 58	32 52	31 46	30 43	29 40	28 39	27 38	26 39	25 40	24 43	23 47	22 52		30
	40	35 14	34 08	33 02	31 57	30 53	29 50	28 49	27 48	26 48	25 50	24 52	23 55		40
	50	36 24	35 16	34 09	33 04	31 59	30 56	29 54	28 52	27 51	26 51	25 52	24 53		50
3	00	37 27	36 20	35 13	34 06	33 01	31 56	30 53	29 51	28 49	27 48	26 47	25 48	3	00
	10	38 24	37 16	36 09	35 03	33 57	32 52	31 48	30 45	29 42	28 40	27 39	26 38		10
	20	39 16	38 08	37 00	35 53	34 48	33 43	32 38	31 34	30 31	29 28	28 27	27 25		20
	30	40 01	38 53	37 46	36 39	35 33	34 28	33 23	32 19	31 14	30 12	29 10	28 07		30
	40	40 41	39 33	38 26	37 20	36 13	35 08	34 03	32 59	31 55	30 51	29 48	28 46		40
	50	41 15	40 08	39 02	37 56	36 49	35 44	34 39	33 34	32 30	31 26	30 23	29 21		50
4	00	41 46	40 39	39 33	38 27	37 21	36 16	35 11	34 07	33 02	31 58	30 54	29 51	4	00
	10	42 12	41 06	40 00	38 54	37 48	36 43	35 38	34 33	33 29	32 25	31 22	30 18		10
	20	42 33	41 28	40 23	39 17	38 11	37 06	36 01	34 58	33 53	32 49	31 45	30 42		20
	30	42 50	41 45	40 40	39 35	38 30	37 26	36 22	35 17	34 13	33 10	32 06	31 03		30
	40	43 04	41 59	40 54	39 51	38 46	37 42	36 38	35 34	34 30	33 26	32 23	31 19		40
	50	43 14	42 10	41 05	40 02	38 57	37 54	36 50	35 47	34 43	33 39	32 35	31 32		50
5	00	43 20	42 16	41 13	40 09	39 06	38 01	36 58	35 55	34 52	33 49	32 46	31 43	5	00
	10	43 22	42 20	41 16	40 13	39 10	38 07	37 04	36 02	34 59	33 56	32 53	31 50		10
	20	43 21	42 19	41 16	40 14	39 11	38 09	37 07	36 04	35 01	33 58	32 57	31 54		20
	30	43 17	42 15	41 13	40 11	39 08	38 06	37 05	36 03	35 01	33 59	32 57	31 55		30
	40	43 09	42 08	41 07	40 05	39 03	38 02	37 01	35 59	34 58	33 56	32 54	31 53		40
	50	42 58	41 58	40 57	39 57	38 55	37 54	36 54	35 53	34 52	33 50	32 49	31 48		50
6	00	42 45	41 45	40 44	39 44	38 43	37 43	36 43	35 42	34 41	33 41	32 40	31 39	6	00
	10	42 28	41 28	40 29	39 28	38 28	37 28	36 29	35 29	34 29	33 30	32 29	31 28		10
	20	42 07	41 08	40 09	39 10	38 11	37 12	36 13	35 13	34 14	33 15	32 15	31 16		20
	30	41 44	40 46	39 47	38 49	37 50	36 52	35 53	34 54	33 56	32 57	31 58	31 00		30
	40	41 18	40 20	39 23	38 25	37 27	36 28	35 30	34 33	33 35	32 37	31 39	30 40		40
	50	40 48	39 52	38 54	37 57	36 59	36 02	35 05	34 08	33 10	32 14	31 16	30 19		50
7	00	40 15	39 19	38 23	37 27	36 30	35 33	34 37	33 41	32 44	31 48	30 51	29 54	7	00
	10	39 47	38 45	37 49	36 54	35 57	35 02	34 06	33 10	32 14	31 19	30 22	29 27		10
	20	39 02	38 07	37 12	36 17	35 22	34 27	33 32	32 37	31 42	30 47	29 52	28 57		20
	30	38 20	37 26	36 32	35 38	34 43	33 49	32 56	32 02	31 07	30 13	29 19	28 25		30
	40	37 35	36 42	35 49	34 55	34 10	33 18	32 25	31 33	30 41	29 49	28 56	27 50		40
	50	36 48	35 55	35 02	34 10	33 18	32 25	31 33	30 41	29 49	28 56	28 05	27 13		50
8	00	35 57	35 05	34 13	33 21	32 30	31 38	30 47	29 56	29 05	28 14	27 23	26 32	8	00
	10	35 02	34 12	33 21	32 30	31 39	30 49	29 59	29 09	28 19	27 29	26 39	25 50		10
	20	34 04	33 14	32 25	31 35	30 45	29 57	29 08	28 19	27 30	26 42	25 53	25 05		20
	30	33 03	32 15	31 26	30 38	29 49	29 02	28 14	27 26	26 39	25 51	25 04	24 17		30
	40	31 58	31 11	30 24	29 37	28 49	28 03	27 16	26 30	25 44	24 59	24 12	23 26		40
	50	30 51	30 05	29 19	28 33	27 47	27 02	26 17	25 32	24 46	24 03	23 19	22 34		50
9	00	29 40	28 55	28 10	27 26	26 41	25 58	25 14	24 31	23 48	23 04	22 22	21 39	9	00
	10	28 25	27 42	26 59	26 16	25 33	24 51	24 09	23 26	22 45	22 04	21 23	20 42		10
	20	27 08	26 26	25 44	25 03	24 22	23 41	23 00	22 21	21 41	21 01	20 21	19 41		20
	30	25 47	25 06	24 26	23 47	23 07	22 29	21 50	21 12	20 34	19 56	19 18	18 41		30
	40	24 21	23 44	23 05	22 28	21 50	21 13	20 36	20 00	19 24	18 48	18 12	17 38		40
	50	22 53	22 18	21 41	21 06	20 30	19 55	19 20	18 46	18 12	17 38	17 05	16 31		50
10	00	21 23	20 49	20 14	19 41	19 08	18 35	18 02	17 30	16 58	16 26	15 54	15 24	10	00
	10	19 48	19 17	18 45	18 13	17 42	17 11	16 41	16 11	15 41	15 12	14 42	14 14		10
	20	18 12	17 42	17 12	16 43	16 14	15 46	15 18	14 51	14 23	13 56	13 29	13 02		20
	30	16 32	16 04	15 37	15 11	14 44	14 19	13 52	13 27	13 03	12 38	12 14	11 49		30
	40	14 49	14 24	14 00	13 36	13 11	12 48	12 26	12 03	11 40	11 18	10 56	10 34		40
	50	13 04	12 41	12 20	11 58	11 38	11 16	10 56	10 37	10 16	9 56	9 37	9 18		50
11	00	11 16	10 57	10 38	10 19	10 01	9 44	9 26	9 09	8 51	8 34	8 18	8 01	11	00
	10	9 27	9 10	8 55	8 40	8 24	8 09	7 54	7 39	7 25	7 10	6 56	6 42		10
	20	7 35	7 23	7 09	6 57	6 45	6 32	6 21	6 09	5 57	5 46	5 34	5 23		20
	30	5 42	5 33	5 23	5 14	5 05	4 55	4 46	4 38	4 29	4 20	4 11	4 03		30
	40	3 49	3 43	3 36	3 29	3 24	3 17	3 11	3 05	2 59	2 53	2 47	2 42		40
	50	1 55	1 52	1 48	1 45	1 42	1 38	1 35	1 33	1 30	1 27	1 24	1 21		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 13°.			DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 13°.			
Hour Angle.			60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.		0	0	0	0	0	0	0	0	0	0	0	h.	m.	
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	0 00
	10	1 42	1 38	1 33	1 29	1 24	1 20	1 17	1 13	1 09	1 05	1 01	1 01		10	10
	20	3 25	3 15	3 07	2 57	2 49	2 41	2 32	2 25	2 17	2 10	2 02	2 02		20	20
	30	5 06	4 52	4 38	4 25	4 13	4 00	3 48	3 37	3 25	3 14	3 02	3 02		30	30
	40	6 45	6 27	6 09	5 52	5 35	5 19	5 02	4 47	4 32	4 17	4 03	4 03		40	40
	50	8 23	8 00	7 39	7 18	6 57	6 36	6 16	5 57	5 38	5 20	5 02	5 02		50	50
1	00	9 59	9 33	9 06	8 40	8 16	7 52	7 29	7 06	6 44	6 22	6 00	6 00	1	00	00
	10	11 32	11 02	10 32	10 03	9 34	9 07	8 39	8 14	7 47	7 23	6 58	6 58		10	10
	20	13 02	12 28	11 55	11 22	10 50	10 20	9 49	9 19	8 50	8 22	7 54	7 54		20	20
	30	14 30	13 52	13 15	12 39	12 04	11 30	10 56	10 24	9 51	9 20	8 48	8 48		30	30
	40	15 54	15 12	14 33	13 54	13 15	12 39	12 02	11 26	10 50	10 16	9 42	9 42		40	40
	50	17 14	16 30	15 47	15 06	14 24	13 44	13 04	12 25	11 48	11 10	10 34	10 34		50	50
2	00	18 31	17 44	16 59	16 14	15 30	14 47	14 05	13 23	12 43	12 03	11 24	11 24	2	00	00
	10	19 44	18 55	18 07	17 19	16 33	15 48	15 03	14 19	13 35	12 53	12 11	12 11		10	10
	20	20 53	20 02	19 11	18 22	17 33	16 45	15 58	15 12	14 26	13 42	12 58	12 58		20	20
	30	21 58	21 05	20 12	19 21	18 29	17 40	16 51	16 02	15 15	14 28	13 42	13 42		30	30
	40	22 59	22 04	21 10	20 17	19 24	18 32	17 42	16 51	16 01	15 12	14 23	14 23		40	40
	50	23 57	23 00	22 04	21 09	20 14	19 21	18 28	17 37	16 44	15 54	15 03	15 03		50	50
3	00	24 50	23 51	22 55	21 58	21 03	20 08	19 13	18 19	17 26	16 34	15 41	15 41	3	00	00
	10	25 39	24 40	23 42	22 44	21 47	20 51	19 54	18 59	18 05	17 11	16 17	16 17		10	10
	20	26 24	25 24	24 25	23 26	22 27	21 30	20 33	19 36	18 40	17 44	16 50	16 50		20	20
	30	27 06	26 05	25 04	24 05	23 05	22 07	21 09	20 11	19 14	18 18	17 21	17 21		30	30
	40	27 43	26 42	25 41	24 41	23 40	22 40	21 42	20 43	19 44	18 47	17 49	17 49		40	40
	50	28 18	27 16	26 14	25 13	24 12	23 12	22 12	21 12	20 13	19 14	18 16	18 16		50	50
4	00	28 48	27 46	26 44	25 42	24 41	23 40	22 39	21 38	20 38	19 39	18 40	18 40	4	00	00
	10	29 15	28 12	27 10	26 08	25 05	24 05	23 03	22 02	21 02	20 02	19 02	19 02		10	10
	20	29 39	28 36	27 33	26 30	25 25	24 27	23 24	22 23	21 22	20 21	19 20	19 20		20	20
	30	29 59	28 55	27 53	26 50	25 48	24 46	23 44	22 42	21 40	20 39	19 38	19 38		30	30
	40	30 16	29 12	28 10	27 07	26 04	25 02	24 00	22 58	21 56	20 54	19 52	19 52		40	40
	50	30 29	29 26	28 24	27 21	26 18	25 16	24 13	23 11	22 09	21 06	20 05	20 05		50	50
5	00	30 39	29 37	28 35	27 31	26 29	25 26	24 24	23 22	22 19	21 17	20 15	20 15	5	00	00
	10	30 47	29 44	28 42	27 39	26 36	25 34	24 32	23 30	22 27	21 25	20 22	20 22		10	10
	20	30 52	29 49	28 47	27 44	26 42	25 39	24 36	23 35	22 32	21 31	20 28	20 28		20	20
	30	30 57	29 50	28 48	27 46	26 44	25 42	24 40	23 38	22 36	21 34	20 31	20 31		30	30
	40	30 51	29 49	28 47	27 46	26 44	25 42	24 40	23 39	22 37	21 35	20 33	20 33		40	40
	50	30 46	29 45	28 44	27 42	26 41	25 39	24 38	23 36	22 35	21 34	20 32	20 32		50	50
6	00	30 39	29 35	28 37	27 37	26 36	25 35	24 34	23 33	22 31	21 30	20 29	20 29	6	00	00
	10	30 29	29 29	28 28	27 28	26 28	25 27	24 26	23 26	22 25	21 25	20 25	20 25		10	10
	20	30 16	29 15	28 16	27 17	26 17	25 17	24 17	23 17	22 17	21 17	20 16	20 16		20	20
	30	30 00	29 01	28 03	27 04	26 04	25 05	24 06	23 07	22 07	21 07	20 07	20 07		30	30
	40	29 42	28 44	27 45	26 47	25 48	24 49	23 51	22 53	21 54	20 54	19 55	19 55		40	40
	50	29 21	28 23	27 26	26 29	25 31	24 33	23 34	22 37	21 39	20 40	19 42	19 42		50	50
7	00	28 58	28 00	27 04	26 07	25 10	24 13	23 16	22 19	21 22	20 24	19 27	19 27	7	00	00
	10	28 31	27 34	26 39	25 43	24 47	23 51	22 55	21 59	21 02	20 06	19 09	19 09		10	10
	20	28 02	27 06	26 12	25 17	24 22	23 27	22 32	21 36	20 41	19 46	18 51	18 51		20	20
	30	27 31	26 36	25 43	24 49	23 55	23 01	22 07	21 12	20 18	19 24	18 29	18 29		30	30
	40	26 57	26 03	25 11	24 18	23 25	22 32	21 39	20 46	19 53	19 00	18 07	18 07		40	40
	50	26 21	25 28	24 37	23 45	22 53	22 01	21 10	20 17	19 25	18 33	17 42	17 42		50	50
8	00	25 41	24 50	24 01	23 10	22 17	21 28	20 37	19 47	18 56	18 06	17 14	17 14	8	00	00
	10	25 00	24 10	23 22	22 32	21 42	20 53	20 04	19 14	18 25	17 36	16 46	16 46		10	10
	20	24 16	23 28	22 40	21 52	21 04	20 16	19 28	18 40	17 52	17 04	16 16	16 16		20	20
	30	23 30	22 43	21 57	21 10	20 23	19 37	18 50	18 04	17 18	16 31	15 44	15 44		30	30
	40	22 41	21 56	21 11	20 26	19 41	18 56	18 11	17 26	16 41	15 56	15 11	15 11		40	40
	50	21 50	21 06	20 23	19 39	18 56	18 13	17 29	16 46	16 02	15 20	14 36	14 36		50	50
9	00	20 57	20 14	19 33	18 52	18 09	17 27	16 46	16 05	15 23	14 41	14 00	14 00	9	00	00
	10	20 02	19 21	18 41	18 01	17 20	16 41	16 01	15 21	14 41	14 02	13 22	13 22		10	10
	20	19 04	18 24	17 47	17 08	16 31	15 52	15 14	14 36	13 58	13 21	12 43	12 43		20	20
	30	18 04	17 27	16 50	16 14	15 38	15 02	14 26	13 50	13 14	12 38	12 02	12 02		30	30
	40	17 02	16 27	15 53	15 18	14 44	14 09	13 35	13 01	12 28	11 54	11 20	11 20		40	40
	50	15 58	15 25	14 53	14 21	13 48	13 16	12 44	12 12	11 40	11 08	10 37	10 37		50	50
10	00	14 53	14 22	13 52	13 21	12 51	12 21	11 51	11 22	10 51	10 22	9 53	9 53	10	00	00
	10	13 45	13 16	12 48	12 20	11 52	11 25	10 57	10 29	10 02	9 35	9 07	9 07		10	10
	20	12 35	12 09	11 43	11 18	10 52	10 26	10 02	9 36	9 11	8 46	8 21	8 21		20	20
	30	11 25	11 01	10 38	10 13	9 51	9 28	9 04	8 42	8 19	7 56	7 34	7 34		30	30
	40	10 12	9 51	9 30	9 09	8 49	8 27	8 07	7 46	7 25	7 05	6 45	6 45		40	40
	50	8 59	8 40	8 21	8 03	7 45	7 26	7 08	6 50	6 32	6 14	5 56	5 56		50	50
11	00	7 44	7 28	7 12	6 56	6 39	6 24	6 09	5 54	5 38	5 22	5 06	5 06	11	00	00
	10	6 28	6 14	6 01	5 48	5 34	5 21	5 09	4 55	4 42	4 29	4 17	4 17		10	10
	20	5 12	5 01	4 50	4 40	4 29	4 16	4 06	3 56	3 46	3 36	3 26	3 26		20	20
	30	3 54	3 46	3 38	3 30	3 22	3 14	3 06	2 58	2 50	2 42	2 34	2 34		30	30
	40	2 37	2 31	2 26	2 20	2 14	2 09	2 04	1 59	1 54	1 49	1 43	1 43		40	40
	50	1 18	1 16	1 13	1 10	1 07	1 04	1 02	0 59	0 57	0 54	0 51	0 51		50	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 14°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 14°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
0	10	12 54	11 42	10 40	9 48	8 56	8 02	7 48	7 17	6 49	6 25	6 02	5 41	0	10
0	20	24 32	22 24	20 34	18 59	17 36	16 22	15 16	14 18	13 26	12 37	11 54	11 15	0	20
0	30	34 11	31 32	29 14	27 09	25 19	23 40	22 10	20 49	19 36	18 30	17 28	16 32	0	30
0	40	41 53	39 02	36 28	34 08	32 01	30 06	28 20	26 44	25 16	23 54	22 39	21 29	0	40
0	50	47 54	45 01	42 24	39 58	37 44	35 40	33 45	31 58	30 19	28 47	27 22	26 01	0	50
1	00	52 32	49 47	47 12	44 48	42 32	40 24	38 24	36 32	34 47	33 08	31 35	30 08	1	00
1	10	56 12	53 36	51 07	48 46	46 31	44 24	42 23	40 30	38 41	36 58	35 22	33 50	1	10
1	20	59 06	56 39	54 17	52 01	49 50	47 46	45 46	43 53	42 04	40 20	38 41	37 07	1	20
1	30	61 25	59 06	56 52	54 42	52 38	50 37	48 40	46 48	45 00	43 16	41 36	40 01	1	30
1	40	63 17	61 07	59 00	56 56	54 56	53 00	51 06	49 17	47 31	45 49	44 09	42 35	1	40
1	50	64 47	62 45	60 44	58 47	56 52	55 00	53 11	51 25	49 41	48 01	46 23	44 49	1	50
2	00	66 01	64 05	62 11	60 19	58 30	56 43	54 58	53 15	51 34	49 56	48 20	46 47	2	00
2	10	67 01	65 11	63 23	61 37	59 53	58 09	56 27	54 48	53 10	51 35	50 01	48 30	2	10
2	20	67 49	66 05	64 23	62 42	61 01	59 22	57 44	56 09	54 34	53 01	51 30	50 01	2	20
2	30	68 29	66 49	65 11	63 35	61 59	60 24	58 50	57 17	55 45	54 15	52 46	51 19	2	30
2	40	69 00	67 25	65 52	64 19	62 47	61 15	59 44	58 15	56 46	55 19	53 52	52 27	2	40
2	50	69 25	67 55	66 25	64 56	63 28	61 59	60 32	59 05	57 39	56 14	54 50	53 26	2	50
3	00	69 44	68 18	66 52	65 26	64 00	62 35	61 11	59 47	58 24	57 01	55 39	54 18	3	00
3	10	69 59	68 35	67 13	65 50	64 27	63 05	61 43	60 21	59 00	57 40	56 20	55 01	3	10
3	20	70 09	68 49	67 28	66 08	64 49	63 28	62 09	60 50	59 32	58 13	56 55	55 38	3	20
3	30	70 16	68 58	67 39	66 22	65 05	63 47	62 30	61 14	59 57	58 40	57 24	56 09	3	30
3	40	70 19	69 03	67 47	66 32	65 16	64 01	62 47	61 32	60 17	59 03	57 48	56 34	3	40
3	50	70 18	69 04	67 51	66 38	65 25	64 11	62 99	61 46	60 32	59 20	58 07	56 55	3	50
4	00	70 15	69 04	67 52	66 41	65 30	64 18	63 07	61 96	60 44	59 33	58 21	57 11	4	00
4	10	70 09	68 59	67 50	66 40	65 30	64 20	63 09	62 01	60 50	59 40	58 29	57 17	4	10
4	20	70 00	68 52	67 44	66 36	65 28	64 20	63 12	62 03	60 55	59 47	58 39	57 31	4	20
4	30	69 50	68 43	67 36	66 30	65 23	64 17	63 09	62 02	60 56	59 49	58 41	57 35	4	30
4	40	69 37	68 31	67 26	66 20	65 15	64 09	63 04	61 59	60 52	59 47	58 41	57 35	4	40
4	50	69 22	68 17	67 13	66 09	65 05	64 00	62 56	61 51	60 46	59 42	58 37	57 32	4	50
5	00	69 04	68 01	66 58	65 55	64 52	63 48	62 45	61 41	60 38	59 34	58 30	57 26	5	00
5	10	68 45	67 43	66 41	65 38	64 37	63 34	62 31	61 29	60 26	59 23	58 20	57 17	5	10
5	20	68 24	67 22	66 21	65 20	64 18	63 16	62 14	61 13	60 11	59 10	58 08	57 06	5	20
5	30	68 00	67 00	66 00	65 00	64 00	63 00	62 00	61 00	60 00	59 00	58 00	57 00	5	30
5	40	67 35	66 35	65 35	64 35	63 35	62 35	61 35	60 35	59 34	58 33	57 33	56 32	5	40
5	50	67 08	66 08	65 09	64 09	63 10	62 11	61 11	60 12	59 11	58 12	57 12	56 12	5	50
6	00	66 36	65 40	64 40	63 41	62 43	61 44	60 45	59 46	58 46	57 47	56 48	55 49	6	00
6	10	66 06	65 08	64 09	63 11	62 13	61 14	60 15	59 17	58 19	57 20	56 21	55 23	6	10
6	20	65 32	64 35	63 37	62 39	61 41	60 42	59 44	58 46	57 48	56 50	55 52	54 53	6	20
6	30	64 57	63 58	63 01	62 03	61 06	60 08	59 10	58 12	57 14	56 17	55 19	54 21	6	30
6	40	64 18	63 20	62 23	61 26	60 28	59 30	58 33	57 36	56 38	55 41	54 44	53 47	6	40
6	50	63 37	62 39	61 42	60 46	59 48	58 51	57 54	56 57	56 00	55 03	54 05	53 09	6	50
7	00	62 53	61 56	60 58	60 02	59 05	58 08	57 12	56 15	55 18	54 21	53 25	52 29	7	00
7	10	62 06	61 09	60 12	59 15	58 19	57 23	56 26	55 30	54 33	53 37	52 41	51 45	7	10
7	20	61 17	60 20	59 23	58 27	57 31	56 33	55 37	54 42	53 45	52 49	51 53	50 57	7	20
7	30	60 25	59 28	58 31	57 34	56 39	55 42	54 45	53 50	52 53	51 58	51 03	50 08	7	30
7	40	59 29	58 32	57 35	56 39	55 43	54 46	53 50	52 55	51 59	51 04	50 09	49 14	7	40
7	50	58 30	57 33	56 35	55 39	54 43	53 47	52 52	51 56	51 01	50 06	49 11	48 16	7	50
8	00	57 26	56 29	55 33	54 37	53 40	52 44	51 49	50 53	49 59	49 04	48 09	47 15	8	00
8	10	56 19	55 22	54 25	53 29	52 33	51 36	50 43	49 48	48 52	47 59	47 05	46 11	8	10
8	20	55 08	54 11	53 14	52 18	51 23	50 27	49 32	48 37	47 43	46 49	45 56	45 03	8	20
8	30	53 52	52 55	51 58	51 02	50 07	49 12	48 17	47 22	46 29	45 35	44 43	43 50	8	30
8	40	52 31	51 34	50 37	49 41	48 45	47 51	46 57	46 03	45 10	44 17	43 24	42 33	8	40
8	50	51 05	50 07	49 11	48 15	47 21	46 26	45 32	44 39	43 46	42 53	42 02	41 11	8	50
9	00	49 33	48 36	47 40	46 44	45 50	44 55	44 03	43 10	42 17	41 26	40 35	39 45	9	00
9	10	47 54	46 58	46 01	45 08	44 14	43 20	42 27	41 35	40 43	39 53	39 03	38 14	9	10
9	20	46 10	45 14	44 18	43 24	42 31	41 38	40 46	39 55	39 05	38 15	37 26	36 38	9	20
9	30	44 17	43 22	42 27	41 34	40 42	39 50	39 00	38 09	37 20	36 31	35 43	34 57	9	30
9	40	42 18	41 24	40 30	39 35	38 47	37 56	37 06	36 18	35 29	34 42	33 56	33 10	9	40
9	50	40 15	39 15	38 26	37 34	36 44	35 55	35 07	34 20	33 33	32 47	32 03	31 19	9	50
10	00	37 56	37 04	36 13	35 24	34 35	33 47	33 01	32 15	31 31	30 46	30 04	29 22	10	00
10	10	35 31	34 41	33 52	33 04	32 18	31 32	30 48	30 04	29 21	28 40	27 59	27 19	10	10
10	20	32 59	32 10	31 23	30 38	29 54	29 10	28 29	27 47	27 07	26 27	25 49	25 11	10	20
10	30	30 17	29 31	28 47	28 03	27 22	26 41	26 01	25 24	24 46	24 09	23 33	22 58	10	30
10	40	27 24	26 43	26 01	25 22	24 45	24 05	23 28	22 53	22 18	21 45	21 12	20 40	10	40
10	50	24 24	23 45	23 08	22 32	21 57	21 22	20 50	20 17	19 46	19 16	18 47	18 17	10	50
11	00	21 14	20 40	20 07	19 34	19 03	18 33	18 03	17 35	17 08	16 42	16 15	15 49	11	00
11	10	17 57	17 27	16 58	16 30	16 04	15 37	15 12	14 48	14 24	14 01	13 39	13 19	11	10
11	20	14 31	14 06	13 43	13 21	12 58	12 37	12 16	11 57	11 37	11 19	11 01	10 43	11	20
11	30	10 59	10 41	10 22	10 05	9 45	9 31	9 16	8 59	8 46	8 31	8 18	8 05	11	30
11	40	7 23	7 10	6 57	6 46	6 34	6 23	6 12	6 02	5 52	5 43	5 33	5 25	11	40
11	50	3 42	3 35	3 30	3 24	3 18	3 12	3 07	3 02	2 56	2 51	2 47	2 43	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 14°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 14°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	5 23	5 05	4 49	4 35	4 21	4 08	3 57	3 46	3 35	3 26	3 16	3 07	1	10
	20	10 38	10 05	9 34	9 05	8 39	8 14	7 50	7 29	7 09	6 49	6 31	6 14		20
	30	15 41	14 53	14 06	13 27	12 48	12 12	11 38	11 06	10 36	10 08	9 41	9 16		30
	40	20 25	19 24	18 28	17 36	16 47	16 00	15 17	14 36	13 57	13 20	12 46	12 13		40
	50	24 47	23 37	22 31	21 30	20 32	19 37	18 45	17 57	17 10	16 26	15 43	15 04		50
1	00	28 46	27 29	26 16	25 07	24 01	22 59	22 01	21 05	20 12	19 21	18 33	17 47	1	00
	10	32 23	31 00	29 41	28 28	27 16	26 08	25 03	24 03	23 04	22 07	21 13	20 22		10
	20	35 37	34 10	32 48	31 30	30 14	29 02	27 53	26 47	25 44	24 43	23 45	22 49		20
	30	38 29	37 00	35 36	34 15	32 56	31 41	30 29	29 19	28 12	27 08	26 05	25 06		30
	40	41 02	39 32	38 07	36 44	35 23	34 06	32 52	31 39	30 29	29 22	28 17	27 14		40
	50	43 16	41 47	40 21	38 57	37 36	36 17	35 01	33 46	32 35	31 25	30 16	29 12		50
2	00	45 16	43 47	42 21	40 57	39 35	38 16	36 99	35 43	34 30	33 19	32 10	31 03	2	00
	10	47 02	45 33	44 07	42 44	41 22	40 02	38 44	37 28	36 15	35 03	33 52	32 43		10
	20	48 32	47 06	45 41	44 19	42 57	41 38	40 20	39 04	37 49	36 37	35 25	34 15		20
	30	49 53	48 28	47 05	45 43	44 23	43 04	41 46	40 30	39 15	38 02	36 50	35 40		30
	40	51 03	49 40	48 18	46 57	45 37	44 20	43 03	41 47	40 32	39 19	38 07	36 56		40
	50	52 04	50 42	49 22	48 02	46 44	45 27	44 11	42 55	41 41	40 28	39 16	38 05		50
3	00	52 56	51 37	50 18	49 00	47 43	46 26	45 11	43 57	42 43	41 30	40 18	39 07	3	00
	10	53 42	52 24	51 07	49 50	48 34	47 19	46 04	44 51	43 38	42 26	41 13	40 03		10
	20	54 21	53 04	51 49	50 33	49 19	48 05	46 51	45 38	44 25	43 14	42 03	40 53		20
	30	54 54	53 38	52 24	51 11	49 57	48 44	47 31	46 19	45 08	43 57	42 47	41 37		30
	40	55 21	54 07	52 55	51 42	50 30	49 18	48 06	46 55	45 44	44 34	43 25	42 15		40
	50	55 43	54 31	53 19	52 08	50 57	49 46	48 36	47 25	46 15	45 06	43 57	42 48		50
4	00	56 00	54 50	53 40	52 29	51 20	50 09	49 00	47 51	46 42	45 34	44 25	43 17	4	00
	10	56 13	55 04	53 55	52 46	51 38	50 28	49 20	48 12	47 03	45 56	44 49	43 41		10
	20	56 23	55 15	54 07	52 59	51 51	50 43	49 36	48 28	47 21	46 14	45 07	44 01		20
	30	56 28	55 20	54 14	53 07	52 00	50 54	49 47	48 40	47 34	46 28	45 22	44 16		30
	40	56 39	55 32	54 18	53 12	52 06	51 00	49 55	48 48	47 43	46 38	45 32	44 27		40
	50	56 38	55 23	54 18	53 14	52 08	51 03	49 58	48 54	47 49	46 45	45 39	44 35		50
5	00	56 23	55 18	54 14	53 11	52 07	51 03	49 59	48 55	47 51	46 47	45 42	44 38	5	00
	10	56 14	55 12	54 08	53 05	52 02	50 59	49 56	48 52	47 49	46 46	45 42	44 39		10
	20	56 03	55 01	53 59	52 56	51 54	50 51	49 49	48 47	47 44	46 42	45 39	44 36		20
	30	55 49	54 48	53 46	52 45	51 42	50 41	49 39	48 37	47 35	46 34	45 32	44 30		30
	40	55 37	54 37	53 30	52 30	51 29	50 28	49 26	48 25	47 24	46 23	45 22	44 20		40
	50	55 12	54 12	53 12	52 12	51 11	50 10	49 10	48 09	47 09	46 09	45 08	44 08		50
6	00	54 49	53 50	52 51	51 50	50 51	49 51	48 52	47 52	46 52	45 52	44 52	43 51	6	00
	10	54 23	53 25	52 26	51 27	50 28	49 29	48 29	47 30	46 31	45 31	44 32	43 32		10
	20	53 55	52 56	51 58	50 59	50 01	49 02	48 04	47 05	46 07	45 08	44 09	43 10		20
	30	53 23	52 25	51 28	50 31	49 32	48 33	47 35	46 36	45 40	44 42	43 43	42 46		30
	40	52 49	51 52	50 55	49 58	49 00	48 03	47 05	46 07	45 10	44 13	43 15	42 17		40
	50	52 12	51 15	50 18	49 22	48 25	47 27	46 31	45 34	44 37	43 40	42 43	41 46		50
7	00	51 31	50 35	49 39	48 43	47 46	46 50	45 53	44 57	44 00	43 05	42 09	41 12	7	00
	10	50 49	49 52	48 56	48 01	47 05	46 09	45 13	44 17	43 22	42 27	41 30	40 35		10
	20	50 02	49 06	48 11	47 16	46 21	45 24	44 29	43 34	42 40	41 44	40 49	39 56		20
	30	49 12	48 16	47 22	46 27	45 32	44 37	43 43	42 48	41 54	41 00	40 06	39 12		30
	40	48 19	47 24	46 30	45 35	44 41	43 47	42 53	41 59	41 05	40 12	39 18	38 24		40
	50	47 22	46 28	45 34	44 40	43 46	42 52	41 59	41 06	40 13	39 21	38 28	37 35		50
8	00	46 21	45 28	44 35	43 41	42 48	41 55	41 03	40 10	39 17	38 26	37 34	36 43	8	00
	10	45 18	44 25	43 32	42 40	41 47	40 55	40 03	39 11	38 20	37 28	36 37	35 46		10
	20	44 10	43 16	42 25	41 32	40 41	39 50	38 59	38 08	37 18	36 27	35 37	34 47		20
	30	42 57	42 05	41 14	40 23	39 32	38 41	37 51	37 01	36 12	35 22	34 33	33 44		30
	40	41 41	40 49	39 59	39 09	38 19	37 29	36 40	35 51	35 02	34 14	33 25	32 39		40
	50	40 20	39 30	38 40	37 51	37 02	36 13	35 24	34 36	33 49	33 02	32 16	31 29		50
9	00	38 55	38 05	37 17	36 28	35 40	34 53	34 05	33 18	32 33	31 47	31 01	30 16	9	00
	10	37 24	36 36	35 49	35 02	34 15	33 28	32 42	31 57	31 12	30 27	29 44	29 00		10
	20	35 50	35 03	34 16	33 30	32 45	32 00	31 15	30 32	29 48	29 05	28 23	27 41		20
	30	34 10	33 25	32 40	31 54	31 11	30 27	29 44	29 02	28 20	27 39	26 58	26 17		30
	40	32 25	31 41	30 55	30 14	29 32	28 50	28 09	27 28	26 48	26 09	25 29	24 50		40
	50	30 35	29 53	29 11	28 30	27 49	27 09	26 30	25 51	25 12	24 35	23 58	23 21		50
10	00	28 40	28 00	27 20	26 41	26 02	25 24	24 47	24 10	23 34	22 58	22 23	21 48	10	00
	10	26 40	26 01	25 24	24 47	24 10	23 35	23 00	22 25	21 51	21 17	20 44	20 11		10
	20	24 35	23 59	23 23	22 49	22 15	21 42	21 08	20 36	20 05	19 33	19 03	18 32		20
	30	22 24	21 51	21 18	20 46	20 14	19 44	19 14	18 44	18 15	17 46	17 19	16 51		30
	40	20 08	19 38	19 09	18 40	18 11	17 43	17 15	16 48	16 22	15 56	15 30	15 05		40
	50	17 49	17 21	16 55	16 29	16 03	15 38	15 14	14 49	14 27	14 04	13 41	13 19		50
11	00	15 25	15 01	14 37	14 15	13 53	13 31	13 09	12 48	12 28	12 08	11 48	11 29	11	00
	10	12 57	12 37	12 17	11 59	11 39	11 20	11 02	10 45	10 27	10 10	9 53	9 37		10
	20	10 26	10 10	9 53	9 37	9 22	9 07	8 53	8 38	8 24	8 11	7 57	7 44		20
	30	7 52	7 39	7 27	7 16	7 03	6 52	6 41	6 30	6 19	6 10	5 59	5 49		30
	40	5 15	5 08	4 59	4 51	4 43	4 35	4 26	4 21	4 14	4 07	4 00	3 54		40
	50	2 38	2 34	2 26	2 22	2 18	2 14	2 11	2 07	2 04	2 00	1 57	1 50		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 14°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 14°.	
Hour Angle.		18°	19°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.			
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00		
	10	3 00	2 51	2 44	2 37	2 30	2 23	2 17	2 11	2 05	2 00	1 54	1 50		10		
	20	5 57	5 42	5 36	5 29	5 22	5 15	5 09	5 03	4 57	4 51	4 45	4 40		20		
	30	8 52	8 39	8 30	8 21	8 13	8 05	7 58	7 51	7 44	7 37	7 31	7 25		30		
	40	11 41	11 11	10 43	10 15	9 49	9 24	8 59	8 35	8 13	7 52	7 32	7 12		40		
	50	14 25	13 49	13 14	12 41	12 09	11 38	11 08	10 40	10 12	9 45	9 20	8 55		50		
1	00	17 03	16 20	15 40	15 01	14 24	13 48	13 13	12 40	12 08	11 36	11 06	10 37	1	00		
	10	19 33	18 46	18 00	17 16	16 34	15 53	15 14	14 36	13 59	13 23	12 49	12 15		10		
	20	21 55	21 03	20 12	19 25	18 38	17 52	17 09	16 27	15 46	15 06	14 28	13 51		20		
	30	24 08	23 13	22 19	21 26	20 36	19 46	18 59	18 13	17 29	16 45	16 04	15 23		30		
	40	26 13	25 14	24 16	23 20	22 27	21 35	20 44	19 55	19 08	18 21	17 35	16 52		40		
	50	28 09	27 07	26 07	25 09	24 13	23 17	22 23	21 31	20 40	19 50	19 02	18 15		50		
2	00	29 57	28 53	27 50	26 50	25 51	24 53	23 56	23 02	22 09	21 16	20 26	19 36	2	00		
	10	31 36	30 31	29 26	28 23	27 23	26 23	25 24	24 27	23 32	22 37	21 43	20 51		10		
	20	33 07	32 00	30 54	29 50	28 47	27 45	26 45	25 46	24 49	23 52	22 57	22 02		20		
	30	34 30	33 23	32 15	31 10	30 06	29 03	28 02	27 01	26 02	25 03	24 06	23 10		30		
	40	35 47	34 38	33 30	32 24	31 20	30 15	29 12	28 10	27 10	26 09	25 10	24 13		40		
	50	36 55	35 46	34 38	33 32	32 26	31 20	30 16	29 14	28 12	27 10	26 10	25 12		50		
3	00	37 58	36 48	35 39	34 33	33 27	32 21	31 16	30 12	29 09	28 07	27 06	26 06	3	00		
	10	38 54	37 45	36 35	35 28	34 22	33 17	32 11	31 06	30 03	29 00	27 58	26 56		10		
	20	39 43	38 34	37 24	36 18	35 12	34 05	32 59	31 55	30 51	29 47	28 44	27 42		20		
	30	40 28	39 19	38 10	37 02	35 56	34 50	33 44	32 39	31 35	30 30	29 26	28 24		30		
	40	41 06	39 58	38 49	37 42	36 36	35 30	34 24	33 19	32 14	31 09	30 05	29 02		40		
	50	41 40	40 32	39 24	38 17	37 11	36 04	34 59	33 54	32 48	31 44	30 39	29 36		50		
4	00	42 10	41 02	39 54	38 47	37 41	36 35	35 29	34 24	33 19	32 14	31 10	30 07	4	00		
	10	42 34	41 27	40 20	39 14	38 08	37 01	35 56	34 51	33 46	32 41	31 36	30 32		10		
	20	42 54	41 47	40 41	39 35	38 30	37 23	36 18	35 14	34 10	33 04	32 00	30 56		20		
	30	43 11	42 05	40 59	39 53	38 48	37 42	36 37	35 33	34 28	33 24	32 20	31 15		30		
	40	43 22	42 17	41 11	40 07	39 02	37 57	36 52	35 48	34 44	33 40	32 35	31 31		40		
	50	43 30	42 26	41 21	40 17	39 12	38 08	37 04	36 00	34 56	33 52	32 48	31 44		50		
5	00	43 35	42 31	41 27	40 23	39 19	38 15	37 11	36 09	35 05	34 01	32 58	31 53	5	00		
	10	43 37	42 33	41 29	40 26	39 22	38 19	37 16	36 13	35 10	34 06	33 03	32 00		10		
	20	43 34	42 31	41 28	40 26	39 23	38 20	37 17	36 15	35 12	34 09	33 07	32 03		20		
	30	43 28	42 26	41 23	40 22	39 20	38 17	37 14	36 13	35 10	34 08	33 06	32 04		30		
	40	43 19	42 17	41 16	40 15	39 13	38 11	37 10	36 07	35 06	34 04	33 03	32 01		40		
	50	43 07	42 07	41 05	40 04	39 04	38 02	37 01	36 00	34 59	33 58	32 56	31 55		50		
6	00	42 52	41 52	40 51	39 51	38 51	37 50	36 50	35 49	34 48	33 48	32 47	31 46	6	00		
	10	42 33	41 34	40 34	39 35	38 35	37 35	36 35	35 35	34 35	33 35	32 35	31 34		10		
	20	42 13	41 14	40 14	39 15	38 16	37 16	36 17	35 18	34 19	33 20	32 20	31 21		20		
	30	41 48	40 49	39 51	38 52	37 54	36 55	35 57	34 59	34 00	33 01	32 03	31 04		30		
	40	41 20	40 22	39 25	38 27	37 30	36 31	35 33	34 36	33 38	32 39	31 42	30 44		40		
	50	40 50	39 53	38 56	37 59	37 02	36 04	35 08	34 10	33 13	32 16	31 19	30 21		50		
7	00	40 16	39 20	38 24	37 28	36 32	35 34	34 38	33 42	32 46	31 50	30 53	29 56	7	00		
	10	39 40	38 44	37 48	36 53	35 58	35 02	34 06	33 11	32 15	31 20	30 24	29 29		10		
	20	39 00	38 05	37 10	36 15	35 21	34 26	33 31	32 37	31 42	30 47	29 52	28 58		20		
	30	38 18	37 24	36 30	35 35	34 42	33 47	32 54	32 00	31 06	30 12	29 19	28 25		30		
	40	37 33	36 38	35 46	34 52	34 00	33 07	32 14	31 21	30 29	29 35	28 43	27 50		40		
	50	36 43	35 50	34 59	34 06	33 15	32 22	31 31	30 38	29 47	28 55	28 03	27 11		50		
8	00	35 51	35 00	34 08	33 17	32 26	31 34	30 44	29 53	29 03	28 12	27 22	26 31	8	00		
	10	34 56	34 05	33 15	32 25	31 36	30 45	29 55	29 06	28 16	27 27	26 37	25 48		10		
	20	33 58	33 08	32 18	31 30	30 42	29 52	29 04	28 16	27 27	26 39	25 51	25 02		20		
	30	32 56	32 07	31 20	30 31	29 44	28 56	28 09	27 22	26 35	25 48	25 01	24 14		30		
	40	31 51	31 04	30 17	29 28	28 44	27 58	27 12	26 27	25 40	24 55	24 10	23 24		40		
	50	30 43	29 57	29 11	28 26	27 41	26 57	26 12	25 28	24 43	23 59	23 15	22 31		50		
9	00	29 30	28 46	28 03	27 19	26 35	25 51	25 08	24 25	23 42	23 00	22 19	21 36	9	00		
	10	28 17	27 34	26 51	26 09	25 27	24 44	24 03	23 22	22 41	21 59	21 20	20 39		10		
	20	26 59	26 17	25 36	24 55	24 16	23 35	22 55	22 15	21 36	20 57	20 18	19 39		20		
	30	25 38	24 57	24 18	23 39	22 51	22 22	21 44	21 07	20 28	19 51	19 14	18 37		30		
	40	24 13	23 34	22 57	22 20	21 43	21 06	20 30	19 54	19 19	18 43	18 09	17 33		40		
	50	22 44	22 09	21 33	20 58	20 24	19 51	19 15	18 40	18 07	17 33	17 01	16 27		50		
10	00	21 14	20 40	20 06	19 34	19 01	18 28	17 56	17 24	16 53	16 21	15 51	15 20	10	00		
	10	19 40	19 08	18 36	18 06	17 35	17 05	16 35	16 06	15 36	15 07	14 38	14 09		10		
	20	18 04	17 34	17 05	16 36	16 08	15 40	15 12	14 45	14 19	13 51	13 25	12 59		20		
	30	16 23	15 56	15 30	15 04	14 38	14 13	13 47	13 23	12 59	12 34	12 09	11 45		30		
	40	14 42	14 17	13 53	13 29	13 06	12 43	12 20	11 58	11 36	11 15	10 53	10 31		40		
	50	12 56	12 35	12 14	11 53	11 33	11 12	10 52	10 32	10 13	9 53	9 34	9 16		50		
11	00	11 10	10 52	10 33	10 15	9 56	9 39	9 21	9 05	8 48	8 31	8 15	7 58	11	00		
	10	9 22	9 05	8 50	8 35	8 20	8 05	7 51	7 36	7 22	7 08	6 54	6 40		10		
	20	7 31	7 18	7 05	6 54	6 41	6 30	6 18	6 06	5 54	5 44	5 33	5 21		20		
	30	5 39	5 30	5 21	5 11	5 03	4 53	4 44	4 35	4 27	4 19	4 10	4 02		30		
	40	3 47	3 40	3 34	3 28	3 22	3 16	3 10	3 04	2 58	2 53	2 47	2 42		40		
	50	1 53	1 51	1 48	1 44	1 41	1 38	1 35	1 32	1 29	1 26	1 23	1 20		50		
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00		

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 14°.			DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 14°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.	m.	
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	
	10	1 44	1 39	1 34	1 30	1 26	1 21	1 17	1 14	1 10	1 06	1 02		10	
	20	3 28	3 18	3 09	3 00	2 51	2 42	2 35	2 26	2 19	2 11	2 03		20	
	30	5 11	4 57	4 42	4 29	4 16	4 03	3 51	3 39	3 27	3 16	3 04		30	
	40	6 52	6 34	6 15	5 57	5 40	5 23	5 07	4 51	4 36	4 21	4 05		40	
	50	8 31	8 09	7 46	7 24	7 02	6 41	6 21	6 01	5 42	5 23	5 05		50	
1	00	10 08	9 41	9 14	8 48	8 24	7 59	7 35	7 12	6 49	6 26	6 04	1	00	
	10	11 43	11 12	10 41	10 11	9 42	9 14	8 46	8 20	7 53	7 27	7 03		10	
	20	13 14	12 39	12 05	11 31	10 59	10 27	9 57	9 26	8 56	8 28	7 59		20	
	30	14 42	14 05	13 27	12 50	12 14	11 38	11 04	10 31	9 58	9 26	8 55		30	
	40	16 07	15 26	14 45	14 05	13 26	12 47	12 10	11 34	10 58	10 23	9 48		40	
	50	17 29	16 45	16 00	15 17	14 35	13 54	13 13	12 34	11 55	11 17	10 40		50	
2	00	18 46	17 59	17 12	16 27	15 42	14 57	14 15	13 33	12 51	12 11	11 30	2	00	
	10	20 00	19 10	18 20	17 32	16 45	15 59	15 14	14 28	13 44	13 01	12 18		10	
	20	21 09	20 17	19 25	18 35	17 45	16 56	16 09	15 22	14 36	13 50	13 05		20	
	30	22 14	21 20	20 27	19 35	18 43	17 52	17 02	16 13	15 24	14 36	13 49		30	
	40	23 16	22 20	21 24	20 30	19 37	18 44	17 53	17 01	16 11	15 21	14 32		40	
	50	24 12	23 16	22 19	21 22	20 27	19 34	18 40	17 47	16 54	16 03	15 12		50	
3	00	25 06	24 08	23 09	22 12	21 15	20 19	19 24	18 29	17 35	16 42	15 49	3	00	
	10	25 55	24 55	23 56	22 57	22 00	21 02	20 06	19 10	18 14	17 19	16 25		10	
	20	26 40	25 39	24 39	23 39	22 40	21 41	20 44	19 47	18 50	17 53	16 58		20	
	30	27 21	26 20	25 19	24 18	23 18	22 18	21 20	20 22	19 24	18 26	17 29		30	
	40	27 58	26 56	25 55	24 54	23 53	22 52	21 53	20 53	19 55	18 56	17 58		40	
	50	28 32	27 30	26 28	25 26	24 24	23 23	22 23	21 23	20 22	19 23	18 24		50	
4	00	29 02	27 59	26 57	25 54	24 52	23 51	22 49	21 48	20 48	19 47	18 47	4	00	
	10	29 28	28 26	27 22	26 19	25 17	24 15	23 13	22 12	21 11	20 10	19 09		10	
	20	29 51	28 49	27 45	26 42	25 39	24 36	23 34	22 32	21 31	20 30	19 29		20	
	30	30 11	29 08	28 04	27 01	25 59	24 56	23 54	22 51	21 49	20 46	19 45		30	
	40	30 27	29 24	28 20	27 17	26 14	25 11	24 09	23 06	22 04	21 01	20 00		40	
	50	30 40	29 37	28 33	27 30	26 27	25 25	24 22	23 19	22 16	21 14	20 11		50	
5	00	30 50	29 47	28 43	27 40	26 38	25 35	24 33	23 29	22 27	21 23	20 21	5	00	
	10	30 57	29 54	28 51	27 48	26 45	25 42	24 40	23 37	22 34	21 31	20 29		10	
	20	31 00	29 58	28 55	27 53	26 49	25 47	24 45	23 42	22 40	21 37	20 35		20	
	30	31 00	29 59	28 56	27 54	26 52	25 49	24 47	23 45	22 42	21 40	20 37		30	
	40	30 58	29 57	28 55	27 53	26 51	25 49	24 47	23 45	22 43	21 40	20 38		40	
	50	30 52	29 52	28 51	27 49	26 47	25 46	24 42	23 42	22 41	21 39	20 37		50	
6	00	30 45	29 44	28 43	27 42	26 41	25 40	24 39	23 38	22 37	21 35	20 34	6	00	
	10	30 34	29 33	28 33	27 33	26 32	25 32	24 32	23 31	22 30	21 29	20 28		10	
	20	30 21	29 21	28 21	27 22	26 22	25 22	24 22	23 22	22 21	21 21	20 21		20	
	30	30 08	29 08	28 07	27 07	26 08	25 09	24 09	23 10	22 10	21 10	20 11		30	
	40	29 45	28 47	27 49	26 51	25 53	24 54	23 55	22 56	21 57	20 58	19 59		40	
	50	29 23	28 27	27 29	26 32	25 33	24 36	23 38	22 40	21 42	20 44	19 46		50	
7	00	28 59	28 03	27 07	26 09	25 12	24 15	23 19	22 22	21 25	20 27	19 29	7	00	
	10	28 32	27 37	26 41	25 45	24 49	23 53	22 58	22 01	21 05	20 09	19 12		10	
	20	28 02	27 09	26 14	25 19	24 23	23 29	22 34	21 39	20 44	19 48	18 52		20	
	30	27 31	26 37	25 43	24 50	23 56	23 02	22 08	21 13	20 20	19 26	18 31		30	
	40	26 56	26 04	25 11	24 19	23 26	22 33	21 40	20 47	19 54	19 00	18 06		40	
	50	26 20	25 28	24 36	23 45	22 53	22 02	21 10	20 19	19 27	18 34	17 43		50	
8	00	25 40	24 50	23 59	23 09	22 18	21 28	20 38	19 47	18 57	18 07	17 16	8	00	
	10	24 58	24 10	23 20	22 31	21 42	20 53	20 04	19 15	18 26	17 37	16 47		10	
	20	24 15	23 26	22 39	21 51	21 04	20 15	19 26	18 40	17 53	17 05	16 17		20	
	30	23 27	22 42	21 55	21 08	20 22	19 36	18 51	18 04	17 18	16 31	15 45		30	
	40	22 39	21 54	21 09	20 24	19 39	18 55	18 10	17 26	16 41	15 56	15 11		40	
	50	21 47	21 05	20 21	19 37	18 55	18 11	17 28	16 45	16 03	15 19	14 36		50	
9	00	20 54	20 12	19 31	18 49	18 07	17 26	16 45	16 03	15 23	14 41	14 00	9	00	
	10	19 58	19 19	18 38	17 58	17 19	16 38	15 59	15 20	14 40	14 01	13 22		10	
	20	19 00	18 22	17 44	17 06	16 28	15 50	15 12	14 35	13 58	13 20	12 42		20	
	30	18 00	17 24	16 48	16 12	15 36	14 59	14 24	13 48	13 13	12 37	12 02		30	
	40	16 59	16 24	15 49	15 16	14 41	14 07	13 33	13 00	12 27	11 53	11 19		40	
	50	15 55	15 22	14 50	14 18	13 46	13 14	12 42	12 11	11 39	11 08	10 36		50	
10	00	14 49	14 19	13 48	13 19	12 49	12 19	11 50	11 20	10 51	10 21	9 52	10	00	
	10	13 41	13 13	12 45	12 18	11 50	11 23	10 55	10 28	10 01	9 33	9 07		10	
	20	12 32	12 06	11 41	11 15	10 51	10 25	9 59	9 34	9 08	8 45	8 20		20	
	30	11 21	10 58	10 35	10 12	9 49	9 26	9 03	8 40	8 18	7 56	7 32		30	
	40	10 09	9 49	9 28	9 07	8 46	8 26	8 05	7 45	7 25	7 05	6 45		40	
	50	8 57	8 38	8 19	8 01	7 43	7 24	7 07	6 49	6 32	6 14	5 56		50	
11	00	7 42	7 26	7 10	6 55	6 38	6 23	6 08	5 52	5 36	5 22	5 06	11	00	
	10	6 26	6 13	6 00	5 47	5 34	5 20	5 07	4 54	4 42	4 28	4 16		10	
	20	5 10	5 00	4 49	4 38	4 28	4 17	4 07	3 57	3 46	3 36	3 25		20	
	30	3 53	3 45	3 37	3 29	3 22	3 13	3 05	2 58	2 50	2 42	2 34		30	
	40	2 36	2 31	2 25	2 19	2 14	2 09	2 04	1 59	1 54	1 48	1 43		40	
	50	1 18	1 15	1 12	1 10	1 07	1 04	1 02	0 59	0 57	0 54	0 52		50	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 15°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 15°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /	
		0	00	0	00	0	00	0	00	0	00	0	00	0	00
0	00	0	00	0	00	0	00	0	00	0	00	0	00	0	00
0	10	14	16	12	48	11	36	10	35	9	42	8	58	7	43
0	20	26	51	24	21	22	13	20	24	18	49	17	26	16	12
0	30	37	07	33	58	31	19	29	00	25	05	23	26	21	57
0	40	44	45	41	37	38	46	36	13	33	52	31	46	28	04
0	50	50	40	47	35	44	45	42	06	39	40	37	26	35	22
1	00	55	11	52	15	49	29	46	54	44	28	42	12	40	04
1	10	58	39	55	54	53	17	50	48	48	25	46	11	44	03
1	20	61	21	58	47	50	19	53	57	51	40	49	30	47	24
1	30	63	29	61	05	58	47	58	52	54	21	52	15	50	14
1	40	65	10	62	57	60	46	58	39	56	34	54	34	52	36
1	50	66	32	64	26	62	23	60	23	56	28	54	36	52	46
2	00	67	37	65	40	63	43	61	49	59	56	58	05	56	18
2	10	68	30	66	38	64	48	62	59	61	13	59	27	57	43
2	20	69	12	67	25	65	41	63	58	62	16	60	35	58	56
2	30	69	44	68	04	66	25	64	47	63	09	61	32	59	36
2	40	70	10	68	35	67	00	65	26	63	52	62	20	60	47
2	50	70	30	68	59	67	28	65	57	64	28	62	59	61	30
3	00	70	44	69	17	67	50	66	24	64	57	63	31	62	05
3	10	70	54	69	30	68	07	66	43	65	20	63	56	62	34
3	20	71	01	69	39	68	18	66	58	65	37	64	17	62	34
3	30	71	02	69	44	68	25	67	08	66	49	64	37	63	14
3	40	71	02	69	46	68	30	67	15	66	59	64	43	63	27
3	50	70	57	69	44	68	31	67	17	66	03	64	50	63	37
4	00	70	51	69	39	68	28	67	17	66	05	64	53	63	41
4	10	70	42	69	33	68	23	67	13	66	03	64	53	63	43
4	20	70	31	69	22	68	15	67	06	65	57	64	50	63	41
4	30	70	17	69	11	68	04	66	57	65	59	64	43	63	36
4	40	70	01	68	56	67	51	66	45	65	59	64	34	63	28
4	50	69	43	68	39	67	35	66	31	65	27	64	22	63	18
5	00	69	23	68	21	67	18	66	15	65	11	64	08	63	04
5	10	68	03	68	00	66	58	65	56	64	53	63	51	62	46
5	20	68	38	67	37	66	36	65	35	64	33	63	32	62	26
5	30	68	13	67	12	66	12	65	12	64	11	63	10	62	09
5	40	67	46	66	45	65	46	64	45	63	45	62	45	61	45
5	50	67	16	66	16	65	17	64	18	63	18	62	19	61	20
6	00	66	43	65	45	64	46	63	48	62	49	61	50	60	51
6	10	66	10	65	12	64	13	63	15	62	16	61	18	60	20
6	20	65	34	64	36	63	39	62	41	61	42	60	45	59	47
6	30	64	55	63	58	63	01	62	04	61	06	60	08	58	48
6	40	64	15	63	18	62	21	61	24	60	26	59	29	57	32
6	50	63	32	62	35	61	38	60	41	59	44	58	48	56	41
7	00	62	47	61	49	60	53	59	56	58	03	57	07	56	10
7	10	61	57	61	01	60	05	58	18	57	16	56	19	55	23
7	20	61	07	60	09	59	13	57	21	56	25	55	29	54	33
7	30	60	12	59	15	58	19	56	23	55	32	54	36	53	40
7	40	59	15	58	17	57	22	56	25	55	30	54	34	52	44
7	50	58	13	57	17	56	21	55	25	54	29	53	34	51	43
8	00	57	08	56	11	55	16	54	20	53	24	52	28	51	40
8	10	55	59	55	02	54	07	53	11	52	16	51	21	50	27
8	20	54	46	53	49	52	54	51	50	49	46	48	48	48	38
8	30	53	29	52	32	51	37	50	41	49	46	47	44	46	31
8	40	52	06	51	09	50	14	49	19	48	24	47	31	45	18
8	50	50	38	49	42	48	47	47	52	46	04	45	12	44	19
9	00	49	05	48	08	47	13	46	20	45	26	44	33	43	40
9	10	47	25	46	29	45	35	44	41	43	48	42	55	41	14
9	20	45	39	44	44	43	51	42	57	42	05	41	14	40	23
9	30	43	47	42	52	42	00	41	07	40	15	39	25	38	35
9	40	41	47	40	53	40	01	39	10	38	19	37	31	36	43
9	50	39	39	38	46	37	57	37	06	36	17	35	29	34	43
10	00	37	23	36	33	35	44	34	55	34	07	33	22	32	36
10	10	35	00	34	10	33	37	31	51	31	06	30	24	29	41
10	20	32	48	31	40	30	55	30	11	29	27	28	46	28	05
10	30	29	46	29	02	28	19	27	37	26	57	26	18	25	39
10	40	26	56	26	15	25	35	24	56	24	19	23	43	23	07
10	50	23	57	23	22	22	09	21	34	21	01	20	30	20	30
11	00	20	50	20	16	19	45	18	43	18	14	17	46	17	19
11	10	17	36	17	06	16	39	15	22	15	22	14	58	14	34
11	20	14	14	13	50	12	35	12	44	12	23	11	45	11	45
11	30	10	46	10	27	10	10	9	54	9	37	8	38	8	24
11	40	7	13	7	01	6	49	6	27	6	16	5	56	5	47
11	50	3	38	3	31	3	25	3	14	3	09	2	59	2	54
12	00	0	00	0	00	0	00	0	00	0	00	0	00	0	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 15°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 15°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	0	1	2	3	4	5	6	7	8	9	10	11	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	5 37	5 18	5 02	4 46	4 31	4 18	4 05	3 54	3 42	3 32	3 21	3 13	1	00
	20	11 06	10 30	9 57	9 26	8 58	8 31	8 06	7 43	7 22	7 01	6 42	6 24		10
	30	16 20	15 28	14 41	13 56	13 15	12 36	12 01	11 27	10 55	10 25	9 57	9 30		20
	40	21 15	20 10	19 10	18 13	17 22	16 32	15 47	15 03	14 22	13 43	13 07	12 32		30
	50	25 44	24 29	23 20	22 14	21 12	20 15	19 19	18 28	17 40	16 53	16 09	15 28		40
1	00	29 48	28 26	27 09	25 56	24 47	23 41	22 40	21 41	20 45	19 52	19 02	18 14	1	50
	10	33 28	32 01	30 38	29 20	28 05	26 54	25 46	24 42	23 40	22 42	21 46	20 52		10
	20	36 43	35 13	33 47	32 24	31 05	29 50	28 37	27 29	26 23	25 19	24 19	23 20		20
	30	39 36	38 03	36 35	35 11	33 49	32 31	31 15	30 02	28 53	27 46	26 41	25 40		30
	40	42 08	40 36	39 06	37 40	36 17	34 56	33 38	32 24	31 11	30 01	28 53	27 49		40
	50	44 21	42 49	41 20	39 53	38 29	37 06	35 48	34 32	33 17	32 05	30 55	29 48		50
2	00	46 19	44 48	43 19	41 52	40 28	39 06	37 45	36 27	35 12	33 59	32 48	31 39	2	00
	10	48 02	46 31	45 02	43 37	42 13	40 50	39 31	38 13	36 57	35 42	34 29	33 19		10
	20	49 30	48 02	46 35	45 11	43 47	42 25	41 05	39 47	38 30	37 16	36 02	34 51		20
	30	50 49	49 22	47 56	46 33	45 11	43 50	42 30	41 11	39 55	38 40	37 27	36 15		30
	40	51 56	50 31	49 07	47 45	46 24	45 04	43 45	42 28	41 12	39 57	38 43	37 31		40
	50	52 54	51 31	50 09	48 48	47 28	46 09	44 52	43 34	42 19	41 04	39 50	38 39		50
3	00	53 44	52 23	51 03	49 43	48 25	47 07	45 51	44 34	43 19	42 05	40 52	39 40	3	00
	10	54 27	53 08	51 49	50 31	49 14	47 58	46 42	45 27	44 13	42 59	41 46	40 35		10
	20	55 04	53 46	52 29	51 12	49 57	48 41	47 27	46 12	44 59	43 47	42 34	41 23		20
	30	55 33	54 18	53 02	51 47	50 33	49 19	48 05	46 52	45 40	44 28	43 16	42 06		30
	40	55 58	54 44	53 30	52 16	51 03	49 50	48 38	47 26	46 14	45 03	43 53	42 43		40
	50	56 18	55 05	53 53	52 41	51 28	50 17	49 06	47 55	46 44	45 34	44 24	43 15		50
4	00	56 33	55 22	54 10	52 59	51 49	50 38	49 28	48 19	47 09	46 00	44 50	43 42	4	00
	10	56 43	55 33	54 23	53 14	52 05	50 56	49 47	48 36	47 29	46 20	45 12	44 04		10
	20	56 50	55 41	54 33	53 25	52 17	51 08	49 59	48 52	47 45	46 37	45 29	44 21		20
	30	56 53	55 46	54 39	53 31	52 24	51 17	50 10	49 03	47 56	46 49	45 43	44 36		30
	40	56 52	55 46	54 40	53 34	52 28	51 21	50 15	49 09	48 04	46 57	45 51	44 46		40
	50	56 48	55 43	54 38	53 34	52 29	51 23	50 18	49 13	48 08	47 02	45 57	44 52		50
5	00	56 42	55 37	54 33	53 29	52 25	51 21	50 16	49 12	48 08	47 03	45 58	44 55	5	00
	10	56 31	55 28	54 25	53 21	52 18	51 14	50 11	49 08	48 05	47 01	45 57	44 54		10
	20	56 18	55 16	54 14	53 11	52 08	51 05	50 03	49 00	47 58	46 55	45 52	44 50		20
	30	56 02	55 01	53 59	52 57	51 55	50 54	49 52	48 50	47 58	46 56	45 54	44 52		30
	40	55 43	54 42	53 41	52 40	51 39	50 38	49 37	48 36	47 35	46 33	45 32	44 31		40
	50	55 21	54 21	53 21	52 21	51 21	50 20	49 19	48 19	47 18	46 18	45 18	44 17		50
6	00	54 56	53 57	52 57	51 58	50 58	49 58	48 58	47 59	46 59	46 00	44 59	44 00	6	00
	10	54 29	53 30	52 32	51 33	50 34	49 35	48 35	47 36	46 37	45 38	44 39	43 40		10
	20	53 59	53 01	52 03	51 05	50 06	49 07	48 09	47 10	46 12	45 13	44 15	43 16		20
	30	53 26	52 28	51 31	50 33	49 35	48 37	47 39	46 41	45 43	44 45	43 48	42 50		30
	40	52 50	51 53	50 56	49 58	48 59	47 59	46 59	45 59	44 59	43 59	42 59	41 58		40
	50	52 11	51 14	50 18	49 22	48 24	47 28	46 31	45 35	44 38	43 42	42 44	41 48		50
7	00	51 30	50 33	49 37	48 41	47 45	46 49	45 53	44 57	44 01	43 05	42 09	41 13	7	00
	10	50 44	49 48	48 53	47 57	47 02	46 06	45 11	44 15	43 20	42 24	41 29	40 34		10
	20	49 56	49 01	48 06	47 11	46 16	45 21	44 26	43 31	42 37	41 42	40 48	39 54		20
	30	49 05	48 11	47 16	46 21	45 27	44 32	43 38	42 43	41 50	40 56	40 02	39 10		30
	40	48 10	47 16	46 22	45 29	44 35	43 41	42 47	41 53	41 00	40 07	39 14	38 21		40
	50	47 13	46 19	45 25	44 32	43 39	42 46	41 53	41 00	40 08	39 15	38 23	37 32		50
8	00	46 10	45 18	44 25	43 32	42 39	41 47	40 53	40 03	39 11	38 20	37 28	36 37	8	00
	10	45 06	44 12	43 20	42 28	41 36	40 46	39 53	39 02	38 12	37 21	36 31	35 41		10
	20	44 36	43 45	42 53	42 01	41 11	40 20	39 30	38 38	37 58	37 09	36 19	35 30		20
	30	44 43	43 51	43 01	42 11	41 20	40 30	39 40	38 51	38 03	37 14	36 25	35 37		30
	40	44 25	43 35	42 45	41 55	41 05	40 15	39 25	38 35	37 45	36 55	36 05	35 17		40
	50	44 04	43 15	42 25	41 35	40 45	39 55	39 05	38 15	37 25	36 35	35 45	34 55		50
9	00	38 38	37 50	37 02	36 14	35 27	34 40	33 53	33 07	32 21	31 37	30 52	30 07	9	00
	10	37 08	36 20	35 33	34 47	34 01	33 14	32 29	31 45	31 01	30 17	29 33	28 50		10
	20	35 34	34 46	34 00	33 16	32 30	31 46	31 03	30 19	29 36	28 54	28 12	27 30		20
	30	33 52	33 07	32 23	31 39	30 56	30 13	29 30	28 48	28 08	27 27	26 47	26 07		30
	40	32 07	31 23	30 41	30 00	29 17	28 36	27 56	27 16	26 37	25 57	25 19	24 41		40
	50	30 17	29 36	28 55	28 15	27 35	26 55	26 16	25 38	24 59	24 24	23 48	23 12		50
10	00	28 22	27 43	27 04	26 25	25 48	25 11	24 34	23 58	23 23	22 47	22 13	21 39	10	00
	10	26 22	25 45	25 08	24 32	23 56	23 21	22 47	22 13	21 40	21 07	20 35	20 03		10
	20	24 17	23 42	23 08	22 34	22 01	21 29	20 57	20 25	19 54	19 24	18 54	18 24		20
	30	22 08	21 36	21 04	20 33	20 02	19 32	19 03	18 33	18 06	17 37	17 09	16 42		30
	40	19 54	19 24	18 55	18 27	17 59	17 31	17 04	16 38	16 13	15 48	15 22	14 58		40
	50	17 35	17 09	16 43	16 18	15 53	15 28	15 05	14 41	14 18	13 55	13 33	13 12		50
11	00	15 13	14 49	14 27	14 04	13 43	13 22	13 01	12 41	12 21	12 01	11 42	11 23	11	00
	10	12 47	12 27	12 08	11 49	11 30	11 12	10 55	10 38	10 21	10 04	9 48	9 32		10
	20	10 17	10 01	9 46	9 31	9 16	9 01	8 47	8 33	8 20	8 06	7 53	7 39		20
	30	7 45	7 33	7 21	7 09	6 58	6 48	6 36	6 26	6 16	6 06	5 56	5 46		30
	40	5 12	5 03	4 56	4 47	4 39	4 33	4 25	4 18	4 11	4 04	3 57	3 52		40
	50	2 36	2 32	2 28	2 24	2 21	2 17	2 13	2 09	2 05	2 02	1 59	1 56		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 15°.				DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 15°.			
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.			
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00		
	10	3 04	2 55	2 48	2 40	2 33	2 27	2 20	2 14	2 07	2 02	1 56	1 51	1	10		
	20	6 06	5 50	5 34	5 20	5 06	4 52	4 39	4 26	4 15	4 04	3 52	3 42	2	20		
	30	9 05	8 41	8 18	7 56	7 35	7 16	6 56	6 37	6 20	6 03	5 47	5 31	3	30		
	40	11 59	11 27	10 58	10 30	10 02	9 36	9 10	8 47	8 24	8 01	7 40	7 19	4	40		
	50	14 47	14 09	13 33	12 58	12 25	11 53	11 22	10 53	10 24	9 56	9 30	9 04	5	50		
1	00	17 26	16 44	16 02	15 21	14 42	14 05	13 29	12 54	12 21	11 49	11 17	10 47	1	00		
	10	20 00	19 12	18 24	17 38	16 54	16 12	15 32	14 52	14 14	13 38	13 02	12 28	2	10		
	20	22 25	21 30	20 39	19 48	19 00	18 14	17 29	16 46	16 03	15 22	14 43	14 04	3	20		
	30	24 40	23 42	22 46	21 52	21 00	20 09	19 20	18 33	17 47	17 03	16 19	15 38	4	30		
	40	26 46	25 45	24 46	23 48	22 53	21 59	21 07	20 16	19 26	18 38	17 52	17 07	5	40		
	50	28 42	27 39	26 37	25 36	24 39	23 42	22 46	21 52	21 00	20 10	19 20	18 32		50		
2	00	30 30	29 25	28 21	27 19	26 17	25 19	24 20	23 24	22 29	21 36	20 44	19 58	2	00		
	10	32 11	31 03	29 56	28 52	27 40	26 48	25 48	24 50	23 52	22 57	22 02	21 08	3	10		
	20	33 41	32 32	31 25	30 19	29 15	28 12	27 10	26 09	25 10	24 12	23 16	22 20	4	20		
	30	35 04	33 54	32 46	31 39	30 33	29 30	28 27	27 25	26 24	25 24	24 25	23 27	5	30		
	40	36 20	35 09	34 01	32 53	31 46	30 41	29 37	28 33	27 31	26 31	25 30	24 30		40		
	50	37 27	36 17	35 08	34 00	32 52	31 46	30 41	29 37	28 34	27 32	26 30	25 29		50		
3	00	38 29	37 18	36 09	35 00	33 52	32 45	31 39	30 35	29 31	28 28	27 25	26 23	3	00		
	10	39 24	38 13	37 04	35 55	34 47	33 40	32 33	31 28	30 23	29 20	28 16	27 14	4	10		
	20	40 12	39 03	37 53	36 44	35 36	34 29	33 23	32 17	31 11	30 07	29 03	27 59	5	20		
	30	40 55	39 46	38 36	37 28	36 20	35 12	34 06	33 00	31 54	30 49	29 45	28 41		30		
	40	41 34	40 24	39 15	38 07	36 59	35 51	34 45	33 38	32 33	31 28	30 23	29 19		40		
	50	42 05	40 56	39 48	38 40	37 32	36 25	35 19	34 13	33 07	32 02	30 56	29 52		50		
4	00	42 33	41 25	40 17	39 09	38 03	36 56	35 49	34 42	33 37	32 32	31 27	30 22	4	00		
	10	42 57	41 49	40 41	39 34	38 28	37 21	36 15	35 08	34 03	32 59	31 53	30 48	5	10		
	20	43 15	42 08	41 01	39 54	38 48	37 42	36 36	35 31	34 26	33 21	32 15	31 10		20		
	30	43 29	42 24	41 17	40 11	39 05	38 00	36 54	35 49	34 44	33 39	32 34	31 29		30		
	40	43 41	42 35	41 29	40 24	39 19	38 13	37 08	36 03	34 58	33 54	32 49	31 45		40		
	50	43 47	42 42	41 37	40 32	39 26	38 23	37 18	36 13	35 09	34 05	33 00	31 56		50		
5	00	43 50	42 46	41 42	40 38	39 33	38 29	37 25	36 21	35 17	34 13	33 09	32 05	5	00		
	10	43 51	42 46	41 43	40 39	39 36	38 32	37 28	36 25	35 22	34 19	33 15	32 11		10		
	20	43 47	42 44	41 41	40 38	39 34	38 31	37 29	36 26	35 23	34 19	33 16	32 13		20		
	30	43 39	42 37	41 35	40 33	39 31	38 28	37 25	36 22	35 20	34 18	33 15	32 12		30		
	40	43 30	42 28	41 26	40 25	39 23	38 21	37 19	36 17	35 15	34 13	33 11	32 08		40		
	50	43 16	42 16	41 15	40 13	39 12	38 11	37 10	36 08	35 07	34 06	33 04	32 02		50		
6	00	43 00	41 59	40 59	39 58	38 58	37 58	36 57	35 56	34 56	33 56	32 54	31 53	6	00		
	10	42 40	41 40	40 40	39 41	38 41	37 41	36 42	35 42	34 41	33 41	32 41	31 41		10		
	20	42 18	41 18	40 19	39 20	38 21	37 22	36 23	35 24	34 24	33 25	32 25	31 25		20		
	30	41 51	40 53	39 55	38 57	37 59	37 00	36 02	35 03	34 04	33 06	32 07	31 08		30		
	40	41 23	40 26	39 28	38 30	37 33	36 35	35 38	34 40	33 42	32 44	31 46	30 48		40		
	50	40 51	39 55	38 58	38 01	37 04	36 07	35 10	34 13	33 16	32 19	31 22	30 24		50		
7	00	40 17	39 21	38 25	37 29	36 32	35 36	34 40	33 44	32 48	31 52	30 55	29 58	7	00		
	10	39 39	38 44	37 49	36 53	35 58	35 02	34 08	33 12	32 17	31 22	30 26	29 30		10		
	20	38 58	38 05	37 10	36 15	35 21	34 27	33 32	32 37	31 43	30 49	29 54	28 59		20		
	30	38 15	37 22	36 28	35 34	34 41	33 47	32 53	32 00	31 07	30 13	29 19	28 26		30		
	40	37 28	36 36	35 43	34 50	33 57	33 05	32 12	31 20	30 28	29 36	28 42	27 50		40		
	50	36 38	35 47	34 55	34 04	33 12	32 20	31 28	30 37	29 45	28 54	28 03	27 11		50		
8	00	35 46	34 55	34 04	33 14	32 23	31 32	30 41	29 51	29 00	28 10	27 20	26 30	8	00		
	10	34 50	34 00	33 10	32 20	31 31	30 42	29 52	29 03	28 13	27 24	26 35	25 46		10		
	20	33 51	33 03	32 13	31 24	30 37	29 48	29 00	28 12	27 24	26 36	25 48	25 01		20		
	30	32 49	32 01	31 14	30 26	29 39	28 52	28 05	27 18	26 31	25 46	24 59	24 12		30		
	40	31 43	30 57	30 11	29 24	28 38	27 52	27 07	26 22	25 36	24 52	24 07	23 22		40		
	50	30 35	29 49	29 05	28 19	27 36	26 51	26 07	25 22	24 39	23 55	23 11	22 28		50		
9	00	29 23	28 39	27 55	27 12	26 29	25 46	25 04	24 20	23 39	22 57	22 14	21 33	9	00		
	10	28 08	27 26	26 43	26 02	25 20	24 39	23 58	23 17	22 36	21 56	21 16	20 36		10		
	20	26 49	26 09	25 28	24 48	24 08	23 29	22 49	22 10	21 31	20 53	20 14	19 36		20		
	30	25 28	24 49	24 10	23 32	22 53	22 15	21 38	21 01	20 24	19 47	19 10	18 34		30		
	40	24 03	23 26	22 49	22 12	21 37	21 01	20 24	19 49	19 14	18 39	18 04	17 29		40		
	50	22 35	22 01	21 25	20 51	20 16	19 42	19 09	18 36	18 02	17 30	16 57	16 24		50		
10	00	21 05	20 32	19 58	19 27	18 54	18 23	17 50	17 19	16 47	16 18	15 47	15 16	10	00		
	10	19 31	19 01	18 30	17 59	17 29	17 00	16 29	16 01	15 32	15 03	14 35	14 06		10		
	20	17 55	17 26	16 58	16 30	16 02	15 34	15 07	14 41	14 14	13 48	13 22	12 56		20		
	30	16 16	15 50	15 24	14 57	14 32	14 07	13 43	13 18	12 54	12 30	12 06	11 42		30		
	40	14 34	14 10	13 47	13 24	13 01	12 38	12 16	11 54	11 32	11 11	10 49	10 28		40		
	50	12 50	12 29	12 09	11 48	11 28	11 07	10 48	10 28	10 10	9 50	9 31	9 12		50		
11	00	11 04	10 46	10 28	10 10	9 53	9 35	9 18	9 01	8 45	8 29	8 12	7 56	11	00		
	10	9 17	9 01	8 46	8 31	8 16	8 01	7 48	7 33	7 19	7 05	6 51	6 39		10		
	20	7 27	7 14	7 03	6 50	6 39	6 27	6 15	6 03	5 53	5 42	5 31	5 19		20		
	30	5 36	5 27	5 18	5 09	5 00	4 51	4 42	4 34	4 25	4 17	4 08	4 00		30		
	40	3 45	3 38	3 32	3 27	3 20	3 14	3 08	3 02	2 57	2 52	2 46	2 41		40		
	50	1 53	1 49	1 46	1 43	1 40	1 38	1 35	1 32	1 29	1 26	1 23	1 21		50		
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00				
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00		

AZIMUTH OR TRUE BEARING.

LATITUDE 16°.			DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 16°.		
Hour Angle.			36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.				
h.	m.		0	1	2	3	4	5	6	7	8	9	10	11	12	h.	m.		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00		
	10	5 54	5 53	5 54	4 58	4 42	4 27	4 14	4 01	3 49	3 39	3 28	3 18	3 18	3 18	1	00		
	20	11 37	10 58	10 22	9 48	9 18	8 50	8 23	7 59	7 36	7 14	6 54	6 35	6 35	6 35		10		
	30	17 04	16 09	15 17	14 29	13 45	13 04	12 26	11 50	11 16	10 45	9 15	9 47	9 47	9 47		20		
	40	22 06	20 59	19 54	18 54	17 59	17 07	16 17	15 32	14 48	14 07	13 30	12 53	12 53	12 53		30		
	50	26 46	25 26	24 11	23 01	21 55	20 55	19 57	19 02	18 10	17 22	16 35	15 52	15 52	15 52		40		
1	00	30 55	29 28	28 06	26 48	25 35	24 27	23 21	22 20	21 21	20 25	19 32	18 42	18 42	18 42	1	00		
	10	34 38	33 05	31 38	30 15	28 56	27 42	26 31	25 24	24 19	23 18	22 19	21 23	21 23	21 23		10		
	20	37 54	36 19	34 45	33 22	31 59	30 40	29 25	28 13	27 03	25 58	24 55	23 54	23 54	23 54		20		
	30	40 46	39 11	37 38	36 09	34 44	33 23	32 04	30 49	29 36	28 27	27 20	26 15	26 15	26 15		30		
	40	43 18	41 41	40 09	38 38	37 11	35 49	34 28	33 11	31 55	30 43	29 33	28 26	28 26	28 26		40		
	50	45 29	43 54	42 21	40 50	39 24	38 00	36 37	35 18	34 02	32 47	31 35	30 26	30 26	30 26		50		
2	00	47 25	45 50	44 18	42 48	41 21	39 57	38 34	37 14	35 56	34 41	33 27	32 16	32 16	32 16	2	00		
	10	49 05	47 32	46 01	44 33	43 06	41 42	40 19	38 59	37 41	36 24	35 09	33 56	33 56	33 56		10		
	20	50 31	49 01	47 31	46 04	44 39	43 15	41 52	40 33	39 15	37 57	36 41	35 28	35 28	35 28		20		
	30	51 46	50 18	48 50	47 24	46 00	44 37	43 16	41 56	40 38	39 21	38 05	36 51	36 51	36 51		30		
	40	52 51	51 24	49 59	48 34	47 11	45 50	44 29	43 10	41 53	40 36	39 21	38 06	38 06	38 06		40		
	50	53 46	52 22	50 58	49 35	48 14	46 53	45 34	44 16	42 58	41 43	40 28	39 14	39 14	39 14		50		
3	00	54 33	53 10	51 49	50 28	49 08	47 40	46 11	44 53	43 57	42 42	41 28	40 14	40 14	40 14	3	00		
	10	55 13	53 53	52 33	51 13	49 55	48 38	47 21	46 04	44 48	43 34	42 21	41 07	41 07	41 07		10		
	20	55 47	54 28	53 10	51 52	50 35	49 20	48 03	46 49	45 33	44 20	43 07	41 55	41 55	41 55		20		
	30	56 13	54 57	53 41	52 25	51 09	49 55	48 40	47 27	46 12	44 59	43 47	42 36	42 36	42 36		30		
	40	56 35	55 21	54 06	52 52	51 38	50 24	49 11	47 58	46 46	45 34	44 22	43 11	43 11	43 11		40		
	50	56 53	55 39	54 27	53 13	52 01	50 48	49 37	48 25	47 14	46 03	44 53	43 42	43 42	43 42		50		
4	00	57 05	55 53	54 42	53 30	52 19	51 09	49 57	48 47	47 37	46 27	45 16	44 07	44 07	44 07	4	00		
	10	57 13	56 03	54 53	53 42	52 33	51 24	50 14	49 04	47 55	46 46	45 37	44 28	44 28	44 28		10		
	20	57 18	56 10	55 00	53 51	52 43	51 34	50 26	49 17	48 08	47 01	45 53	44 45	44 45	44 45		20		
	30	57 18	56 11	55 04	53 55	52 48	51 41	50 33	49 26	48 19	47 12	46 04	44 57	44 57	44 57		30		
	40	57 16	56 10	55 03	53 57	52 51	51 43	50 37	49 31	48 25	47 18	46 12	45 06	45 06	45 06		40		
	50	57 10	56 05	54 59	53 54	52 49	51 43	50 37	49 32	48 26	47 21	46 16	45 10	45 10	45 10		50		
5	00	57 01	55 56	54 52	53 47	52 43	51 38	50 34	49 30	48 25	47 20	46 16	45 11	45 11	45 11	5	00		
	10	56 49	55 45	54 42	53 38	52 35	51 32	50 28	49 24	48 20	47 17	46 13	45 09	45 09	45 09		10		
	20	56 33	55 31	54 28	53 26	52 23	51 21	50 18	49 15	48 12	47 09	46 07	45 03	45 03	45 03		20		
	30	56 16	55 14	54 12	53 10	52 08	51 07	50 04	49 03	48 01	46 58	45 56	44 54	44 54	44 54		30		
	40	55 55	54 53	53 53	52 52	51 50	50 49	49 48	48 47	47 46	46 44	45 43	44 42	44 42	44 42		40		
	50	55 31	54 30	53 30	52 30	51 30	50 30	49 30	48 29	47 29	46 28	45 28	44 26	44 26	44 26		50		
6	00	55 05	54 05	53 06	52 06	51 07	50 07	49 08	48 08	47 07	46 08	45 08	44 08	44 08	44 08	6	00		
	10	54 35	53 36	52 38	51 38	50 40	49 41	48 42	47 43	46 44	45 44	44 46	43 46	43 46	43 46		10		
	20	54 04	53 06	52 07	51 09	50 10	49 13	48 14	47 16	46 17	45 18	44 20	43 22	43 22	43 22		20		
	30	53 29	52 32	51 34	50 36	49 39	48 41	47 43	46 46	45 48	44 50	43 52	42 54	42 54	42 54		30		
	40	52 52	51 54	50 57	50 00	49 03	48 06	47 09	46 12	45 15	44 18	43 21	42 24	42 24	42 24		40		
	50	52 16	51 14	50 18	49 21	48 25	47 29	46 32	45 36	44 40	43 43	42 47	41 50	41 50	41 50		50		
7	00	51 27	50 31	49 35	48 40	47 44	46 48	45 52	44 57	44 01	43 05	42 09	41 14	41 14	41 14	7	00		
	10	50 40	49 46	48 50	47 54	46 59	46 05	45 09	44 15	43 19	42 24	41 29	40 35	40 35	40 35		10		
	20	49 52	48 56	48 02	47 07	46 12	45 18	44 23	43 29	42 35	41 40	40 47	39 52	39 52	39 52		20		
	30	48 59	48 04	47 10	46 16	45 21	44 28	43 34	42 40	41 47	40 54	40 01	39 06	39 06	39 06		30		
	40	48 03	47 09	46 15	45 22	44 28	43 35	42 42	41 49	40 56	40 03	39 10	38 18	38 18	38 18		40		
	50	47 04	46 10	45 17	44 24	43 32	42 39	41 47	40 54	40 03	39 10	38 19	37 27	37 27	37 27		50		
8	00	46 00	45 08	44 15	43 23	42 31	41 40	40 47	39 57	39 05	38 14	37 23	36 33	36 33	36 33	8	00		
	10	44 54	44 03	43 10	42 19	41 27	40 37	39 46	38 56	38 05	37 14	36 25	35 35	35 35	35 35		10		
	20	43 44	42 53	42 02	41 10	40 21	39 30	38 40	37 50	37 00	36 12	35 23	34 34	34 34	34 34		20		
	30	42 29	41 39	40 48	39 59	39 09	38 19	37 31	36 42	35 53	35 06	34 18	33 30	33 30	33 30		30		
	40	41 11	40 22	39 32	38 43	37 55	37 06	36 18	35 30	34 44	33 56	33 09	32 23	32 23	32 23		40		
	50	39 49	39 00	38 12	37 24	36 36	35 49	35 02	34 15	33 28	32 43	31 58	31 13	31 13	31 13		50		
9	00	38 22	37 34	36 47	36 00	35 14	34 28	33 41	32 57	32 11	31 26	30 42	29 58	29 58	29 58	9	00		
	10	36 51	36 04	35 17	34 32	33 47	33 02	32 17	31 34	30 50	30 07	29 24	28 42	28 42	28 42		10		
	20	35 16	34 30	33 45	33 00	32 17	31 32	30 50	30 07	29 26	28 44	28 03	27 21	27 21	27 21		20		
	30	33 35	32 51	32 08	31 24	30 42	30 00	29 19	28 38	27 57	27 17	26 38	25 59	25 59	25 59		30		
	40	31 50	31 08	30 25	29 44	29 03	28 23	27 43	27 04	26 25	25 47	25 10	24 32	24 32	24 32		40		
	50	30 00	29 19	28 39	27 59	27 20	26 43	26 05	25 28	24 51	24 14	23 38	23 02	23 02	23 02		50		
10	00	28 05	27 27	26 48	26 11	25 34	24 57	24 21	23 46	23 11	22 38	22 03	21 30	21 30	21 30	10	00		
	10	26 05	25 29	24 53	24 18	23 43	23 09	22 35	22 02	21 29	20 57	20 25	19 43	19 43	19 43		10		
	20	24 02	23 28	22 54	22 21	21 49	21 17	20 45	20 15	19 44	19 14	18 45	18 16	18 16	18 16		20		
	30	21 53	21 21	20 50	20 19	19 50	19 21	18 51	18 24	17 55	17 28	17 02	16 35	16 35	16 35		30		
	40	19 40	19 11	18 42	18 15	17 47	17 21	16 55	16 30	16 04	15 39	15 15	14 51	14 51	14 51		40		
	50	17 23	16 56	16 31	16 06	15 42	15 19	14 55	14 32	14 10	13 48	13 26	13 05	13 05	13 05		50		
11	00	15 02	14 39	14 16	13 55	13 33	13 14	12 53	12 33	12 14	11 55	11 35	11 17	11 17	11 17	11	00		
	10	12 37	12 17	11 58	11 40	11 22	11 05	10 48	10 31	10 15	9 59	9 42	9 27	9 27	9 27		10		
	20	10 09	9 54	9 39	9 23	9 09	8 55	8 41	8 27	8 14	8 01	7 48	7 36	7 36					

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 16°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 16°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	3 09	3 00	2 52	2 45	2 37	2 30	2 23	2 17	2 10	2 04	1 59	1 53		10
	20	6 16	5 59	5 43	5 27	5 13	4 55	4 45	4 33	4 20	4 08	3 56	3 46		20
	30	9 20	8 55	8 31	8 08	7 46	7 26	7 05	6 46	6 28	6 10	5 54	5 38		30
	40	12 18	11 46	11 14	10 44	10 16	9 49	9 23	8 58	8 34	8 10	7 48	7 27		40
	50	15 10	14 30	13 53	13 16	12 41	12 06	11 37	11 05	10 36	10 08	9 41	9 14		50
1	00	17 54	17 08	16 24	15 42	15 01	14 23	13 46	13 10	12 36	12 02	11 30	10 59	1	00
	10	20 30	19 38	18 49	18 02	17 16	16 32	15 50	15 10	14 30	13 53	13 16	12 41		10
	20	22 56	21 59	21 06	20 14	19 24	18 35	17 50	17 04	16 20	15 39	14 58	14 18		20
	30	25 12	24 12	23 15	22 19	21 25	20 33	19 43	18 54	18 06	17 21	16 37	15 53		30
	40	27 20	26 17	25 16	24 16	23 19	22 23	21 30	20 37	19 46	18 58	18 10	17 23		40
	50	29 17	28 12	27 08	26 06	25 06	24 07	23 10	22 16	21 22	20 29	19 38	18 49		50
2	00	31 06	29 59	28 52	27 48	26 46	25 44	24 46	23 47	22 51	21 57	21 03	20 10	2	00
	10	32 45	31 36	30 28	29 22	28 18	27 15	26 14	25 14	24 15	23 18	22 22	21 27		10
	20	34 16	33 06	31 57	30 50	29 44	28 39	27 36	26 34	25 34	24 35	23 36	22 40		20
	30	35 39	34 28	33 17	32 09	31 03	29 56	28 52	27 48	26 47	25 46	24 46	23 48		30
	40	36 53	35 42	34 31	33 22	32 14	31 07	30 02	28 58	27 51	26 52	25 51	24 50		40
	50	38 01	36 49	35 39	34 29	33 20	32 13	31 07	30 01	28 56	27 53	26 51	25 49		50
3	00	39 01	37 49	36 39	35 29	34 20	33 11	32 04	30 58	29 54	28 49	27 45	26 44	3	00
	10	39 55	38 44	37 33	36 23	35 14	34 06	32 58	31 51	30 46	29 40	28 36	27 33		10
	20	40 43	39 31	38 21	37 11	36 02	34 53	33 46	32 39	31 32	30 27	29 22	28 18		20
	30	41 24	40 13	39 04	37 54	36 45	35 36	34 29	33 22	32 15	31 10	30 04	28 59		30
	40	42 00	40 50	39 41	38 32	37 23	36 15	35 07	34 00	32 53	31 47	30 42	29 37		40
	50	42 52	41 43	40 33	39 24	38 15	37 06	35 41	34 33	33 27	32 20	31 14	30 09		50
4	00	42 58	41 49	40 41	39 32	38 24	37 17	36 10	35 03	33 56	32 50	31 44	30 39	4	00
	10	43 20	42 12	41 04	39 56	38 49	37 41	36 34	35 27	34 21	33 15	32 09	31 04		10
	20	43 37	42 29	41 22	40 15	39 08	38 01	36 55	35 48	34 42	33 36	32 30	31 25		20
	30	43 51	42 43	41 37	40 30	39 24	38 18	37 12	36 05	35 00	33 54	32 49	31 44		30
	40	44 00	42 54	41 48	40 41	39 35	38 30	37 24	36 19	35 14	34 09	33 04	31 59		40
	50	44 05	43 00	41 54	40 49	39 44	38 39	37 34	36 28	35 24	34 19	33 14	32 10		50
5	00	44 07	43 02	41 58	40 53	39 49	38 44	37 39	36 35	35 31	34 26	33 22	32 18	5	00
	10	44 05	43 01	41 57	40 53	39 49	38 45	37 41	36 37	35 34	34 31	33 26	32 23		10
	20	44 00	42 57	41 54	40 51	39 47	38 44	37 40	36 37	35 35	34 31	33 28	32 24		20
	30	43 52	42 50	41 47	40 44	39 41	38 39	37 36	36 34	35 31	34 28	33 25	32 22		30
	40	43 40	42 38	41 37	40 35	39 33	38 32	37 29	36 27	35 25	34 23	33 21	32 18		40
	50	43 26	42 24	41 23	40 22	39 21	38 20	37 19	36 17	35 15	34 14	33 12	32 11		50
6	00	43 08	42 07	41 07	40 06	39 06	38 06	37 06	36 04	35 04	34 03	33 02	32 00	6	00
	10	42 47	41 47	40 48	39 47	38 48	37 48	36 48	35 48	34 48	33 48	32 48	31 48		10
	20	42 23	41 24	40 25	39 27	38 27	37 29	36 29	35 29	34 30	33 31	32 32	31 32		20
	30	41 56	40 58	40 00	39 02	38 04	37 05	36 07	35 08	34 09	33 10	32 12	31 14		30
	40	41 27	40 29	39 32	38 34	37 37	36 40	35 42	34 44	33 46	32 48	31 50	30 53		40
	50	40 54	39 58	39 00	38 04	37 07	36 11	35 14	34 16	33 19	32 23	31 26	30 28		50
7	00	40 18	39 23	38 26	37 31	36 34	35 38	34 42	33 46	32 51	31 54	30 58	30 02	7	00
	10	39 39	38 44	37 50	36 55	35 59	35 04	34 09	33 13	32 19	31 23	30 28	29 32		10
	20	38 58	38 04	37 10	36 15	35 20	34 27	33 33	32 39	31 45	30 50	29 55	29 02		20
	30	38 13	37 20	36 26	35 33	34 40	33 47	32 54	32 00	31 07	30 13	29 18	28 27		30
	40	37 26	36 33	35 41	34 49	33 57	33 04	32 12	31 19	30 28	29 35	28 43	27 50		40
	50	36 36	35 44	34 52	34 00	33 09	32 19	31 28	30 36	29 45	28 53	28 02	27 11		50
8	00	35 41	34 51	34 00	33 10	32 19	31 30	30 40	29 49	29 00	28 09	27 20	26 30	8	00
	10	34 45	33 56	33 06	32 17	31 28	30 39	29 50	29 00	28 11	27 22	26 34	25 46		10
	20	33 40	32 56	32 09	31 20	30 32	29 45	28 57	28 09	27 21	26 34	25 46	24 58		20
	30	32 43	31 55	31 09	30 21	29 34	28 48	28 02	27 14	26 28	25 41	24 56	24 11		30
	40	31 37	30 51	30 05	29 19	28 33	27 48	27 03	26 17	25 33	24 48	24 04	23 20		40
	50	30 28	29 42	28 59	28 14	27 30	26 46	26 03	25 18	24 36	23 52	23 09	22 27		50
9	00	29 15	28 32	27 49	27 05	26 23	25 42	24 59	24 17	23 35	22 53	22 11	21 30	9	00
	10	28 00	27 17	26 37	25 55	25 14	24 33	23 53	23 11	22 32	21 52	21 12	20 33		10
	20	26 41	26 01	25 21	24 41	24 01	23 23	22 44	22 05	21 27	20 48	20 10	19 33		20
	30	25 19	24 41	24 03	23 25	22 47	22 10	21 33	20 56	20 19	19 43	19 06	18 31		30
	40	23 55	23 18	22 42	22 06	21 30	20 55	20 20	19 44	19 09	18 35	18 01	17 27		40
	50	22 27	21 53	21 18	20 44	20 10	19 37	19 04	18 30	17 58	17 25	16 53	16 21		50
10	00	20 56	20 24	19 52	19 20	18 48	18 17	17 45	17 14	16 44	16 14	15 44	15 14	10	00
	10	19 23	18 52	18 22	17 52	17 23	16 54	16 25	15 55	15 28	14 59	14 31	14 03		10
	20	17 47	17 19	16 51	16 24	15 57	15 29	15 03	14 35	14 10	13 44	13 18	12 52		20
	30	16 08	15 43	15 17	14 52	14 27	14 02	13 38	13 14	12 51	12 27	12 03	11 40		30
	40	14 27	14 04	13 41	13 19	12 56	12 34	12 12	11 50	11 29	11 07	10 47	10 26		40
	50	12 44	12 23	12 03	11 43	11 23	11 03	10 44	10 25	10 07	9 47	9 29	9 10		50
11	00	10 59	10 41	10 23	10 06	9 49	9 32	9 15	8 59	8 42	8 26	8 10	7 54	11	00
	10	9 12	8 56	8 42	8 27	8 13	7 59	7 44	7 31	7 17	7 03	6 50	6 36		10
	20	7 26	7 11	6 59	6 48	6 36	6 24	6 13	6 02	5 51	5 40	5 29	5 18		20
	30	5 34	5 24	5 16	5 07	4 58	4 49	4 40	4 32	4 24	4 16	4 07	3 58		30
	40	3 43	3 37	3 31	3 25	3 19	3 13	3 07	3 01	2 57	2 51	2 46	2 40		40
	50	1 52	1 49	1 46	1 43	1 40	1 37	1 34	1 31	1 28	1 25	1 22	1 20		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 16°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 16°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h. m.	0	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	h. m.
10	00	1 48	1 42	1 38	1 33	1 28	1 23	1 20	1 15	1 11	1 07	1 04	1
20	00	3 35	3 25	3 15	3 06	2 56	2 48	2 39	2 31	2 22	2 15	2 06	20
30	00	5 22	5 06	4 52	4 38	4 24	4 11	3 58	3 45	3 32	3 21	3 11	30
40	00	7 07	6 47	6 27	6 09	5 51	5 33	5 16	4 58	4 42	4 27	4 12	40
50	00	8 48	8 24	8 00	7 37	7 15	6 53	6 32	6 11	5 51	5 31	5 12	50
1	00	10 29	10 00	9 31	9 04	8 38	8 12	7 47	7 23	6 59	6 35	6 13	1
10	00	12 06	11 33	11 01	10 29	9 59	9 30	9 01	8 33	8 06	7 38	7 13	10
20	00	13 40	13 04	12 27	11 51	11 18	10 45	10 13	9 40	9 10	8 40	8 10	20
30	00	15 11	14 30	13 50	13 13	12 34	11 57	11 22	10 47	10 13	9 40	9 07	30
40	00	16 38	15 53	15 11	14 28	13 48	13 08	12 29	11 51	11 14	10 37	10 01	40
50	00	18 00	17 13	16 27	15 42	14 59	14 16	13 33	12 53	12 13	11 37	10 55	50
2	00	19 19	18 29	17 40	16 53	16 06	15 20	14 36	13 52	13 09	12 27	11 46	2
10	00	20 34	19 41	18 50	17 59	17 11	16 22	15 35	14 48	14 03	13 18	12 34	10
20	00	21 44	20 49	19 55	19 03	18 11	17 21	16 32	15 43	14 56	14 08	13 22	20
30	00	22 50	21 53	20 58	20 03	19 10	18 17	17 26	16 34	15 44	14 55	14 06	30
40	00	23 51	22 53	21 55	21 00	20 04	19 09	18 16	17 23	16 31	15 39	14 49	40
50	00	24 48	23 49	22 50	21 52	20 55	19 59	19 04	18 08	17 15	16 21	15 29	50
3	00	25 41	24 40	23 40	22 41	21 43	20 45	19 49	18 52	17 57	17 01	16 08	3
10	00	26 30	25 28	24 27	23 27	22 27	21 28	20 30	19 33	18 36	17 38	16 43	10
20	00	27 15	26 12	25 10	24 09	23 08	22 08	21 08	20 09	19 11	18 13	17 16	20
30	00	27 55	26 52	25 49	24 47	23 45	22 44	21 43	20 44	19 44	18 46	17 47	30
40	00	28 32	27 28	26 24	25 22	24 19	23 17	22 16	21 15	20 15	19 15	18 15	40
50	00	29 04	28 00	26 56	25 53	24 50	23 47	22 46	21 44	20 43	19 42	18 41	50
4	00	29 34	28 29	27 25	26 21	25 17	24 14	23 12	22 10	21 08	20 06	19 05	4
10	00	29 58	28 54	27 49	26 45	25 41	24 38	23 35	22 32	21 30	20 28	19 26	10
20	00	30 20	29 16	28 11	27 07	26 03	24 59	23 56	22 53	21 50	20 47	19 45	20
30	00	30 39	29 34	28 29	27 25	26 21	25 17	24 13	23 10	22 07	21 04	20 02	30
40	00	30 53	29 49	28 44	27 40	26 36	25 32	24 29	23 25	22 21	21 18	20 16	40
50	00	31 05	30 01	28 56	27 52	26 48	25 44	24 41	23 36	22 33	21 30	20 27	50
5	00	31 13	30 10	29 05	28 02	26 57	25 54	24 50	23 46	22 43	21 39	20 36	5
10	00	31 19	30 15	29 11	28 07	27 04	26 00	24 57	23 54	22 50	21 46	20 43	10
20	00	31 21	30 17	29 13	28 10	27 07	26 04	25 01	23 57	22 53	21 50	20 47	20
30	00	31 19	30 16	29 11	28 10	27 08	26 05	25 03	24 00	22 57	21 54	20 51	30
40	00	31 16	30 13	29 11	28 09	27 06	26 04	25 02	23 58	22 56	21 53	20 50	40
50	00	31 09	30 07	29 05	28 03	27 01	26 00	24 58	23 55	22 54	21 51	20 48	50
6	00	30 59	29 58	28 56	27 55	26 54	25 53	24 51	23 50	22 48	21 46	20 44	6
10	00	30 47	29 47	28 46	27 45	26 45	25 44	24 43	23 42	22 41	21 39	20 38	10
20	00	30 32	29 33	28 32	27 33	26 32	25 32	24 32	23 31	22 31	21 30	20 30	20
30	00	30 14	29 15	28 15	27 17	26 17	25 18	24 19	23 19	22 20	21 20	20 19	30
40	00	29 54	28 56	27 57	26 58	26 00	25 01	24 03	23 04	22 05	21 06	20 07	40
50	00	29 31	28 33	27 35	26 36	25 40	24 43	23 45	22 47	21 49	20 51	19 52	50
7	00	29 05	28 09	27 12	26 15	25 19	24 23	23 25	22 28	21 31	20 33	19 36	7
10	00	28 31	27 42	26 46	25 50	24 54	23 58	23 03	22 07	21 11	20 14	19 18	10
20	00	28 06	27 12	26 17	25 23	24 28	23 33	22 39	21 44	20 49	19 53	18 58	20
30	00	27 34	26 40	25 47	24 53	23 59	23 06	22 11	21 17	20 24	19 30	18 35	30
40	00	27 08	26 06	25 13	24 21	23 28	22 35	21 43	20 50	19 58	19 05	18 11	40
50	00	26 20	25 29	24 38	23 46	22 54	22 03	21 13	20 21	19 29	18 38	17 47	50
8	00	25 40	24 49	23 59	23 09	22 20	21 29	20 40	19 50	19 00	18 08	17 18	8
10	00	24 57	24 08	23 20	22 31	21 43	20 53	20 05	19 16	18 26	17 39	16 50	10
20	00	24 12	23 25	22 37	21 49	21 03	20 16	19 29	18 40	17 54	17 06	16 19	20
30	00	23 24	22 39	21 52	21 07	20 21	19 36	18 50	18 03	17 18	16 32	15 47	30
40	00	22 35	21 50	21 06	20 22	19 38	18 54	18 10	17 25	16 41	15 56	15 12	40
50	00	21 43	21 00	20 17	19 35	18 52	18 09	17 28	16 44	16 02	15 19	14 37	50
9	00	20 50	20 08	19 26	18 46	18 05	17 24	16 44	16 03	15 22	14 41	14 10	9
10	00	19 54	19 14	18 34	17 55	17 15	16 37	15 58	15 19	14 40	14 00	13 22	10
20	00	18 55	18 17	17 40	17 03	16 25	15 47	15 11	14 33	13 56	13 20	12 42	20
30	00	17 55	17 18	16 43	16 08	15 32	14 57	14 22	13 47	13 12	12 36	12 01	30
40	00	16 52	16 19	15 44	15 12	14 38	14 05	13 31	12 58	12 25	11 52	11 19	40
50	00	15 49	15 17	14 45	14 14	13 42	13 11	12 40	12 08	11 38	11 07	10 36	50
10	00	14 43	14 13	13 44	13 15	12 45	12 16	11 47	11 18	10 49	10 20	9 51	10
10	00	13 36	13 09	12 40	12 14	11 46	11 19	10 53	10 26	9 59	9 32	9 06	10
20	00	12 27	12 02	11 36	11 12	10 46	10 22	9 57	9 32	9 08	8 43		

AZIMUTH OR TRUE BEARING.

LATITUDE 17°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 17°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		0	0	0	0	0	0	0	0	0	0	0	0		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	18 05	15 50	14 03	12 36	11 24	10 24	9 31	8 46	8 08	7 33	7 02	6 36	1	00
	20	34 56	29 24	26 28	23 59	21 51	20 03	18 29	17 05	15 53	14 48	13 51	12 58		10
	30	43 51	39 54	36 29	33 28	30 50	28 31	26 28	24 38	22 59	21 31	20 11	18 58		20
	40	51 34	47 42	44 13	41 04	38 13	35 39	33 19	31 13	29 17	27 32	25 56	24 29		30
	50	57 03	53 27	50 07	47 00	44 08	41 30	39 04	36 49	34 45	32 49	31 03	29 24		40
1	00	61 01	57 43	54 36	51 38	48 51	46 15	43 49	41 32	39 24	37 23	35 31	33 45	1	50
	10	63 58	60 56	58 03	55 16	52 38	50 07	47 44	45 28	43 20	41 19	39 24	37 36		10
	20	66 11	63 25	60 44	58 08	55 39	53 15	50 57	48 45	46 39	44 39	42 44	40 55		20
	30	67 52	65 20	62 51	60 26	57 55	55 49	53 37	51 29	49 27	47 29	45 35	43 46		30
	40	69 10	66 50	64 31	62 16	60 03	57 54	55 48	53 47	51 48	49 54	48 02	46 15		40
	50	70 11	68 00	65 51	63 44	61 39	59 37	57 37	55 40	53 46	51 55	50 07	48 23		50
2	00	70 58	68 55	66 54	64 55	62 57	61 01	59 08	57 16	55 26	53 40	51 55	50 13	2	00
	10	71 34	69 39	67 45	65 53	64 00	62 11	60 23	58 35	56 51	55 08	53 27	51 48		10
	20	72 00	70 12	68 25	66 38	64 52	63 08	61 24	59 42	58 01	56 22	54 44	53 08		20
	30	72 20	70 38	68 56	67 14	65 34	63 54	62 16	60 38	59 01	57 26	55 51	54 18		30
	40	72 34	70 57	69 21	67 43	66 07	64 32	62 57	61 23	59 50	58 18	56 47	55 16		40
	50	72 43	71 10	69 28	68 06	66 34	65 02	63 31	62 01	60 31	59 02	57 34	56 05		50
3	00	72 47	71 18	69 51	68 22	66 53	65 25	63 58	62 31	61 04	59 38	58 13	56 48	3	00
	10	72 47	71 23	69 58	68 33	67 07	65 39	64 19	62 55	61 31	60 08	58 44	57 22		10
	20	72 46	71 23	70 01	68 39	67 17	65 53	64 34	63 13	61 52	60 31	59 11	57 50		20
	30	72 39	71 20	70 01	68 43	67 23	66 04	64 45	63 27	62 08	60 49	59 31	58 13		30
	40	72 31	71 14	69 58	68 41	67 25	66 08	64 52	63 36	62 19	61 03	59 46	58 30		40
	50	72 20	71 06	69 52	68 37	67 22	66 08	64 54	63 40	62 26	61 11	59 57	58 43		50
4	00	72 07	70 55	69 42	68 30	67 18	66 05	64 53	63 41	62 29	61 16	60 04	58 52	4	00
	10	71 51	70 41	69 30	68 21	67 10	65 59	64 49	63 38	62 28	61 17	60 06	58 56		10
	20	71 33	70 25	69 17	68 08	66 59	65 51	64 41	63 32	62 24	61 15	60 05	58 53		20
	30	71 14	70 07	69 01	67 54	66 46	65 39	64 31	63 24	62 16	61 08	60 01	58 47		30
	40	70 53	69 48	68 42	67 36	66 30	65 24	64 18	63 13	62 06	61 00	59 53	58 47		40
	50	70 30	69 26	68 21	67 17	66 13	65 08	64 03	63 00	61 53	60 48	59 43	58 38		50
5	00	70 05	69 01	67 59	66 55	65 52	64 48	63 45	62 41	61 37	60 33	59 29	58 25	5	00
	10	69 37	68 36	67 34	66 32	65 29	64 27	63 24	62 22	61 19	60 16	59 13	58 10		10
	20	69 09	68 09	67 07	66 06	65 04	64 03	63 01	62 00	60 58	59 56	58 53	57 52		20
	30	68 39	67 39	66 39	65 38	64 37	63 36	62 36	61 35	60 34	59 33	58 31	57 31		30
	40	68 07	67 07	66 08	65 08	64 08	63 08	62 08	61 08	60 08	59 08	58 07	57 08		40
	50	67 32	66 33	65 35	64 36	63 37	62 37	61 38	60 39	59 40	58 40	57 41	56 41		50
6	00	66 56	65 58	65 00	64 01	63 03	62 04	61 06	60 07	59 08	58 10	57 11	56 12	6	00
	10	66 18	65 21	64 22	63 25	62 27	61 29	60 31	59 33	58 35	57 36	56 38	55 40		10
	20	65 38	64 41	63 43	62 46	61 48	60 52	59 54	58 57	57 59	57 01	56 04	55 06		20
	30	64 56	63 58	63 01	62 04	61 08	60 11	59 14	58 17	57 20	56 23	55 26	54 28		30
	40	64 11	63 14	62 17	61 20	60 24	59 27	58 31	57 35	56 38	55 41	54 45	53 49		40
	50	63 23	62 27	61 31	60 35	59 38	58 43	57 46	56 50	55 55	54 58	54 03	53 07		50
7	00	62 34	61 38	60 42	59 45	58 50	57 54	56 58	56 03	55 08	54 12	53 16	52 21	7	00
	10	61 42	60 46	59 50	58 53	57 58	57 03	56 08	55 13	54 18	53 23	52 28	51 33		10
	20	60 46	59 50	58 55	57 59	57 05	56 09	55 15	54 20	53 25	52 30	51 36	50 41		20
	30	59 48	58 53	57 58	57 02	56 07	55 13	54 18	53 23	52 28	51 34	50 40	49 46		30
	40	58 47	57 51	56 57	56 01	55 07	54 12	53 17	52 24	51 30	50 36	49 42	48 48		40
	50	57 42	56 47	55 52	54 57	54 03	53 08	52 14	51 20	50 27	49 34	48 40	47 47		50
8	00	56 34	55 38	54 44	53 49	52 54	52 01	51 07	50 14	49 21	48 28	47 35	46 43	8	00
	10	55 21	54 26	53 32	52 37	51 44	50 50	49 57	49 04	48 11	47 19	46 26	45 35		10
	20	54 04	53 09	52 15	51 21	50 27	49 34	48 41	47 50	46 57	46 06	45 14	44 22		20
	30	52 44	51 49	50 55	50 01	49 08	48 15	47 23	46 31	45 39	44 48	43 57	43 07		30
	40	51 19	50 23	49 30	48 36	47 44	46 51	45 59	45 08	44 17	43 27	42 36	41 47		40
	50	49 47	48 53	47 59	47 07	46 15	45 23	44 31	43 41	42 50	42 01	41 12	40 22		50
9	00	48 11	47 18	46 25	45 32	44 40	43 49	42 58	42 09	41 19	40 31	39 42	38 54	9	00
	10	46 30	45 36	44 44	43 51	43 01	42 10	41 21	40 32	39 43	38 56	38 07	37 21		10
	20	44 41	43 49	42 58	42 06	41 16	40 27	39 38	38 50	38 03	37 16	36 29	35 44		20
	30	42 47	41 56	41 05	40 14	39 26	38 38	37 50	37 03	36 17	35 31	34 46	34 02		30
	40	40 46	39 55	39 06	38 16	37 29	36 42	35 55	35 10	34 26	33 42	32 58	32 15		40
	50	38 38	37 48	37 01	36 13	35 26	34 40	33 55	33 12	32 28	31 46	31 04	30 24		50
10	00	36 22	35 34	34 47	34 01	33 17	32 33	31 50	31 08	30 27	29 47	29 06	28 27	10	00
	10	33 59	33 12	32 28	31 45	31 03	30 21	29 39	28 59	28 19	27 41	27 02	26 26		10
	20	31 28	30 44	30 02	29 19	28 39	28 00	27 21	26 43	26 06	25 30	24 54	24 20		20
	30	28 48	28 07	27 27	26 49	26 11	25 33	24 58	24 23	23 48	23 15	22 42	22 10		30
	40	26 02	25 24	24 46	24 10	23 35	23 01	22 25	21 56	21 25	20 54	20 24	19 55		40
	50	23 07	22 33	21 58	21 25	20 54	20 24	19 54	19 24	18 56	18 29	18 01	17 36		50
11	00	20 04	19 33	19 04	18 34	18 07	17 40	17 14	16 49	16 23	16 00	15 36	15 13	11	00
	10	16 55	16 29	16 03	15 38	15 14	14 52	14 30	14 08	13 46	13 26	13 05	12 46		10
	20	13 40	13 19	12 58	12 38	12 18	11 59	11 41	11 23	11 06	10 49	10 33	10 17		20
	30	10 21	10 04	9 48	9 32	9 18	9 02	8 48	8 35	8 22	8 09	7 57	7 45		30
	40	6 56	6 45	6 33	6 23	6 13	6 03	5 54	5 45	5 36	5 28	5 19	5 11		40
	50	3 29	3 23	3 18	3 12	3 07	3 02	2 58	2 53	2 48	2 44	2 40	2 36		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 17°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 17°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°		Hour Angle.	
h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
10 00	1 50	1 45	1 39	1 35	1 30	1 25	1 20	1 16	1 12	1 08	1 04	1 00	1 00	1 00	1 00
20 00	3 40	3 29	3 19	3 09	3 00	2 50	2 42	2 33	2 25	2 16	2 09	2 00	2 00	2 00	2 00
30 00	5 27	5 12	4 57	4 42	4 28	4 14	4 01	3 49	3 35	3 23	3 12	3 00	3 00	3 00	3 00
40 00	7 14	6 53	6 33	6 14	5 55	5 37	5 20	5 03	4 46	4 30	4 15	4 00	4 00	4 00	4 00
50 00	8 59	8 33	8 08	7 45	7 22	6 59	6 37	6 17	5 56	5 36	5 17	5 00	5 00	5 00	5 00
1 00	10 40	10 10	9 41	9 13	8 46	8 20	7 54	7 29	7 04	6 41	6 18	6 00	6 00	6 00	6 00
10 00	12 19	11 45	11 12	10 40	10 08	9 38	9 08	8 40	8 12	7 44	7 18	7 00	7 00	7 00	7 00
20 00	13 54	13 16	12 39	12 03	11 28	10 54	10 21	9 49	9 17	8 47	8 17	7 50	7 50	7 50	7 50
30 00	15 26	14 44	14 03	13 23	12 45	12 08	11 31	10 56	10 21	9 47	9 13	8 40	8 40	8 40	8 40
40 00	16 54	16 08	15 24	14 42	14 00	13 19	12 40	12 00	11 22	10 45	10 08	9 30	9 30	9 30	9 30
50 00	18 17	17 29	16 42	15 56	15 11	14 27	13 45	13 03	12 21	11 42	11 03	10 25	10 25	10 25	10 25
2 00	19 36	18 46	17 56	17 07	16 19	15 32	14 47	14 03	13 18	12 35	11 54	11 10	11 10	11 10	11 10
10 00	20 52	19 59	19 06	18 15	17 24	16 35	15 47	14 59	14 13	13 28	12 43	12 00	12 00	12 00	12 00
20 00	22 02	21 05	20 12	19 18	18 26	17 35	16 44	15 54	15 05	14 18	13 31	12 45	12 45	12 45	12 45
30 00	23 08	22 11	21 15	20 19	19 24	18 30	17 38	16 46	15 55	15 05	14 16	13 28	13 28	13 28	13 28
40 00	24 10	23 10	22 13	21 15	20 19	19 23	18 29	17 36	16 42	15 50	14 59	14 08	14 08	14 08	14 08
50 00	25 07	24 07	23 07	22 07	21 09	20 13	19 16	18 21	17 26	16 33	15 38	14 45	14 45	14 45	14 45
3 00	26 00	24 58	23 57	22 57	21 57	20 59	20 01	19 04	18 08	17 12	16 17	15 25	15 25	15 25	15 25
10 00	26 49	25 46	24 44	23 42	22 42	21 42	20 43	19 44	18 46	17 49	16 53	16 00	16 00	16 00	16 00
20 00	27 32	26 29	25 26	24 24	23 23	22 21	21 20	20 21	19 22	18 24	17 26	16 30	16 30	16 30	16 30
30 00	28 14	27 09	26 05	25 02	23 99	22 58	21 57	20 56	19 55	18 56	17 58	17 03	17 03	17 03	17 03
40 00	28 49	27 44	26 40	25 36	24 33	23 31	22 29	21 28	20 26	19 26	18 26	17 28	17 28	17 28	17 28
50 00	29 22	28 16	27 11	26 07	25 04	24 01	22 58	21 56	20 53	19 52	18 51	17 50	17 50	17 50	17 50
4 00	29 50	28 44	27 39	26 35	25 31	24 27	23 24	22 21	21 18	20 16	19 14	18 14	18 14	18 14	18 14
10 00	30 14	29 09	28 04	26 59	25 55	24 51	23 47	22 44	21 40	20 38	19 36	18 36	18 36	18 36	18 36
20 00	30 36	29 30	28 25	27 20	26 15	25 11	24 08	23 04	22 00	20 57	19 55	18 55	18 55	18 55	18 55
30 00	30 53	29 48	28 43	27 38	26 33	25 29	24 25	23 21	22 17	21 13	20 10	19 10	19 10	19 10	19 10
40 00	31 07	30 02	28 57	27 53	26 48	25 43	24 39	23 35	22 31	21 27	20 24	19 24	19 24	19 24	19 24
50 00	31 18	30 14	29 09	28 04	26 59	25 55	24 51	23 47	22 43	21 39	20 35	19 35	19 35	19 35	19 35
5 00	31 26	30 21	29 17	28 12	27 08	26 04	25 00	23 56	22 52	21 47	20 44	19 44	19 44	19 44	19 44
10 00	31 30	30 25	29 22	28 18	27 13	26 09	25 05	24 02	22 58	21 55	20 51	19 51	19 51	19 51	19 51
20 00	31 32	30 27	29 24	28 20	27 17	26 13	25 09	24 06	23 02	21 59	20 56	19 56	19 56	19 56	19 56
30 00	31 30	30 26	29 23	28 20	27 17	26 14	25 10	24 07	23 04	22 01	20 58	19 58	19 58	19 58	19 58
40 00	31 25	30 22	29 20	28 17	27 14	26 12	25 09	24 06	23 03	22 00	20 57	19 57	19 57	19 57	19 57
50 00	31 18	30 16	29 14	28 11	27 09	26 07	25 04	24 02	23 00	21 58	20 55	19 55	19 55	19 55	19 55
6 00	31 07	30 06	29 04	28 03	27 02	26 00	24 58	23 57	22 54	21 53	20 50	19 50	19 50	19 50	19 50
10 00	30 54	29 54	28 52	27 52	26 51	25 50	24 49	23 48	22 46	21 45	20 44	19 44	19 44	19 44	19 44
20 00	30 38	29 39	28 39	27 38	26 38	25 38	24 39	23 38	22 37	21 36	20 36	19 36	19 36	19 36	19 36
30 00	30 20	29 21	28 22	27 22	26 23	25 23	24 24	23 25	22 24	21 24	20 25	19 25	19 25	19 25	19 25
40 00	29 59	29 01	28 02	27 04	26 05	25 06	24 08	23 09	22 10	21 11	20 11	19 11	19 11	19 11	19 11
50 00	29 35	28 38	27 41	26 42	25 45	24 48	23 50	22 51	21 53	20 56	19 57	18 57	18 57	18 57	18 57
7 00	29 09	28 12	27 16	26 20	25 23	24 26	23 29	22 32	21 35	20 37	19 40	18 40	18 40	18 40	18 40
10 00	28 40	27 44	26 49	25 54	24 58	24 02	23 06	22 10	21 13	20 18	19 22	18 22	18 22	18 22	18 22
20 00	28 09	27 14	26 20	25 25	24 30	23 36	22 41	21 46	20 51	19 56	19 01	18 01	18 01	18 01	18 01
30 00	27 35	26 42	25 49	24 55	24 01	23 08	22 14	21 21	20 26	19 32	18 39	17 39	17 39	17 39	17 39
40 00	26 59	26 07	25 15	24 22	23 30	22 38	21 45	20 53	20 00	19 07	18 14	17 14	17 14	17 14	17 14
50 00	26 21	25 30	24 39	23 47	22 57	22 05	21 14	20 23	19 31	18 40	17 48	16 48	16 48	16 48	16 48
8 00	25 40	24 50	24 00	23 11	22 20	21 31	20 41	19 51	19 01	18 11	17 20	16 20	16 20	16 20	16 20
10 00	24 56	24 08	23 20	22 31	21 43	20 55	20 06	19 17	18 28	17 40	16 51	16 01	16 01	16 01	16 01
20 00	24 11	23 24	22 37	21 50	21 03	20 16	19 29	18 42	17 54	17 07	16 20	15 30	15 30	15 30	15 30
30 00	23 24	22 38	21 52	21 07	20 21	19 36	18 50	18 05	17 19	16 33	15 48	15 00	15 00	15 00	15 00
40 00	22 34	21 50	21 06	20 21	19 37	18 54	18 10	17 26	16 41	15 57	15 14	14 30	14 30	14 30	14 30
50 00	21 41	20 58	20 06	19 34	18 51	18 10	17 27	16 45	16 02	15 20	14 38	13 55	13 55	13 55	13 55
9 00	20 47	20 07	19 26	18 44	18 04	17 23	16 43	16 03	15 22	14 41	14 01	13 22	13 22	13 22	13 22
10 00	19 51	19 12	18 32	17 54	17 14	16 36	15 57	15 19	14 39	14 01	13 22	12 43	12 43	12 43	12 43
20 00	18 52	18 15	17 38	17 01	16 24	15 47	15 09	14 33	13 56	13 20	12 43	12 04	12 04	12 04	12 04
30 00	17 52	17 16	16 42	16 06	15 31	14 56	14 20	13 46	13 11	12 36	12 01	11 26	11 26	11 26	11 26
40 00	16 50	16 16	15 43	15 10	14 37	14 03	13 31	12 58	12 24	11 52	11 19	10 45	10 45	10 45	10 45
50 00	15 46	15 14	14 44	14 12	13 41	13 09	12 39	12 08	11 37	11 06	10 35	10 05	10 05	10 05	10 05
10 00	14 41	14 11	13 42	13 13	12 44	12 15	11 46	11 17	10 48	10 19	9 51	9 22	9 22	9 22	9 22
10 00	13 33	13 05	12 39	12 11	11 45	11 18	10 51	10 25	9 58	9 31	9 06	8 37	8 37	8 37	8 37
20 00	12 24	11 59	11 35	11 10	10 45	10 20	9 56	9 32	9 07	8 43	8 19	7 50	7 50	7 50	7 50
30 00	11 15	10 51	10 29	10 06	9 44	9 22	9 00	8 38	8 15	7 53	7 31	7 02	7 02	7 02	7 02
40 00	10 03	9 43	9 22	9 02	8 42	8 22	8 02	7 42	7 22	7 03	6 44	6 15	6 15	6 15	6 15
50 00	8 50	8 32	8 14	7 57	7 39	7 22	7 04	6 47	6 29	6 12	5 55	5 26	5 26	5 26	5 26
11 00	7 37	7 21	7 05	6 50	6 35	6 20	6 05	5 50	5 34	5 20	5 05	4 36	4 36	4 36	4 36
10 00	6 22	6 09	5 55	5 43	5 31	5 17	5 05	4 52	4 40	4 28	4 15	3 46	3 46	3 46	3 46
20 00	5 06	4 56	4 46	4 35	4 25	4 15	4 05	3 55	3 44	3 35	3 24	2 55	2 55	2 55	2 55
30 00	3 51	3 43	3 34	3 27	3 19	3 12	3 04	2 56	2 48	2 41	2 34	2 05	2 05	2 05	2 05
40 00	2 34	2 29	2 24	2 19	2 13	2 08	2 03	1 58	1 52	1 48	1 43	1 14	1 14	1 14	1 14
50 00	1 17	1 14	1 12	1 09	1 07	1 04	1 01	0 59	0 56	0 54	0 52	0 23	0 23	0 23	0 23
12 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00

In North latitude, when the star is rising or

AZIMUTH OR TRUE BEARING.

LATITUDE 18°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 18°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	20 49	17 56	15 43	13 56	12 29	11 18	10 17	9 26	8 41	8 03	7 28	6 56		10
	20	37 01	32 43	29 12	26 15	23 46	21 40	19 52	18 17	16 55	15 43	14 39	13 40		20
	30	48 07	43 35	39 39	36 14	33 13	30 35	28 16	26 13	24 23	22 45	21 16	19 57		30
	40	55 33	51 18	47 26	43 56	40 46	37 56	35 21	33 02	30 55	29 00	27 15	25 39		40
	50	60 39	56 46	53 10	49 49	46 41	43 49	41 11	38 44	36 30	34 25	32 29	30 43		50
1	00	64 14	60 44	57 25	54 17	51 19	48 32	45 55	43 28	41 12	39 03	37 02	35 09	1	00
	10	66 49	63 41	60 39	57 44	54 57	52 17	49 46	47 22	45 07	42 58	40 56	39 01		10
	20	68 45	65 53	63 07	60 25	57 49	55 18	52 54	50 35	48 22	46 16	44 15	42 19		20
	30	70 11	67 34	65 01	62 31	60 05	57 44	55 27	53 14	51 07	49 03	47 04	45 10		30
	40	71 16	68 52	66 29	64 11	61 54	59 41	57 31	55 25	53 23	51 23	49 28	47 36		40
	50	72 05	69 51	67 40	65 30	63 22	61 16	59 13	57 13	55 16	53 21	51 29	49 41		50
2	00	72 41	70 37	68 34	66 32	64 32	62 34	60 38	58 43	56 51	55 01	53 13	51 27	2	00
	10	73 09	71 13	69 17	67 22	65 29	63 36	61 46	59 57	58 10	56 24	54 40	52 59		10
	20	73 28	71 39	69 50	68 02	66 14	64 28	62 42	60 58	59 15	57 34	55 54	54 15		20
	30	73 40	71 58	70 14	68 32	66 50	65 08	63 28	61 48	60 11	58 33	56 56	55 21		30
	40	73 49	72 10	70 32	68 55	67 17	65 41	64 05	62 30	60 56	59 21	57 48	56 16		40
	50	73 51	72 17	70 44	69 12	67 39	66 06	64 34	63 03	61 32	59 61	58 31	57 02		50
3	00	73 51	72 21	70 51	69 23	67 53	66 25	64 56	63 29	62 01	60 33	59 07	57 41	3	00
	10	73 46	72 20	70 55	69 30	68 03	66 38	65 14	63 49	62 24	60 59	59 36	58 12		10
	20	73 39	72 16	70 54	69 32	68 09	66 47	65 25	64 03	62 41	61 19	59 58	58 37		20
	30	73 29	72 09	70 50	69 31	68 11	66 51	65 32	64 12	62 54	61 34	60 15	58 56		30
	40	73 16	72 00	70 43	69 26	68 08	66 52	65 35	64 19	63 01	61 45	60 27	59 11		40
	50	73 02	71 48	70 34	69 19	68 03	66 49	65 34	64 19	63 05	61 50	60 35	59 21		50
4	00	72 45	71 33	70 21	69 08	67 55	66 43	65 30	64 17	63 05	61 52	60 39	59 26	4	00
	10	72 26	71 16	70 06	68 55	67 45	66 34	65 23	64 12	63 01	61 50	60 39	59 28		10
	20	72 05	70 57	69 49	68 40	67 31	66 22	65 13	64 04	62 55	61 45	60 35	59 26		20
	30	71 43	70 36	69 30	68 22	67 15	66 08	65 00	63 52	62 44	61 36	60 29	59 21		30
	40	71 19	70 14	69 08	68 03	66 57	65 51	64 44	63 38	62 32	61 25	60 19	59 12		40
	50	70 54	69 49	68 44	67 41	66 35	65 31	64 27	63 21	62 16	61 11	60 05	59 00		50
5	00	70 25	69 23	68 19	67 16	66 13	65 10	64 06	63 02	61 59	60 54	59 49	58 45	5	00
	10	69 56	68 55	67 53	66 51	65 48	64 46	63 43	62 40	61 37	60 34	59 32	58 28		10
	20	69 26	68 25	67 24	66 22	65 21	64 19	63 18	62 16	61 15	60 12	59 11	58 08		20
	30	68 53	67 52	66 52	65 52	64 51	63 51	62 50	61 50	60 49	59 47	58 46	57 45		30
	40	68 18	67 18	66 18	65 19	64 20	63 20	62 20	61 20	60 20	59 20	58 20	57 19		40
	50	67 42	66 43	65 44	64 46	63 46	62 47	61 48	60 49	59 50	58 51	57 51	56 52		50
6	00	67 04	66 05	65 07	64 09	63 10	62 12	61 13	60 15	59 16	58 18	57 20	56 20	6	00
	10	66 23	65 25	64 28	63 30	62 32	61 34	60 37	59 39	58 41	57 43	56 45	55 47		10
	20	65 40	64 44	63 46	62 50	61 52	60 55	59 58	59 01	58 03	57 06	56 08	55 11		20
	30	64 56	63 59	63 03	62 06	61 09	60 13	59 16	58 19	57 22	56 26	55 29	54 33		30
	40	64 09	63 13	62 16	61 20	60 24	59 28	58 32	57 35	56 40	55 43	54 47	53 51		40
	50	63 21	62 24	61 28	60 33	59 36	58 41	57 45	56 50	55 53	54 58	54 03	53 07		50
7	00	62 28	61 33	60 37	59 42	58 46	57 51	56 56	56 01	55 06	54 10	53 15	52 20	7	00
	10	61 34	60 39	59 44	58 48	57 53	56 58	56 03	55 08	54 14	53 19	52 24	51 30		10
	20	60 37	59 42	58 47	57 52	56 56	56 02	55 08	54 13	53 19	52 25	51 31	50 36		20
	30	59 37	58 42	57 47	56 53	55 58	55 03	54 10	53 16	52 22	51 28	50 35	49 40		30
	40	58 34	57 39	56 44	55 50	54 56	54 01	53 08	52 14	51 21	50 27	49 35	48 42		40
	50	57 27	56 32	55 39	54 44	53 50	52 56	52 03	51 10	50 17	49 24	48 32	47 39		50
8	00	56 17	55 23	54 28	53 35	52 41	51 48	50 54	50 01	49 10	48 17	47 25	46 33	8	00
	10	55 03	54 08	53 15	52 21	51 28	50 35	49 42	48 50	47 59	47 06	46 15	45 23		10
	20	53 45	52 51	51 57	51 04	50 11	49 18	48 26	47 35	46 44	45 52	45 01	44 10		20
	30	52 23	51 29	50 36	49 43	48 50	47 58	47 06	46 15	45 24	44 33	43 44	42 54		30
	40	50 55	50 02	49 08	48 17	47 24	46 33	45 42	44 51	44 02	43 12	42 22	41 33		40
	50	49 23	48 30	47 37	46 46	45 54	45 03	44 13	43 23	42 34	41 45	40 56	40 08		50
9	00	47 46	46 53	46 01	45 10	44 18	43 28	42 39	41 50	41 02	40 13	39 26	38 38	9	00
	10	46 03	45 11	44 20	43 30	42 38	41 49	41 00	40 13	39 25	38 38	37 51	37 06		10
	20	44 14	43 23	42 32	41 43	40 54	40 05	39 17	38 30	37 44	36 57	36 12	35 28		20
	30	42 20	41 28	40 39	39 51	39 02	38 15	37 29	36 43	35 57	35 12	34 28	33 41		30
	40	40 17	39 28	38 39	37 52	37 04	36 19	35 34	34 49	34 05	33 22	32 40	31 58		40
	50	38 09	37 20	36 34	35 48	35 02	34 17	33 34	32 51	32 09	31 27	30 47	30 07		50
10	00	35 53	35 07	34 21	33 37	32 53	32 11	31 29	30 47	30 07	29 28	28 49	28 11	10	00
	10	33 30	32 45	32 02	31 20	30 37	29 57	29 17	28 38	28 00	27 22	26 46	26 09		10
	20	31 00	30 17	29 36	28 56	28 16	27 38	27 01	26 24	25 49	25 13	24 39	24 04		20
	30	28 22	27 42	27 04	26 26	25 48	25 13	24 38	24 04	23 31	22 58	22 26	21 55		30
	40	25 36	24 59	24 23	23 49	23 15	22 42	22 10	21 38	21 09	20 38	20 09	19 41		40
	50	22 43	22 10	21 37	21 06	20 35	20 06	19 36	19 09	18 42	18 14	17 49	17 23		50
11	00	19 44	19 14	18 45	18 18	17 50	17 25	16 59	16 34	16 10	15 47	15 24	15 01	11	00
	10	16 37	16 11	15 47	15 24	15 00	14 38	14 17	13 55	13 35	13 15	12 56	12 37		10
	20	13 25	13 04	12 44	12 25	12 06	11 48	11 31	11 13	10 56	10 41	10 26	10 09		20
	30	10 08	9 52	9 37	9 23	9 08	8 53	8 40	8 27	8 15	8 02	7 50	7 39		30
	40	6 48	6 37	6 27	6 16	6 07	5 57	5 49	5 39	5 32	5 23	5 15	5 07		40
	50	3 25	3 19	3 14	3 08	3 04	2 59	2 54	2 51	2 46	2 42	2 37	2 34		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 18°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 18°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		00	00	00	00	00	00	00	00	00	00	00	00		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
0	10	6 31	6 06	5 44	5 24	5 06	4 49	4 34	4 19	4 05	3 53	3 41	3 30	0	10
0	20	12 49	12 02	11 20	10 40	10 05	9 32	9 01	8 34	8 08	7 43	7 20	6 59	0	20
0	30	18 40	17 39	16 39	15 43	14 52	14 05	13 21	12 40	12 02	11 27	10 53	10 22	0	30
0	40	24 12	22 50	21 36	20 27	19 23	18 23	17 27	16 36	15 47	15 01	14 19	13 38	0	40
0	50	29 04	27 33	26 08	24 48	23 33	22 24	21 19	20 17	19 20	18 26	17 35	16 46	0	50
1	00	33 24	31 45	30 13	28 47	27 23	26 06	24 53	23 44	22 39	21 38	20 39	19 44	1	00
1	10	37 12	35 29	33 51	32 19	30 51	29 29	28 10	26 55	25 45	24 37	23 33	22 31	1	10
1	20	40 30	38 44	37 04	35 30	33 58	32 31	31 09	29 50	28 35	27 22	26 13	25 07	1	20
1	30	43 21	41 36	39 54	38 18	36 45	35 16	33 51	32 29	31 10	29 54	28 41	27 31	1	30
1	40	45 49	44 05	42 23	40 47	39 13	37 43	36 15	34 51	33 31	32 12	30 57	29 44	1	40
1	50	47 56	46 13	44 33	42 57	41 23	39 52	38 24	37 00	35 38	34 18	33 00	31 46	1	50
2	00	49 45	48 04	46 26	44 51	43 19	41 48	40 20	38 55	37 32	36 11	34 52	33 36	2	00
2	10	51 18	49 41	48 04	46 31	44 59	43 30	42 03	40 38	39 14	37 54	36 34	35 17	2	10
2	20	52 38	51 03	49 29	47 58	46 28	45 00	43 34	42 09	40 46	39 25	38 05	36 47	2	20
2	30	53 47	52 15	50 44	49 14	47 45	46 18	44 53	43 29	42 08	40 47	39 27	38 10	2	30
2	40	54 45	53 15	51 46	50 19	48 52	47 27	46 03	44 40	43 20	41 59	40 40	39 23	2	40
2	50	55 34	54 07	52 40	51 15	49 50	48 27	47 03	45 42	44 22	43 03	41 45	40 27	2	50
3	00	56 15	54 50	53 26	52 02	50 39	49 18	47 57	46 37	45 18	43 59	42 41	41 25	3	00
3	10	56 49	55 27	54 04	52 43	51 22	50 02	48 42	47 24	46 05	44 49	43 32	42 17	3	10
3	20	57 16	55 56	54 36	53 17	51 58	50 39	49 21	48 03	46 47	45 31	44 16	43 00	3	20
3	30	57 39	56 20	55 01	53 44	52 27	51 10	49 53	48 38	47 22	46 07	44 53	43 39	3	30
3	40	57 55	56 38	55 22	54 06	52 51	51 35	50 20	49 06	47 52	46 38	45 25	44 11	3	40
3	50	58 06	56 52	55 38	54 23	53 09	51 55	50 42	49 29	48 16	47 03	45 51	44 39	3	50
4	00	58 13	57 01	55 48	54 36	53 23	52 11	50 59	49 47	48 35	47 24	46 12	45 01	4	00
4	10	58 17	57 05	55 54	54 43	53 33	52 22	51 11	50 00	48 50	47 39	46 29	45 19	4	10
4	20	58 17	57 07	55 57	54 47	53 38	52 28	51 19	50 09	48 59	47 51	46 42	45 33	4	20
4	30	58 13	57 04	55 56	54 48	53 39	52 31	51 22	50 15	49 07	47 58	46 50	45 42	4	30
4	40	58 05	56 58	55 51	54 44	53 37	52 30	51 22	50 16	49 08	48 02	46 54	45 47	4	40
4	50	57 55	56 49	55 43	54 38	53 32	52 26	51 19	50 13	49 07	48 01	46 55	45 48	4	50
5	00	57 41	56 36	55 32	54 28	53 23	52 18	51 13	50 07	49 02	47 57	46 52	45 47	5	00
5	10	57 25	56 21	55 18	54 14	53 10	52 06	51 02	49 58	48 55	47 50	46 46	45 41	5	10
5	20	57 06	56 03	55 00	53 58	52 55	51 52	50 49	49 46	48 43	47 40	46 37	45 34	5	20
5	30	56 44	55 42	54 41	53 39	52 37	51 35	50 32	49 30	48 28	47 26	46 23	45 21	5	30
5	40	56 19	55 18	54 17	53 16	52 16	51 15	50 13	49 12	48 10	47 09	46 07	45 05	5	40
5	50	55 51	54 52	53 52	52 52	51 52	50 51	49 51	48 51	47 50	46 49	45 48	44 47	5	50
6	00	55 22	54 23	53 24	52 24	51 25	50 25	49 25	48 26	47 26	46 26	45 26	44 27	6	00
6	10	54 49	53 50	52 52	51 53	50 54	49 56	48 57	47 59	47 00	46 01	45 02	44 02	6	10
6	20	54 14	53 15	52 18	51 20	50 22	49 25	48 26	47 28	46 31	45 32	44 33	43 35	6	20
6	30	53 35	52 38	51 42	50 45	49 47	48 49	47 53	46 55	45 57	45 00	44 02	43 04	6	30
6	40	52 54	51 58	51 02	50 05	49 09	48 12	47 16	46 19	45 23	44 26	43 28	42 32	6	40
6	50	52 11	51 15	50 20	49 23	48 27	47 32	46 36	45 40	44 44	43 48	42 52	41 56	6	50
7	00	51 25	50 29	49 34	48 39	47 44	46 49	45 54	44 58	44 03	43 08	42 13	41 17	7	00
7	10	50 35	49 40	48 46	47 51	46 57	46 03	45 08	44 14	43 20	42 25	41 30	40 35	7	10
7	20	49 43	48 49	47 54	47 00	46 07	45 13	44 19	43 25	42 32	41 39	40 45	39 51	7	20
7	30	48 48	47 54	47 01	46 08	45 14	44 21	43 28	42 35	41 42	40 49	39 56	39 04	7	30
7	40	47 49	46 55	46 03	45 10	44 18	43 26	42 33	41 41	40 50	39 57	39 06	38 13	7	40
7	50	46 47	45 54	45 03	44 11	43 18	42 26	41 36	40 45	39 54	39 02	38 12	37 20	7	50
8	00	45 41	44 50	43 58	43 07	42 16	41 26	40 34	39 45	38 54	38 04	37 14	36 24	8	00
8	10	44 33	43 42	42 51	42 01	41 10	40 21	39 31	38 42	37 52	37 03	36 14	35 25	8	10
8	20	43 21	42 30	41 40	40 51	40 01	39 13	38 24	37 35	36 47	35 58	35 11	34 23	8	20
8	30	42 04	41 15	40 27	39 38	38 49	38 01	37 13	36 25	35 39	34 52	34 04	33 17	8	30
8	40	40 44	39 56	39 07	38 21	37 32	36 46	35 59	35 13	34 26	33 40	32 55	32 08	8	40
8	50	39 20	38 33	37 46	36 59	36 13	35 28	34 41	33 56	33 12	32 27	31 43	30 58	8	50
9	00	37 51	37 06	36 20	35 34	34 49	34 05	33 20	32 37	31 53	31 09	30 27	29 43	9	00
9	10	36 20	35 35	34 51	34 05	33 22	32 39	31 56	31 13	30 31	29 48	29 07	28 26	9	10
9	20	34 44	34 00	33 16	32 33	31 51	31 09	30 27	29 47	29 06	28 26	27 45	27 06	9	20
9	30	33 02	32 20	31 38	30 56	30 16	29 36	28 55	28 17	27 38	26 58	26 20	25 42	9	30
9	40	31 17	30 36	29 56	29 17	28 37	27 58	27 20	26 42	26 05	25 28	24 52	24 15	9	40
9	50	29 27	28 48	28 10	27 32	26 55	26 18	25 41	25 06	24 30	23 54	23 20	22 46	9	50
10	00	27 33	26 56	26 20	25 43	25 08	24 33	23 59	23 25	22 52	22 18	21 46	21 13	10	00
10	10	25 34	25 00	24 25	23 51	23 18	22 46	22 13	21 41	21 10	20 39	20 08	19 38	10	10
10	20	23 31	22 58	22 26	21 55	21 24	20 55	20 24	19 55	19 25	18 57	18 29	18 01	10	20
10	30	21 24	20 54	20 24	19 55	19 27	19 00	18 32	18 04	17 38	17 12	16 46	16 20	10	30
10	40	19 13	18 45	18 19	17 52	17 27	17 01	16 37	16 12	15 48	15 24	15 01	14 37	10	40
10	50	16 58	16 34	16 10	15 46	15 23	15 01	14 38	14 17	13 55	13 34	13 14	12 53	10	50
11	00	14 40	14 18	13 57	13 37	13 16	12 58	12 37	12 19	12 00	11 42	11 24	11 07	11	00
11	10	12 18	12 00	11 42	11 25	11 08	10 52	10 36	10 19	10 03	9 48	9 33	9 18	11	10
11	20	9 54	9 39	9 25	9 11	8 57	8 44	8 31	8 17	8 05	7 53	7 40	7 29	11	20
11	30	7 27	7 16	7 06	6 54	6 44	6 34	6 24	6 14	6 05	5 55	5 47	5 37	11	30
11	40	5 00	4 52	4 44	4 37	4 30	4 24	4 17	4 10	4 04	3 58	3 51	3 45	11	40
11	50	2 30	2 26	2 23	2 19	2 16	2 12	2 09	2 05	2 02	1 59	1 56	1 53	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 18°.													DECLINATION—SAME NAME AS—LATITUDE.													LATITUDE 18°.												
Hour angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour angle.										
h.	m.	0	1	2	3	4	5	6	7	8	9	10	11	h.	m.	0	1	2	3	4	5	6	7	8	9	10	11	h.	m.									
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00									
	10	3 21	3 11	3 01	2 53	2 45	2 37	2 30	2 23	2 16	2 10	2 04	1 58		10	3 21	3 11	3 01	2 53	2 45	2 37	2 30	2 23	2 16	2 10	2 04	1 58		10									
	20	6 38	6 19	6 02	5 44	5 29	5 14	4 58	4 45	4 32	4 18	4 07	3 54		20	6 38	6 19	6 02	5 44	5 29	5 14	4 58	4 45	4 32	4 18	4 07	3 54		20									
	30	9 52	9 24	8 55	8 33	8 09	7 47	7 25	7 05	6 45	6 26	6 08	5 50		30	9 52	9 24	8 55	8 33	8 09	7 47	7 25	7 05	6 45	6 26	6 08	5 50		30									
	40	13 01	12 24	11 50	11 17	10 47	10 17	9 48	9 22	8 56	8 31	8 07	7 44		40	13 01	12 24	11 50	11 17	10 47	10 17	9 48	9 22	8 56	8 31	8 07	7 44		40									
	50	16 06	15 17	14 35	13 56	13 19	12 42	12 08	11 34	11 03	10 32	10 04	9 35		50	16 06	15 17	14 35	13 56	13 19	12 42	12 08	11 34	11 03	10 32	10 04	9 35		50									
1	00	18 51	18 01	17 13	16 27	15 44	15 02	14 22	13 44	13 07	12 30	11 56	11 24	1	00	18 51	18 01	17 13	16 27	15 44	15 02	14 22	13 44	13 07	12 30	11 56	11 24		00									
	10	21 33	20 37	19 44	18 52	18 04	17 17	16 31	15 47	15 05	14 25	13 46	13 09		10	21 33	20 37	19 44	18 52	18 04	17 17	16 31	15 47	15 05	14 25	13 46	13 09		10									
	20	24 03	23 03	22 05	21 09	20 16	19 23	18 34	17 45	16 59	16 14	15 31	14 49		20	24 03	23 03	22 05	21 09	20 16	19 23	18 34	17 45	16 59	16 14	15 31	14 49		20									
	30	26 24	25 20	24 18	23 18	22 20	21 25	20 31	19 38	18 48	17 59	17 12	16 26		30	26 24	25 20	24 18	23 18	22 20	21 25	20 31	19 38	18 48	17 59	17 12	16 26		30									
	40	28 34	27 27	26 21	25 18	24 17	23 18	22 20	21 24	20 30	19 39	18 47	17 58		40	28 34	27 27	26 21	25 18	24 17	23 18	22 20	21 24	20 30	19 39	18 47	17 58		40									
	50	30 34	29 22	28 15	27 10	26 05	25 03	24 03	23 05	22 07	21 12	20 18	19 26		50	30 34	29 22	28 15	27 10	26 05	25 03	24 03	23 05	22 07	21 12	20 18	19 26		50									
2	00	32 22	31 10	30 00	28 52	27 46	26 42	25 39	24 38	23 38	22 41	21 44	20 49	2	00	32 22	31 10	30 00	28 52	27 46	26 42	25 39	24 38	23 38	22 41	21 44	20 49		00									
	10	34 02	32 48	31 38	30 28	29 19	28 13	27 08	26 05	25 03	24 03	23 04	22 07		10	34 02	32 48	31 38	30 28	29 19	28 13	27 08	26 05	25 03	24 03	23 04	22 07		10									
	20	35 32	34 18	33 05	31 54	30 45	29 37	28 30	27 26	26 22	25 21	24 20	23 18		20	35 32	34 18	33 05	31 54	30 45	29 37	28 30	27 26	26 22	25 21	24 20	23 18		20									
	30	36 54	35 39	34 26	33 14	32 04	30 54	29 47	28 41	27 35	26 32	25 30	24 28		30	36 54	35 39	34 26	33 14	32 04	30 54	29 47	28 41	27 35	26 32	25 30	24 28		30									
	40	38 07	36 51	35 39	34 26	33 15	32 05	30 56	29 49	28 43	27 38	26 34	25 31		40	38 07	36 51	35 39	34 26	33 15	32 05	30 56	29 49	28 43	27 38	26 34	25 31		40									
	50	39 12	37 57	36 43	35 31	34 20	33 10	32 00	30 52	29 45	28 39	27 33	26 30		50	39 12	37 57	36 43	35 31	34 20	33 10	32 00	30 52	29 45	28 39	27 33	26 30		50									
3	00	40 10	38 55	37 42	36 29	35 18	34 08	32 57	31 49	30 41	29 34	28 28	27 24	3	00	40 10	38 55	37 42	36 29	35 18	34 08	32 57	31 49	30 41	29 34	28 28	27 24		00									
	10	41 01	39 47	38 34	37 22	36 11	35 00	33 50	32 40	31 32	30 25	29 18	28 13		10	41 01	39 47	38 34	37 22	36 11	35 00	33 50	32 40	31 32	30 25	29 18	28 13		10									
	20	41 46	40 33	39 20	38 08	36 57	35 46	34 36	33 27	32 18	31 11	30 04	28 58		20	41 46	40 33	39 20	38 08	36 57	35 46	34 36	33 27	32 18	31 11	30 04	28 58		20									
	30	42 26	41 13	40 00	38 49	37 38	36 27	35 18	34 09	32 59	31 52	30 45	29 39		30	42 26	41 13	40 00	38 49	37 38	36 27	35 18	34 09	32 59	31 52	30 45	29 39		30									
	40	42 58	41 47	40 35	39 24	38 14	37 04	35 54	34 45	33 36	32 28	31 21	30 14		40	42 58	41 47	40 35	39 24	38 14	37 04	35 54	34 45	33 36	32 28	31 21	30 14		40									
	50	43 28	42 16	41 05	39 55	38 45	37 34	36 25	35 17	34 08	33 00	31 53	30 46		50	43 28	42 16	41 05	39 55	38 45	37 34	36 25	35 17	34 08	33 00	31 53	30 46		50									
4	00	44 50	42 40	41 30	40 20	39 11	38 02	36 53	35 44	34 35	33 28	32 21	31 14	4	00	44 50	42 40	41 30	40 20	39 11	38 02	36 53	35 44	34 35	33 28	32 21	31 14		00									
	10	44 09	43 00	41 50	40 42	39 33	38 24	37 15	36 06	35 00	33 52	32 44	31 38		10	44 09	43 00	41 50	40 42	39 33	38 24	37 15	36 06	35 00	33 52	32 44	31 38		10									
	20	44 23	43 15	42 07	40 59	39 50	38 42	37 34	36 26	35 19	34 12	33 05	31 58		20	44 23	43 15	42 07	40 59	39 50	38 42	37 34	36 26	35 19	34 12	33 05	31 58		20									
	30	44 34	43 26	42 18	41 11	40 04	38 56	37 49	36 42	35 35	34 28	33 21	32 15		30	44 34	43 26	42 18	41 11	40 04	38 56	37 49	36 42	35 35	34 28	33 21	32 15		30									
	40	44 40	43 33	42 26	41 20	40 13	39 05	37 59	36 53	35 46	34 40	33 34	32 28		40	44 40	43 33	42 26	41 20	40 13	39 05	37 59	36 53	35 46	34 40	33 34	32 28		40									
	50	44 42	43 36	42 30	41 25	40 19	39 12	38 06	37 00	35 54	34 49	33 43	32 37		50	44 42	43 36	42 30	41 25	40 19	39 12	38 06	37 00	35 54	34 49	33 43	32 37		50									
5	00	44 42	43 36	42 31	41 26	40 21	39 15	38 10	37 05	35 59	34 54	33 49	32 44	5	00	44 42	43 36	42 31	41 26	40 21	39 15	38 10	37 05	35 59	34 54	33 49	32 44		00									
	10	44 37	43 33	42 28	41 24	40 20	39 14	38 10	37 06	36 00	34 56	33 52	32 47		10	44 37	43 33	42 28	41 24	40 20	39 14	38 10	37 06	36 00	34 56	33 52	32 47		10									
	20	44 29	43 26	42 22	41 18	40 15	39 11	38 07	37 03	35 59	34 55	33 51	32 47		20	44 29	43 26	42 22	41 18	40 15	39 11	38 07	37 03	35 59	34 55	33 51	32 47		20									
	30	44 18	43 15	42 12	41 10	40 06	39 04	38 00	36 57	35 54	34 51	33 47	32 44		30	44 18	43 15	42 12	41 10	40 06	39 04	38 00	36 57	35 54	34 51	33 47	32 44		30									
	40	44 03	43 02	42 00	40 58	39 55	38 53	37 51	36 49	35 46	34 43	33 40	32 38		40	44 03	43 02	42 00	40 58	39 55	38 53	37 51	36 49	35 46	34 43	33 40	32 38		40									
	50	43 46	42 45	41 44	40 43	39 41	38 40	37 39	36 36	35 35	34 33	33 31	32 28		50	43 46	42 45	41 44	40 43	39 41	38 40	37 39	36 36	35 35	34 33	33 31	32 28		50									
6	00	43 26	42 26	41 26	40 25	39 25	38 24	37 23	36 22	35 20	34 20	33 18	32 18	6	00	43 26	42 26	41 26	40 25	39 25	38 24	37 23	36 22	35 20	34 20	33 18	32 18		00									
	10	43 03	42 03	41 03	40 04	39 04	38 04	37 04	36 04	35 04	34 04	33 03	32 03		10	43 03	42 03	41 03	40 04	39 04	38 04	37 04	36 04	35														

AZIMUTH OR TRUE BEARING.

LATITUDE 18°.			DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 18°.		
Hour Angle.			60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.			
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.	0 /	
			0	0	0	0	0	0	0	0	0	0	0				0
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	0 00	
	10	1 52	1 47	1 41	1 36	1 32	1 27	1 22	1 17	1 13	1 09	1 05	1 01	1	10	1 05	
	20	3 44	3 32	3 22	3 13	3 02	2 53	2 44	2 35	2 26	2 18	2 10	2 02	2	20	2 10	
	30	5 33	5 17	5 02	4 47	4 33	4 18	4 05	3 52	3 39	3 26	3 14	3 04	3	30	3 14	
	40	7 23	7 01	6 41	6 21	6 02	5 43	5 25	5 08	4 51	4 34	4 17	4 04	4	40	4 17	
	50	9 09	8 42	8 17	7 53	7 29	7 06	6 44	6 22	6 01	5 41	5 21	5 04	5	50	5 21	
1	00	10 52	10 20	9 51	9 23	8 54	8 27	8 01	7 35	7 11	6 46	6 23	6 04	1	00	6 23	
	10	12 33	11 57	11 23	10 50	10 17	9 47	9 17	8 47	8 19	7 50	7 24	6 59	1	10	7 24	
	20	14 09	13 30	12 52	12 14	11 38	11 04	10 29	9 56	9 25	8 54	8 22	7 55	2	20	8 22	
	30	15 42	14 58	14 17	13 36	12 57	12 18	11 42	11 05	10 29	9 54	9 21	8 52	2	30	9 21	
	40	17 11	16 24	15 39	14 56	14 12	13 31	12 50	12 10	11 32	10 53	10 17	9 44	2	40	10 17	
	50	18 35	17 45	16 57	16 10	15 25	14 39	13 55	13 13	12 31	11 50	11 11	10 31	3	50	11 11	
2	00	19 56	19 03	18 12	17 22	16 33	15 45	14 59	14 13	13 29	12 45	12 03	11 22	2	00	12 03	
	10	21 11	20 16	19 23	18 30	17 39	16 48	15 59	15 11	14 24	13 37	12 52	12 09	2	10	12 52	
	20	22 22	21 24	20 29	19 34	18 40	17 48	16 57	16 05	15 16	14 28	13 40	12 55	2	20	13 40	
	30	23 29	22 29	21 31	20 35	19 39	18 44	17 51	16 58	16 06	15 15	14 26	13 41	2	30	14 26	
	40	24 30	23 30	22 30	21 32	20 34	19 38	18 42	17 48	16 54	16 00	15 08	14 22	2	40	15 08	
	50	25 27	24 25	23 25	22 25	21 26	20 27	19 30	18 33	17 37	16 43	15 49	14 54	3	50	15 49	
3	00	26 20	25 16	24 15	23 13	22 13	21 13	20 14	19 16	18 19	17 23	16 28	15 34	3	00	16 28	
	10	27 09	26 04	25 01	23 59	22 57	21 57	20 56	19 56	18 58	18 00	17 03	16 08	3	10	17 03	
	20	27 52	26 47	25 43	24 40	23 38	22 36	21 34	20 34	19 34	18 35	17 37	16 40	3	20	17 37	
	30	28 32	27 27	26 22	25 18	24 15	23 12	22 09	21 08	20 07	19 07	18 07	17 09	3	30	18 07	
	40	29 08	28 02	26 57	25 52	24 48	23 45	22 42	21 39	20 37	19 36	18 36	17 38	3	40	18 36	
	50	29 39	28 32	27 27	26 23	25 19	24 14	23 10	22 07	21 05	20 03	19 01	18 02	4	50	19 01	
4	00	30 07	29 01	27 55	26 50	25 45	24 40	23 37	22 33	21 29	20 27	19 24	18 22	4	00	19 24	
	10	30 51	29 45	28 39	27 34	26 29	25 24	24 19	23 15	22 11	21 07	19 45	18 44	4	10	19 45	
	20	30 52	29 46	28 40	27 35	26 30	25 24	24 19	23 15	22 11	21 07	20 04	19 02	4	20	20 04	
	30	31 08	30 02	28 57	27 51	26 46	25 41	24 36	23 32	22 27	21 23	20 19	19 16	4	30	20 19	
	40	31 22	30 16	29 10	28 06	27 00	25 55	24 50	23 45	22 41	21 37	20 33	19 30	4	40	20 33	
	50	31 32	30 27	29 21	28 16	27 11	26 06	25 02	23 56	22 52	21 48	20 44	19 41	4	50	20 44	
5	00	31 39	30 34	29 29	28 23	27 19	26 14	25 10	24 06	23 01	21 57	20 53	19 50	5	00	20 53	
	10	31 42	30 38	29 33	28 29	27 25	26 20	25 16	24 11	23 07	22 03	20 59	19 56	5	10	20 59	
	20	31 43	30 39	29 35	28 31	27 26	26 22	25 18	24 15	23 11	22 07	21 03	19 59	5	20	21 03	
	30	31 41	30 37	29 33	28 30	27 27	26 23	25 19	24 16	23 12	22 09	21 05	19 59	5	30	21 05	
	40	31 35	30 32	29 29	28 27	27 23	26 20	25 17	24 14	23 11	22 07	21 04	19 59	5	40	21 04	
	50	31 27	30 24	29 22	28 20	27 18	26 15	25 13	24 10	23 07	22 04	21 01	19 57	5	50	21 01	
6	00	31 16	30 15	29 11	28 11	27 09	26 07	25 06	24 03	23 01	21 59	20 57	19 54	6	00	20 57	
	10	31 02	30 01	29 00	27 59	26 58	25 57	24 55	23 54	22 53	21 51	20 50	19 47	6	10	20 50	
	20	30 46	29 46	28 46	27 45	26 45	25 45	24 44	23 43	22 43	21 42	20 40	19 38	6	20	20 40	
	30	30 26	29 27	28 27	27 28	26 29	25 29	24 30	23 30	22 30	21 29	20 30	19 30	6	30	20 30	
	40	30 04	29 06	28 07	27 09	26 10	25 12	24 13	23 14	22 15	21 16	20 16	19 16	6	40	20 16	
	50	29 40	28 43	27 45	26 47	25 50	24 52	23 54	22 56	21 58	21 00	20 02	19 02	6	50	20 02	
7	00	29 13	28 16	27 20	26 24	25 27	24 30	23 33	22 36	21 39	20 42	19 45	18 48	7	00	19 45	
	10	28 43	27 48	26 53	25 57	25 02	24 06	23 10	22 13	21 17	20 21	19 25	18 29	7	10	19 25	
	20	28 11	27 17	26 23	25 28	24 34	23 39	22 44	21 49	20 54	19 59	19 04	18 09	7	20	19 04	
	30	27 38	26 44	25 51	24 58	24 05	23 11	22 17	21 23	20 29	19 35	18 42	17 47	7	30	18 42	
	40	27 01	26 09	25 17	24 24	23 33	22 40	21 48	20 55	20 02	19 10	18 17	17 24	7	40	18 17	
	50	26 22	25 31	24 40	23 49	22 58	22 08	21 17	20 25	19 34	18 43	17 51	17 00	7	50	17 51	
8	00	25 41	24 51	24 01	23 12	22 22	21 32	20 43	19 53	19 03	18 13	17 22	16 32	8	00	17 22	
	10	24 57	24 09	23 20	22 32	21 43	20 55	20 07	19 19	18 31	17 42	16 53	16 04	8	10	16 53	
	20	24 11	23 24	22 37	21 50	21 04	20 17	19 30	18 43	17 56	17 09	16 22	15 35	8	20	16 22	
	30	23 22	22 37	21 52	21 06	20 22	19 36	18 51	18 06	17 20	16 34	15 50	15 06	8	30	15 50	
	40	22 33	21 49	21 05	20 22	19 38	18 53	18 10	17 26	16 42	15 59	15 14	14 30	8	40	15 14	
	50	21 40	20 58	20 15	19 34	18 52	18 09	17 28	16 45	16 03	15 21	14 39	13 57	8	50	14 39	
9	00	20 45	20 05	19 25	18 45	18 04	17 23	16 43	16 02	15 22	14 41	14 01	13 21	9	00	14 01	
	10	19 49	19 10	18 31	17 53	17 14	16 35	15 57	15 19	14 40	14 01	13 23	12 44	9	10	13 23	
	20	18 50	18 11	17 36	16 57	16 20	15 46	15 09	14 33	13 56	13 20	12 43	12 06	9	20	12 43	
	30	17 50	17 15	16 39	16 05	15 30	14 55	14 21	13 45	13 11	12 37	12 02	11 27	9	30	12 02	
	40	16 48	16 15	15 41	15 09	14 36	14 02	13 30	12 57	12 24	11 52	11 22	10 52	9	40	11 22	
	50	15 44	15 13	14 41	14 10	13 40	13 09	12 38	12 07	11 37	11 06	10 36	10 06	9	50	10 36	
10	00	14 38	14 09	13 40	13 11	12 42	12 14	11 45	11 17	10 48	10 20	9 51	9 22	10	00	9 51	
	10	13 31	13 04	12 37	12 11	11 44	11 17	10 50	10 24	9 58	9 31	9 05	8 38	10	10	9 05	
	20	12 22	11 57	11 33	11 08	10 44	10 20	9 55	9 32	9 07	8 43	8 18	7 52	10	20	8 43	
	30	11 12	10 50	10 26	10 05	9 43	9 21	8 59	8 37	8 15	7 53	7 31	7 09	10	30	7 53	
	40	10 00	9 41	9 20	9 01	8 41	8 21	8 01	7 42	7 22	7 03	6 43	6 24	10	40	7 03	
	50	8 48	8 31	8 13	7 55	7 38	7 20	7 03	6 46	6 29	6 12	5 55	5 38	10	50	6 12	
11	00	7 35	7 19	7 04	6 49	6 34	6 19	6 04	5 49	5 34	5 20	5 05	4 50	11	00	5 05	
	10	6 21	6 07	5 55	5 42	5 29	5 17	5 04	4 51	4 40	4 27	4 15	4 03	11	10	4 27	
	20	5 05	4 55	4 45	4 35	4 24	4 14	4 04	3 54	3 44	3 35	3 25	3 15	11	20	3 35	
	30	3 49	3 42	3 34	3 27	3 18	3 11	3 04	2 56	2 49	2 42	2 34	2 26	11	30	2 42	
	40	2 33	2 28	2 23	2 17	2 12	2 07	2 03	1 58	1 52	1 48	1 43	1 38	11	40	1 43	
	50	1 16	1 14	1 11	1 09	1 06	1 04	1 01	0 59	0 57	0 53	0 51	0 48	11	50	0 51	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	0 00	

In North latitude, when the star is rising or Has' of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 19°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 19°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
0	10	21 30	20 40	17 47	15 35	13 49	12 22	11 11	10 11	9 19	8 36	7 57	7 23	0	10
0	20	42 03	36 47	32 29	28 58	26 02	23 34	21 28	19 40	18 07	16 45	15 32	14 28	0	20
0	30	53 02	47 51	43 20	39 23	35 57	32 57	30 19	28 00	25 57	24 09	22 31	21 03	0	30
0	40	59 57	55 17	51 01	47 08	43 39	40 28	37 38	35 03	32 44	30 37	28 43	26 57	0	40
0	50	64 32	60 23	56 30	52 52	49 30	46 22	43 30	40 51	38 25	36 10	34 05	32 10	0	50
1	00	67 38	63 58	60 28	57 07	53 58	50 59	48 12	45 35	43 07	40 49	38 41	36 40	1	00
1	10	69 30	66 33	63 23	60 20	57 25	54 36	51 57	49 24	47 00	44 44	42 35	40 33	1	10
1	20	71 25	68 28	65 35	62 47	60 05	57 28	54 57	52 32	50 12	47 59	45 52	43 51	1	20
1	30	72 34	69 54	67 15	64 42	62 11	59 44	57 22	55 04	52 50	50 42	48 38	46 39	1	30
1	40	73 25	70 58	68 33	66 10	63 50	61 33	59 18	57 08	55 01	52 57	50 58	49 02	1	40
1	50	74 01	71 46	69 31	67 18	65 09	63 00	60 53	58 50	56 49	54 51	52 55	51 03	1	50
2	00	74 28	72 22	70 17	68 13	66 11	64 09	62 10	60 13	58 18	56 25	54 34	52 46	2	00
2	10	74 46	72 48	70 51	68 55	67 00	65 06	63 13	61 21	59 31	57 43	55 57	54 12	2	10
2	20	74 57	73 06	71 16	69 27	67 38	65 50	64 03	62 17	60 31	58 48	57 07	55 26	2	20
2	30	75 02	73 19	71 34	69 50	68 07	66 25	64 43	63 02	61 21	59 42	58 04	56 26	2	30
2	40	75 04	73 24	71 46	70 09	68 29	66 52	65 15	63 37	62 01	60 26	58 52	57 18	2	40
2	50	75 01	73 26	71 52	70 18	68 46	67 12	65 39	64 06	62 33	61 02	59 31	58 01	2	50
3	00	74 55	73 24	71 54	70 25	68 56	67 26	65 57	64 28	62 59	61 30	60 03	58 35	3	00
3	10	74 45	73 19	71 53	70 27	69 01	67 35	66 09	64 44	63 17	61 52	60 28	59 03	3	10
3	20	74 34	73 11	71 48	70 25	69 02	67 39	66 16	64 55	63 32	62 09	60 47	59 25	3	20
3	30	74 19	72 59	71 40	70 20	69 01	67 40	66 20	65 00	63 40	62 21	61 01	59 42	3	30
3	40	74 02	72 46	71 29	70 11	68 54	67 37	66 20	65 03	63 44	62 27	61 10	59 53	3	40
3	50	73 44	72 30	71 15	70 00	68 45	67 30	66 16	65 01	63 45	62 30	61 15	59 59	3	50
4	00	73 24	72 12	70 59	69 46	68 34	67 21	66 09	64 55	63 42	62 29	61 15	60 03	4	00
4	10	73 02	71 51	70 41	69 31	68 20	67 09	65 58	64 46	63 35	62 24	61 13	60 01	4	10
4	20	72 38	71 30	70 22	69 12	68 03	66 54	65 45	64 35	63 26	62 16	61 06	59 56	4	20
4	30	72 13	71 06	69 59	68 52	67 44	66 36	65 29	64 21	63 13	62 06	60 57	59 49	4	30
4	40	71 46	70 40	69 35	68 29	67 23	66 17	65 11	64 05	62 58	61 51	60 45	59 37	4	40
4	50	71 17	70 13	69 09	68 05	67 00	65 55	64 50	63 46	62 41	61 35	60 30	59 24	4	50
5	00	70 47	69 44	68 41	67 38	66 34	65 31	64 27	63 23	62 19	61 16	60 11	59 07	5	00
5	10	70 15	69 14	68 12	67 09	66 07	65 04	64 02	62 59	61 56	60 54	59 51	58 47	5	10
5	20	69 41	68 41	67 40	66 38	65 35	64 36	63 35	62 33	61 31	60 29	59 27	58 25	5	20
5	30	69 06	68 06	67 06	66 06	65 06	64 05	63 05	62 05	61 04	60 03	59 01	58 00	5	30
5	40	68 29	67 31	66 32	65 31	64 32	63 32	62 33	61 33	60 33	59 33	58 33	57 33	5	40
5	50	67 51	66 53	65 54	64 55	63 57	62 57	61 59	61 00	60 00	59 01	58 02	57 03	5	50
6	00	66 10	65 12	64 14	63 16	62 19	61 22	60 24	59 25	58 27	57 28	56 29	55 29	6	00
6	10	65 28	64 30	63 33	62 35	61 41	60 44	59 46	58 48	57 50	56 52	55 55	55 55	6	10
6	20	64 43	63 46	62 50	61 53	60 59	60 02	59 06	58 09	57 11	56 14	55 17	54 17	6	20
6	30	64 57	64 00	63 04	62 08	61 12	60 15	59 19	58 22	57 25	56 29	55 33	54 36	6	30
6	40	64 08	63 12	62 17	61 21	60 25	59 28	58 33	57 37	56 41	55 46	54 49	53 53	6	40
6	50	63 17	62 21	61 26	60 30	59 35	58 39	57 44	56 49	55 53	54 58	54 02	53 07	6	50
7	00	62 23	61 28	60 33	59 37	58 43	57 48	56 53	55 59	55 03	54 09	53 14	52 19	7	00
7	10	61 27	60 32	59 38	58 42	57 48	56 53	55 59	55 04	54 10	53 16	52 22	51 27	7	10
7	20	60 28	59 33	58 39	57 45	56 50	55 56	55 02	54 08	53 14	52 21	51 26	50 33	7	20
7	30	59 26	58 31	57 37	56 43	55 50	54 55	54 02	53 09	52 15	51 21	50 28	49 35	7	30
7	40	58 21	57 27	56 33	55 39	54 46	53 52	52 59	52 06	51 13	50 20	49 27	48 35	7	40
7	50	57 13	56 19	55 25	54 32	53 39	52 45	51 53	51 00	50 07	49 16	48 24	47 31	7	50
8	00	56 01	55 07	54 14	53 20	52 27	51 35	50 42	49 50	48 59	48 06	47 15	46 24	8	00
8	10	54 46	53 52	52 58	52 05	51 14	50 21	49 29	48 38	47 46	46 55	46 04	45 13	8	10
8	20	53 26	52 32	51 40	50 48	49 55	49 02	48 12	47 21	46 30	45 40	44 49	43 59	8	20
8	30	52 02	51 08	50 16	49 24	48 33	47 41	46 51	46 00	45 10	44 20	43 30	42 42	8	30
8	40	50 33	49 41	48 49	47 57	47 06	46 15	45 25	44 35	43 45	42 57	42 08	41 20	8	40
8	50	49 00	48 08	47 16	46 24	45 35	44 45	43 55	43 06	42 17	41 29	40 42	39 54	8	50
9	00	47 21	46 30	45 39	44 48	43 58	43 09	42 20	41 32	40 44	39 57	39 11	38 24	9	00
9	10	45 37	44 47	43 57	43 06	42 18	41 29	40 41	39 54	39 06	38 21	37 35	36 50	9	10
9	20	43 48	42 57	42 08	41 19	40 31	39 44	38 57	38 11	37 25	36 40	35 56	35 12	9	20
9	30	41 52	41 02	40 15	39 27	38 39	37 53	37 08	36 22	35 39	34 55	34 12	33 29	9	30
9	40	39 50	39 02	38 14	37 28	36 42	35 57	35 13	34 30	33 46	33 05	32 23	31 42	9	40
9	50	37 41	36 54	36 09	35 23	34 39	33 55	33 13	32 31	31 50	31 10	30 30	29 51	9	50
10	00	35 26	34 40	33 56	33 12	32 30	31 49	31 08	30 28	29 48	29 10	28 32	27 55	10	00
10	10	33 03	32 20	31 37	30 56	30 15	29 36	28 57	28 19	27 42	27 06	26 29	25 55	10	10
10	20	30 33	29 52	29 13	28 33	27 55	27 17	26 41	26 05	25 30	24 57	24 23	23 50	10	20
10	30	27 56	27 17	26 41	26 05	25 29	24 54	24 20	23 46	23 14	22 42	22 11	21 41	10	30
10	40	25 12	24 36	24 02	23 28	22 55	22 23	21 52	21 22	20 53	20 24	19 56	19 27	10	40
10	50	22 21	21 49	21 18	20 47	20 18	19 49	19 21	18 54	18 27	18 01	17 36	17 11	10	50
11	00	19 23	18 54	18 27	18 00	17 34	17 09	16 44	16 21	15 57	15 35	15 12	14 50	11	00
11	10	16 19	15 55	15 31	15 08	14 47	14 25	14 04	13 44	13 24	13 05	12 46	12 27	11	10
11	20	13 11	12 51	12 31	12 12	11 54	11 37	11 20	11 03	10 47	10 31	10 16	10 01	11	20
11	30	9 57	9 42	9 27	9 13	8 59	8 45	8 32	8 20	8 08	7 56	7 44	7 33	11	30
11	40	6 40	6 29	6 20	6 11	6 01	5 52	5 43	5 35	5 26	5 19	5 11	5 03	11	40
11	50	3 20	3 16	3 10	3 05	3 01	2 57	2 52	2 47	2 44	2 40	2 36	2 32	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 19°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 19°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.													h.	m.
		0	1	2	3	4	5	6	7	8	9	10	11		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	6 53	6 25	6 02	5 39	5 19	5 01	4 44	4 29	4 15	4 01	3 49	3 38		10
	20	13 31	12 40	11 52	11 10	10 32	9 57	9 23	8 53	8 26	7 59	7 35	7 12		20
	30	19 43	18 31	17 25	16 25	15 30	14 39	13 52	13 08	12 28	11 51	11 15	10 42		30
	40	25 22	23 54	22 34	21 19	20 10	19 07	18 07	17 12	16 20	15 32	14 46	14 03		40
	50	30 23	28 44	27 13	25 48	24 29	23 14	22 05	21 00	19 59	19 01	18 07	17 16		50
1	00	34 47	33 02	31 23	29 51	28 24	27 01	25 44	24 31	23 23	22 18	21 16	20 18	1	00
	10	38 37	36 48	35 04	33 27	31 55	30 27	29 04	27 46	26 31	25 20	24 13	23 09		10
	20	41 55	40 05	38 19	36 38	35 03	33 32	32 05	30 43	29 24	28 08	26 56	25 47		20
	30	44 45	42 55	41 09	39 27	37 51	36 18	34 48	33 22	32 00	30 41	29 26	28 13		30
	40	47 09	45 21	43 37	41 55	40 18	38 44	37 13	35 47	34 22	33 00	31 43	30 27		40
	50	49 14	47 28	45 45	44 04	42 28	40 54	39 23	37 55	36 29	35 06	33 46	32 29		50
2	00	50 59	49 16	47 36	45 57	44 21	42 48	41 17	39 49	38 23	36 59	35 39	34 20	2	00
	10	52 30	50 49	49 10	47 34	46 01	44 28	42 58	41 31	40 05	38 42	37 20	36 01		10
	20	53 46	52 06	50 33	48 59	47 27	45 56	44 27	43 00	41 35	40 11	38 50	37 31		20
	30	54 51	53 16	51 43	50 12	48 41	47 12	45 45	44 19	42 55	41 32	40 11	38 52		30
	40	55 45	54 14	52 44	51 14	49 46	48 19	46 52	45 28	44 06	42 43	41 23	40 03		40
	50	56 31	55 02	53 34	52 07	50 41	49 16	47 52	46 29	45 07	43 45	42 25	41 07		50
3	00	57 08	55 42	54 16	52 52	51 28	50 04	48 42	47 21	46 00	44 40	43 21	42 04	3	00
	10	57 38	56 15	54 52	53 30	52 07	50 46	49 26	48 05	46 46	45 27	44 10	42 53		10
	20	58 03	56 42	55 21	54 00	52 40	51 21	50 01	48 43	47 26	46 08	44 51	43 36		20
	30	58 25	57 07	55 44	54 25	53 08	51 50	50 33	49 16	47 59	46 43	45 27	44 13		30
	40	58 35	57 18	56 02	54 45	53 28	52 13	50 57	49 41	48 27	47 11	45 57	44 43		40
	50	58 44	57 29	56 14	54 59	53 45	52 30	51 16	50 02	48 49	47 35	46 22	45 09		50
4	00	58 50	57 35	56 23	55 09	53 57	52 44	51 30	50 19	49 06	47 53	46 41	45 30	4	00
	10	58 59	57 39	56 26	55 15	54 04	52 52	51 41	50 30	49 18	48 07	46 57	45 46		10
	20	58 46	57 37	56 27	55 16	54 06	52 56	51 46	50 36	49 27	48 17	47 07	45 57		20
	30	58 40	57 32	56 23	55 15	54 06	52 57	51 49	50 40	49 31	48 23	47 14	46 05		30
	40	58 31	57 23	56 16	55 09	54 02	52 54	51 47	50 40	49 34	48 24	47 17	46 10		40
	50	58 18	57 12	56 06	55 00	53 54	52 47	51 41	50 36	49 29	48 23	47 16	46 09		50
5	00	58 02	56 58	55 53	54 48	53 43	52 38	51 33	50 28	49 22	48 17	47 11	46 06	5	00
	10	57 43	56 40	55 37	54 33	53 29	52 25	51 21	50 17	49 12	48 08	47 03	45 59		10
	20	57 22	56 20	55 17	54 14	53 12	52 09	51 06	50 03	48 59	47 55	46 52	45 49		20
	30	56 58	55 57	54 55	53 54	52 52	51 50	50 47	49 45	48 43	47 40	46 38	45 35		30
	40	56 32	55 31	54 30	53 29	52 29	51 27	50 26	49 25	48 23	47 21	46 21	45 19		40
	50	56 03	55 03	54 03	53 03	52 03	51 02	50 03	49 02	48 02	47 01	46 01	45 01		50
6	00	55 30	54 32	53 33	52 33	51 34	50 34	49 35	48 36	47 37	46 37	45 37	44 37	6	00
	10	54 56	53 57	52 59	52 01	51 03	50 04	49 06	48 07	47 08	46 09	45 10	44 11		10
	20	54 19	53 22	52 24	51 26	50 29	49 31	48 33	47 35	46 37	45 39	44 41	43 43		20
	30	53 39	52 43	51 46	50 49	49 53	48 55	47 58	47 00	46 03	45 06	44 08	43 11		30
	40	52 56	52 01	51 05	50 08	49 12	48 16	47 20	46 24	45 27	44 30	43 33	42 37		40
	50	52 12	51 16	50 21	49 26	48 30	47 34	46 39	45 43	44 47	43 52	42 55	42 00		50
7	00	51 24	50 29	49 34	48 39	47 44	46 49	45 55	45 00	44 05	43 10	42 15	41 20	7	00
	10	50 33	49 39	48 45	47 50	46 56	46 01	45 08	44 14	43 20	42 26	41 32	40 37		10
	20	49 39	48 46	47 52	46 58	46 06	45 12	44 18	43 25	42 31	41 39	40 45	39 52		20
	30	48 42	47 49	46 57	46 04	45 11	44 18	43 26	42 34	41 40	40 48	39 56	39 03		30
	40	47 42	46 50	45 58	45 05	44 14	43 22	42 30	41 39	40 47	39 55	39 04	38 12		40
	50	46 40	45 48	44 56	44 05	43 14	42 22	41 31	40 41	39 51	38 59	38 09	37 18		50
8	00	45 32	44 42	43 51	43 01	42 11	41 19	40 29	39 40	38 50	38 00	37 10	36 21	8	00
	10	44 23	43 33	42 43	41 53	41 04	40 13	39 25	38 36	37 46	36 58	36 10	35 21		10
	20	43 09	42 20	41 31	40 42	39 54	39 05	38 17	37 29	36 41	35 53	35 06	34 19		20
	30	41 52	41 03	40 16	39 27	38 40	37 52	37 05	36 19	35 32	34 45	33 59	33 12		30
	40	40 31	39 44	38 57	38 10	37 23	36 36	35 50	35 05	34 19	33 34	32 49	32 03		40
	50	39 06	38 21	37 34	36 48	36 03	35 17	34 32	33 47	33 04	32 20	31 35	30 52		50
9	00	37 38	36 52	36 07	35 23	34 39	33 54	33 10	32 27	31 44	31 01	30 19	29 36	9	00
	10	36 05	35 21	34 36	33 53	33 11	32 27	31 45	31 04	30 22	29 41	28 59	28 19		10
	20	34 29	33 46	33 02	32 21	31 40	30 58	30 17	29 36	28 56	28 17	27 37	26 58		20
	30	32 47	32 06	31 24	30 44	30 04	29 24	28 44	28 06	27 27	26 49	26 12	25 34		30
	40	31 02	30 21	29 42	29 03	28 25	27 47	27 10	26 33	25 55	25 19	24 43	24 07		40
	50	29 12	28 34	27 56	27 19	26 42	26 07	25 30	24 55	24 21	23 46	23 12	22 39		50
10	00	27 18	26 42	26 06	25 31	24 56	24 22	23 48	23 16	22 43	22 10	21 38	21 06	10	00
	10	25 19	24 45	24 12	23 39	23 07	22 34	22 03	21 32	21 01	20 30	20 00	19 31		10
	20	23 17	22 45	22 14	21 44	21 14	20 43	20 14	19 45	19 17	18 49	18 21	17 53		20
	30	21 11	20 42	20 13	19 44	19 17	18 49	18 23	17 56	17 30	17 04	16 39	16 14		30
	40	19 00	18 34	18 07	17 42	17 17	16 52	16 28	16 04	15 40	15 17	14 54	14 31		40
	50	16 47	16 23	16 00	15 37	15 14	14 52	14 31	14 10	13 49	13 28	13 08	12 47		50
11	00	14 30	14 09	13 48	13 28	13 09	12 49	12 31	12 12	11 54	11 36	11 19	11 02	11	00
	10	12 09	11 52	11 34	11 18	11 01	10 45	10 29	10 14	9 58	9 43	9 29	9 13		10
	20	9 47	9 33	9 19	9 05	8 52	8 39	8 25	8 13	8 01	7 48	7 37	7 25		20
	30	7 21	7 11	7 01	6 50	6 40	6 30	6 21	6 11	6 02	5 52	5 44	5 35		30
	40	4 56	4 48	4 40	4 34	4 28	4 21	4 14	4 08	4 02	3 55	3 49	3 44		40
	50	2 28	2 25	2 21	2 17	2 14	2 10	2 08	2 04	2 01	1 58	1 55	1 52		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 10°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 10°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	3 26	3 17	3 07	2 58	2 50	2 41	2 33	2 27	2 19	2 12	2 06	2 00	1	10
	20	6 50	6 31	6 12	5 54	5 37	5 21	5 05	4 51	4 38	4 24	4 12	4 00		20
	30	10 11	9 42	9 14	8 47	8 22	7 59	7 36	7 14	6 53	6 34	6 15	5 57		30
	40	13 24	12 45	12 09	11 36	11 03	10 32	10 03	9 34	9 07	8 41	8 17	7 54		40
	50	16 28	15 42	14 59	14 18	13 38	13 01	12 25	11 50	11 18	10 46	10 16	9 46		50
1	00	19 22	18 30	17 40	16 52	16 07	15 23	14 41	14 01	13 23	12 46	12 11	11 37	1	00
	10	22 07	21 09	20 14	19 20	18 29	17 40	16 53	16 07	15 24	14 43	14 02	13 23		10
	20	24 41	23 37	22 37	21 39	20 43	19 50	18 58	18 08	17 20	16 34	15 49	15 06		20
	30	27 03	25 56	24 52	23 50	22 50	21 52	20 56	20 01	19 10	18 20	17 31	16 44		30
	40	29 15	28 04	26 57	25 51	24 47	23 46	22 48	21 50	20 54	20 00	19 08	18 17		40
	50	31 14	30 01	28 51	27 44	26 37	25 33	24 30	23 30	22 32	21 35	20 39	19 46		50
2	00	33 04	31 50	30 37	29 27	28 19	27 13	26 08	25 04	24 03	23 04	22 06	21 10	2	00
	10	34 43	33 27	32 14	31 02	29 52	28 45	27 38	26 32	25 29	24 27	23 27	22 28		10
	20	36 13	34 56	33 42	32 30	31 18	30 08	29 00	27 53	26 49	25 45	24 42	23 42		20
	30	37 33	36 17	35 02	33 48	32 36	31 26	30 17	29 08	28 02	26 57	25 53	24 49		30
	40	38 46	37 29	36 13	35 00	33 47	32 36	31 26	30 17	29 09	28 03	26 57	25 53		40
	50	39 50	38 34	37 19	36 04	34 51	33 39	32 29	31 19	30 11	29 04	27 57	26 52		50
3	00	40 47	39 31	38 16	37 02	35 49	34 37	33 26	32 16	31 07	29 59	28 51	27 46	3	00
	10	41 37	40 21	39 07	37 53	36 40	35 29	34 17	33 06	31 58	30 49	29 41	28 35		10
	20	42 18	41 05	39 51	38 38	37 26	36 14	35 03	33 52	32 43	31 35	30 26	29 18		20
	30	42 58	41 44	40 31	39 18	38 06	36 54	35 43	34 33	33 24	32 15	31 07	29 58		30
	40	43 30	42 16	41 04	39 52	38 41	37 29	36 19	35 09	34 00	32 51	31 42	30 34		40
	50	43 57	42 45	41 33	40 21	39 10	38 00	36 49	35 39	34 30	33 22	32 13	31 05		50
4	00	44 18	43 07	41 56	40 45	39 35	38 26	37 16	36 06	34 57	33 49	32 40	31 33	4	00
	10	44 36	43 25	42 15	41 05	39 56	38 47	37 37	36 28	35 20	34 12	33 04	31 56		10
	20	44 48	43 39	42 30	41 21	40 12	39 03	37 55	36 47	35 39	34 30	33 23	32 16		20
	30	44 57	43 48	42 40	41 32	40 24	39 16	38 08	37 01	35 53	34 45	33 38	32 31		30
	40	45 01	43 54	42 47	41 39	40 32	39 25	38 17	37 10	36 04	34 57	33 50	32 44		40
	50	45 03	43 56	42 49	41 43	40 36	39 31	38 24	37 17	36 11	35 05	33 58	32 52		50
5	00	45 00	43 55	42 49	41 44	40 37	39 32	38 26	37 20	36 15	35 09	34 04	32 58	5	00
	10	44 54	43 50	42 45	41 39	40 35	39 31	38 25	37 20	36 16	35 11	34 05	33 00		10
	20	44 45	43 41	42 37	41 33	40 29	39 25	38 20	37 16	36 13	35 08	34 04	32 59		20
	30	44 35	43 32	42 27	41 23	40 20	39 17	38 13	37 09	36 07	35 03	33 59	32 55		30
	40	44 17	43 14	42 12	41 11	40 08	39 06	38 03	36 59	35 57	34 55	33 52	32 49		40
	50	43 58	42 56	41 55	40 54	39 53	38 51	37 49	36 47	35 45	34 43	33 41	32 38		50
6	00	43 36	42 36	41 35	40 34	39 34	38 33	37 33	36 31	35 30	34 29	33 28	32 26	6	00
	10	43 11	42 12	41 12	40 12	39 12	38 13	37 13	36 12	35 12	34 12	33 11	32 10		10
	20	42 44	41 45	40 47	39 48	38 48	37 50	36 51	35 50	34 52	33 53	32 52	31 52		20
	30	42 13	41 15	40 18	39 20	38 21	37 24	36 25	35 26	34 28	33 30	32 30	31 32		30
	40	41 40	40 42	39 46	38 49	37 52	36 55	35 58	35 00	34 02	33 05	32 06	31 08		40
	50	41 04	40 08	39 12	38 15	37 19	36 23	35 26	34 30	33 33	32 36	31 39	30 42		50
7	00	40 25	39 30	38 35	37 39	36 44	35 48	34 53	33 57	33 01	32 06	31 09	30 13	7	00
	10	39 43	38 49	37 55	37 00	36 05	35 12	34 17	33 22	32 27	31 33	30 37	29 42		10
	20	38 59	38 05	37 12	36 19	35 25	34 31	33 37	32 43	31 50	30 57	29 02	28 08		20
	30	38 11	37 18	36 26	35 34	34 41	33 49	32 56	32 03	31 11	30 19	29 25	28 33		30
	40	37 20	36 29	35 38	34 46	33 55	33 04	32 12	31 20	30 29	29 38	28 46	27 54		40
	50	36 27	35 37	34 47	33 57	33 06	32 16	31 26	30 35	29 45	28 54	28 04	27 14		50
8	00	35 31	34 42	33 53	33 04	32 14	31 25	30 36	29 46	28 58	28 09	27 20	26 31	8	00
	10	34 33	33 44	32 57	32 09	31 20	30 32	29 44	28 56	28 09	27 21	26 33	25 44		10
	20	33 31	32 43	31 57	31 10	30 23	29 37	28 50	28 04	27 17	26 31	25 44	24 58		20
	30	32 27	31 40	30 55	30 09	29 23	28 39	27 53	27 08	26 23	25 38	24 52	24 07		30
	40	31 19	30 34	29 50	29 05	28 21	27 37	26 53	26 09	25 26	24 43	23 59	23 15		40
	50	30 08	29 25	28 42	27 59	27 16	26 34	25 51	25 09	24 27	23 45	23 03	22 20		50
9	00	28 55	28 13	27 31	26 50	26 09	25 28	24 47	24 06	23 26	22 45	22 05	21 24	9	00
	10	27 38	26 58	26 19	25 38	24 59	24 19	23 39	22 59	22 23	21 43	21 04	20 25		10
	20	26 19	25 40	25 02	24 24	23 46	23 08	22 31	21 53	21 17	20 40	20 02	19 25		20
	30	24 57	24 20	23 44	23 07	22 31	21 55	21 19	20 44	20 09	19 33	18 58	18 23		30
	40	23 32	22 57	22 23	21 48	21 13	20 40	20 05	19 32	18 59	18 25	17 51	17 19		40
	50	22 05	21 31	20 59	20 26	19 54	19 21	18 50	18 18	17 47	17 15	16 44	16 12		50
10	00	20 35	20 03	19 32	19 02	18 32	18 01	17 32	17 02	16 33	16 03	15 34	15 04	10	00
	10	19 02	18 32	18 04	17 36	17 07	16 39	16 11	15 43	15 17	14 50	14 22	13 55		10
	20	17 26	16 59	16 33	16 07	15 41	15 15	14 50	14 24	13 59	13 34	13 10	12 44		20
	30	15 49	15 25	15 01	14 36	14 13	13 49	13 26	13 03	12 40	12 17	11 55	11 33		30
	40	14 09	13 47	13 26	13 04	12 43	12 21	12 01	11 40	11 20	10 59	10 39	10 19		40
	50	12 27	12 08	11 49	11 30	11 11	10 53	10 34	10 15	9 58	9 40	9 22	9 04		50
11	00	10 44	10 28	10 11	9 54	9 38	9 22	9 06	8 50	8 34	8 19	8 03	7 48	11	00
	10	8 59	8 46	8 31	8 17	8 04	7 50	7 37	7 23	7 11	6 58	6 44	6 31		10
	20	7 14	7 02	6 50	6 39	6 28	6 17	6 07	5 56	5 45	5 35	5 25	5 15		20
	30	5 25	5 17	5 09	5 00	4 51	4 44	4 36	4 28	4 20	4 12	4 04	3 56		30
	40	3 38	3 32	3 26	3 21	3 15	3 10	3 04	2 59	2 54	2 48	2 43	2 38		40
	50	1 49	1 46	1 44	1 41	1 38	1 35	1 32	1 29	1 27	1 24	1 22	1 19		50
	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 19°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 19°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.	
h.	m.	o /										h.	m.	
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	1 54	1 48	1 44	1 38	1 33	1 28	1 24	1 19	1 14	1 10	1 06	1	10
	20	3 48	3 37	3 26	3 16	3 05	2 56	2 46	2 37	2 28	2 20	2 11	2	20
	30	5 40	5 24	5 08	4 52	4 37	4 22	4 09	3 55	3 42	3 29	3 17	3	30
	40	7 31	7 09	6 47	6 27	6 08	5 49	5 30	5 12	4 55	4 38	4 22	4	40
	50	9 19	8 52	8 26	8 01	7 36	7 13	6 50	6 28	6 07	5 46	5 25	5	50
1	00	11 05	10 32	10 01	9 32	9 03	8 35	8 09	7 42	7 17	6 52	6 28	1	00
	10	12 46	12 10	11 35	11 01	10 28	9 56	9 25	8 55	8 26	7 57	7 29	10	10
	20	14 26	13 44	13 04	12 26	11 50	11 14	10 39	10 05	9 33	9 01	8 29	20	20
	30	15 58	15 14	14 31	13 49	13 10	12 30	11 52	11 14	10 38	10 03	9 27	30	30
	40	17 28	16 41	15 54	15 09	14 26	13 43	13 00	12 20	11 41	11 02	10 24	40	40
	50	18 54	18 03	17 14	16 26	15 39	14 52	14 07	13 24	12 41	12 00	11 18	50	50
2	00	20 15	19 21	18 28	17 38	16 48	15 59	15 11	14 25	13 39	12 55	12 11	2	00
	10	22 31	20 35	19 40	18 46	17 53	17 02	16 12	15 23	14 35	13 48	13 01	10	10
	20	24 46	22 44	20 47	19 51	18 56	18 02	17 09	16 18	15 28	14 39	13 50	20	20
	30	26 59	24 49	22 48	21 49	20 52	19 55	18 59	18 05	17 11	16 18	15 26	30	30
	40	29 10	26 52	24 45	23 43	22 42	21 42	20 43	19 44	18 47	17 50	16 52	40	40
	50	31 19	28 47	26 33	25 29	24 26	23 24	22 24	21 24	20 26	19 29	18 31	50	50
3	00	33 26	30 36	27 43	24 33	23 31	22 29	21 29	20 29	19 30	18 32	17 34	3	00
	10	35 30	32 24	29 20	26 01	24 16	23 14	22 12	21 10	20 11	19 11	18 12	10	10
	20	37 32	34 07	30 51	27 21	25 33	24 30	23 27	22 24	21 24	20 24	19 24	20	20
	30	39 32	35 41	32 13	28 32	26 40	25 35	24 32	23 28	22 24	21 24	20 24	30	30
	40	41 29	37 12	33 33	29 41	27 45	26 39	25 34	24 28	23 24	22 20	21 18	40	40
	50	43 24	38 41	34 38	30 35	28 37	27 27	26 21	25 12	24 07	23 03	22 05	50	50
4	00	45 17	40 08	35 55	31 32	28 36	27 31	26 26	25 20	24 15	23 11	22 06	4	00
	10	47 08	41 44	37 11	32 38	29 41	27 35	26 30	25 25	24 21	23 17	22 12	10	10
	20	48 56	43 17	38 13	33 10	30 01	27 55	26 50	25 45	24 41	23 37	22 32	20	20
	30	50 42	44 38	39 13	34 09	30 59	28 52	27 46	26 41	25 36	24 32	23 28	30	30
	40	52 26	45 57	40 11	35 06	31 55	29 47	28 40	27 34	26 29	25 24	24 20	40	40
	50	54 08	47 14	41 17	36 01	32 48	30 39	29 31	28 24	27 17	26 12	25 08	50	50
5	00	55 48	48 29	42 11	36 44	33 20	30 10	28 01	26 91	24 48	23 43	22 38	5	00
	10	57 25	49 41	43 01	37 14	33 38	30 26	28 16	27 05	26 04	25 03	24 01	10	10
	20	58 59	50 50	43 49	38 03	34 16	31 03	28 91	26 80	25 78	24 76	23 72	20	20
	30	60 30	51 16	44 13	38 56	34 59	31 45	29 32	28 20	27 17	26 15	25 12	30	30
	40	61 58	52 15	44 35	39 38	35 39	32 24	30 10	28 96	27 83	26 80	25 76	40	40
	50	63 24	53 19	44 54	40 17	36 16	33 00	30 85	28 70	27 56	26 52	25 48	50	50
6	00	64 47	54 26	45 11	40 39	36 35	33 17	31 01	28 84	27 68	26 64	25 59	6	00
	10	66 07	55 41	45 32	41 00	36 54	33 34	31 17	28 99	27 82	26 77	25 72	10	10
	20	67 24	56 52	45 41	41 29	37 01	33 52	31 34	29 15	27 97	26 80	25 74	20	20
	30	68 38	57 59	45 49	41 57	37 10	34 16	31 56	29 36	28 17	27 00	25 92	30	30
	40	69 49	58 59	45 56	42 24	37 19	34 43	32 22	29 62	28 42	27 23	26 14	40	40
	50	70 57	59 54	46 01	42 50	37 27	35 07	32 48	30 26	29 05	27 85	26 75	50	50
7	00	71 62	60 36	46 04	43 14	37 34	35 12	32 53	30 29	29 07	27 86	26 75	7	00
	10	72 64	61 24	46 11	43 41	37 41	35 18	33 00	30 35	29 12	27 93	26 80	10	10
	20	73 63	62 09	46 17	44 07	37 47	35 23	33 05	30 40	29 16	27 97	26 83	20	20
	30	74 59	62 50	46 22	44 32	37 52	35 28	33 10	30 45	29 22	28 04	26 85	30	30
	40	75 52	63 28	46 26	44 56	37 56	35 31	33 13	30 48	29 24	28 06	26 87	40	40
	50	76 42	64 03	46 29	45 19	37 59	35 33	33 15	30 50	29 24	28 06	26 87	50	50
8	00	77 29	64 36	46 31	45 41	38 01	35 38	33 20	30 55	29 29	28 06	26 91	8	00
	10	78 13	65 05	46 33	45 59	38 03	35 38	33 20	30 55	29 29	28 06	26 91	10	10
	20	78 54	65 24	46 34	46 14	38 04	35 38	33 20	30 55	29 29	28 06	26 91	20	20
	30	79 32	65 41	46 35	46 28	38 05	35 38	33 20	30 55	29 29	28 06	26 91	30	30
	40	80 07	66 08	46 35	46 40	38 05	35 38	33 20	30 55	29 29	28 06	26 91	40	40
	50	80 79	66 22	46 35	46 50	38 05	35 38	33 20	30 55	29 29	28 06	26 91	50	50
9	00	81 48	66 42	46 35	47 00	38 05	35 38	33 20	30 55	29 29	28 06	26 91	9	00
	10	82 14	66 58	46 35	47 09	38 05	35 38	33 20	30 55	29 29	28 06	26 91	10	10
	20	82 37	67 11	46 35	47 17	38 05	35 38	33 20	30 55	29 29	28 06	26 91	20	20
	30	83 00	67 21	46 35	47 24	38 05	35 38	33 20	30 55	29 29	28 06	26 91	30	30
	40	83 20	67 29	46 35	47 30	38 05	35 38	33 20	30 55	29 29	28 06	26 91	40	40
	50	83 38	67 35	46 35	47 35	38 05	35 38	33 20	30 55	29 29	28 06	26 91	50	50
10	00	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	10	00
	10	84 46	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	10	10
	20	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	20	20
	30	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	30	30
	40	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	40	40
	50	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	50	50
11	00	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	11	00
	10	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	11	10
	20	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	20	20
	30	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	30	30
	40	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	40	40
	50	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	50	50
12	00	84 47	67 43	46 35	47 43	38 05	35 38	33 20	30 55	29 29	28 06	26 91	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 20°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 20°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	29 38	24 20	20 31	17 39	15 26	13 41	12 15	11 04	10 05	9 13	8 30	7 51	1	10
	20	48 18	41 49	36 32	32 16	28 45	25 49	23 21	21 16	19 29	17 56	16 33	15 22		20
	30	58 44	52 45	47 35	43 03	39 06	35 40	32 41	30 04	27 45	25 42	23 53	22 15		30
	40	64 51	59 44	55 01	50 44	46 50	43 20	40 10	37 19	34 45	32 25	30 20	28 24		40
	50	68 41	64 17	60 07	56 12	52 34	49 11	46 03	43 10	40 31	38 04	35 49	33 44		50
1	00	71 14	67 23	63 41	60 10	56 49	53 39	50 39	47 50	45 14	42 45	40 27	38 19	1	00
	10	72 58	69 35	66 17	63 06	60 02	57 05	54 16	51 35	49 03	46 38	44 21	42 11		10
	20	74 10	71 09	68 11	65 17	62 28	59 45	57 07	54 34	52 09	49 49	47 35	45 27		20
	30	75 01	72 18	69 36	66 57	64 22	61 50	59 23	56 59	54 41	52 27	50 17	48 12		30
	40	75 37	73 08	70 40	68 13	65 50	63 29	61 11	58 55	56 45	54 37	52 33	50 32		40
	50	76 01	73 44	71 27	69 12	66 58	64 46	62 37	60 30	58 26	56 24	54 25	52 29		50
2	00	76 16	74 08	72 02	69 56	67 52	65 46	63 47	61 46	59 49	57 52	55 59	54 07	2	00
	10	76 25	74 26	72 28	70 30	68 32	66 36	64 41	62 48	60 56	59 05	57 16	55 29		10
	20	76 28	74 36	72 45	70 54	69 03	67 14	65 25	63 37	61 50	60 04	58 21	56 38		20
	30	76 25	74 41	72 55	71 11	69 26	67 43	65 59	64 17	62 35	60 54	59 14	57 35		30
	40	76 20	74 41	73 01	71 22	69 42	68 03	66 25	64 47	63 10	61 33	59 57	58 22		40
	50	76 10	74 37	73 02	71 27	69 52	68 19	66 45	65 11	63 37	62 05	60 32	59 00		50
3	00	75 58	74 29	72 59	71 28	69 58	68 28	66 58	65 28	63 58	62 29	61 01	59 31	3	00
	10	75 45	74 19	72 52	71 26	69 59	68 33	67 06	65 39	64 13	62 47	61 21	59 56		10
	20	75 28	74 05	72 43	71 20	69 56	68 32	67 10	65 46	64 23	62 59	61 37	60 14		20
	30	75 10	73 50	72 30	71 10	69 50	68 30	67 09	65 49	64 28	63 08	61 47	60 27		30
	40	74 49	73 32	72 15	70 58	69 40	68 22	67 05	65 47	64 30	63 12	61 54	60 35		40
	50	74 28	73 13	71 58	70 43	69 28	68 13	66 58	65 42	64 26	63 11	61 55	60 39		50
4	00	74 03	72 51	71 38	70 26	69 13	68 00	66 47	65 34	64 20	63 06	61 53	60 39	4	00
	10	73 38	72 28	71 17	70 06	68 56	67 45	66 33	65 21	64 10	62 59	61 47	60 35		10
	20	73 11	72 03	70 54	69 45	68 36	67 28	66 18	65 08	63 58	62 48	61 38	60 28		20
	30	72 43	71 36	70 29	69 22	68 15	67 07	65 59	64 51	63 43	62 35	61 27	60 18		30
	40	72 13	71 08	70 02	68 56	67 50	66 45	65 38	64 32	63 25	62 18	61 12	60 04		40
	50	71 41	70 38	69 34	68 30	67 24	66 20	65 15	64 09	63 05	62 00	60 54	59 48		50
5	00	71 09	70 06	69 02	67 59	66 57	65 53	64 49	63 46	62 42	61 37	60 34	59 29	5	00
	10	70 34	69 33	68 31	67 29	66 27	65 24	64 22	63 19	62 16	61 14	60 11	59 07		10
	20	69 56	68 56	67 56	66 56	65 55	64 54	63 52	62 50	61 49	60 47	59 45	58 42		20
	30	69 21	68 21	67 21	66 21	65 21	64 21	63 21	62 20	61 19	60 18	59 17	58 15		30
	40	68 41	67 43	66 44	65 45	64 45	63 46	62 46	61 46	60 46	59 46	58 47	57 46		40
	50	68 01	67 03	66 04	65 05	64 07	63 09	62 10	61 11	60 12	59 12	58 14	57 15		50
6	00	67 18	66 21	65 23	64 24	63 27	62 29	61 31	60 33	59 35	58 36	57 39	56 40	6	00
	10	66 33	65 37	64 39	63 42	62 45	61 48	60 50	59 53	58 56	57 58	56 59	56 02		10
	20	65 46	64 50	63 54	62 58	62 01	61 04	60 08	59 10	58 14	57 17	56 20	55 23		20
	30	64 58	64 02	63 06	62 11	61 14	60 19	59 22	58 26	57 30	56 33	55 38	54 41		30
	40	64 07	63 12	62 17	61 21	60 25	59 30	58 34	57 38	56 43	55 47	54 52	53 56		40
	50	63 14	62 19	61 24	60 28	59 34	58 38	57 43	56 49	55 54	54 58	54 04	53 09		50
7	00	62 19	61 24	60 29	59 35	58 40	57 46	56 51	55 57	55 02	54 07	53 13	52 18	7	00
	10	61 20	60 26	59 32	58 37	57 43	56 49	55 55	55 01	54 07	53 13	52 19	51 26		10
	20	60 19	59 25	58 31	57 38	56 43	55 50	54 56	54 03	53 10	52 16	51 23	50 29		20
	30	59 16	58 23	57 28	56 35	55 41	54 48	53 55	53 01	52 08	51 16	50 24	49 31		30
	40	58 10	57 16	56 23	55 29	54 36	53 43	52 50	51 58	51 06	50 13	49 21	48 29		40
	50	56 59	56 06	55 12	54 20	53 27	52 35	51 43	50 50	49 59	49 07	48 15	47 24		50
8	00	55 45	54 52	53 59	53 07	52 15	51 23	50 30	49 39	48 48	47 56	47 06	46 15	8	00
	10	54 28	53 36	52 43	51 50	50 59	50 06	49 16	48 25	47 34	46 44	45 53	45 04		10
	20	53 08	52 14	51 22	50 31	49 39	48 49	47 57	47 07	46 17	45 27	44 38	43 48		20
	30	51 42	50 50	49 58	49 06	48 16	47 25	46 35	45 45	44 56	44 07	43 18	42 29		30
	40	50 12	49 20	48 29	47 38	46 48	45 58	45 08	44 19	43 31	42 42	41 55	41 06		40
	50	48 37	47 47	46 55	46 05	45 16	44 27	43 38	42 49	42 01	41 14	40 27	39 41		50
9	00	46 57	46 07	45 17	44 27	43 38	42 50	42 02	41 15	40 28	39 41	38 55	38 10	9	00
	10	45 13	44 23	43 33	42 45	41 56	41 09	40 23	39 36	38 50	38 04	37 20	36 35		10
	20	43 22	42 34	41 45	40 57	40 09	39 24	38 38	37 52	37 08	36 24	35 40	34 57		20
	30	41 26	40 38	39 51	39 03	38 18	37 33	36 48	36 04	35 20	34 37	33 56	33 13		30
	40	39 23	38 37	37 50	37 05	36 20	35 37	34 53	34 10	33 29	32 47	32 07	31 27		40
	50	37 14	36 29	35 44	35 00	34 16	33 35	32 54	32 12	31 33	30 52	30 14	29 35		50
10	00	34 58	34 15	33 32	32 50	32 09	31 29	30 48	30 09	29 31	28 53	28 16	27 40	10	00
	10	32 36	31 54	31 13	30 33	29 54	29 16	28 37	28 01	27 24	26 49	26 14	25 39		10
	20	30 07	29 28	28 49	28 11	27 34	26 58	26 23	25 47	25 13	24 41	24 08	23 35		20
	30	27 31	26 55	26 18	25 42	25 08	24 35	24 01	23 29	22 58	22 28	21 57	21 27		30
	40	24 48	24 14	23 41	23 09	22 37	22 06	21 36	21 07	20 37	20 09	19 42	19 15		40
	50	21 59	21 29	20 58	20 29	20 00	19 33	19 06	18 40	18 13	17 48	17 24	16 59		50
11	00	19 04	18 37	18 10	17 44	17 19	16 55	16 30	16 08	15 45	15 22	15 02	14 40	11	00
	10	16 03	15 39	15 17	14 55	14 33	14 13	13 53	13 33	13 13	12 54	12 37	12 19		10
	20	12 57	12 38	12 19	12 01	11 44	11 27	11 10	10 54	10 39	10 24	10 09	9 54		20
	30	9 47	9 32	9 18	9 04	8 51	8 38	8 25	8 13	8 01	7 50	7 38	7 28		30
	40	6 33	6 23	6 13	6 04	5 56	5 47	5 39	5 30	5 22	5 14	5 06	4 59		40
	50	3 17	3 12	3 08	3 03	2 58	2 54	2 50	2 45	2 41	2 38	2 34	2 30		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 20°.					DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 20°.				
Hour Angle.	36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°						Hour Angle.	
h. m.	0	0	0	0	0	0	0	0	0	0	0	0	h. m.	0	0	0	0	h. m.	
0	00	00	00	00	00	00	00	00	00	00	00	00	0	00	00	00	00	0	
10	17	18	19	20	21	22	23	24	25	26	27	28	10	17	18	19	20	10	
20	34	35	36	37	38	39	40	41	42	43	44	45	20	34	35	36	37	20	
30	51	52	53	54	55	56	57	58	59	60	61	62	30	51	52	53	54	30	
40	68	69	70	71	72	73	74	75	76	77	78	79	40	68	69	70	71	40	
50	85	86	87	88	89	90	91	92	93	94	95	96	50	85	86	87	88	50	
1	00	01	02	03	04	05	06	07	08	09	10	11	1	00	01	02	03	1	
10	18	19	20	21	22	23	24	25	26	27	28	29	10	18	19	20	21	10	
20	35	36	37	38	39	40	41	42	43	44	45	46	20	35	36	37	38	20	
30	52	53	54	55	56	57	58	59	60	61	62	63	30	52	53	54	55	30	
40	69	70	71	72	73	74	75	76	77	78	79	80	40	69	70	71	72	40	
50	86	87	88	89	90	91	92	93	94	95	96	97	50	86	87	88	89	50	
2	00	01	02	03	04	05	06	07	08	09	10	11	2	00	01	02	03	2	
10	19	20	21	22	23	24	25	26	27	28	29	30	10	19	20	21	22	10	
20	36	37	38	39	40	41	42	43	44	45	46	47	20	36	37	38	39	20	
30	53	54	55	56	57	58	59	60	61	62	63	64	30	53	54	55	56	30	
40	70	71	72	73	74	75	76	77	78	79	80	81	40	70	71	72	73	40	
50	87	88	89	90	91	92	93	94	95	96	97	98	50	87	88	89	90	50	
3	00	01	02	03	04	05	06	07	08	09	10	11	3	00	01	02	03	3	
10	20	21	22	23	24	25	26	27	28	29	30	31	10	20	21	22	23	10	
20	37	38	39	40	41	42	43	44	45	46	47	48	20	37	38	39	40	20	
30	54	55	56	57	58	59	60	61	62	63	64	65	30	54	55	56	57	30	
40	71	72	73	74	75	76	77	78	79	80	81	82	40	71	72	73	74	40	
50	88	89	90	91	92	93	94	95	96	97	98	99	50	88	89	90	91	50	
4	00	01	02	03	04	05	06	07	08	09	10	11	4	00	01	02	03	4	
10	21	22	23	24	25	26	27	28	29	30	31	32	10	21	22	23	24	10	
20	38	39	40	41	42	43	44	45	46	47	48	49	20	38	39	40	41	20	
30	55	56	57	58	59	60	61	62	63	64	65	66	30	55	56	57	58	30	
40	72	73	74	75	76	77	78	79	80	81	82	83	40	72	73	74	75	40	
50	89	90	91	92	93	94	95	96	97	98	99	00	50	89	90	91	92	50	
5	00	01	02	03	04	05	06	07	08	09	10	11	5	00	01	02	03	5	
10	22	23	24	25	26	27	28	29	30	31	32	33	10	22	23	24	25	10	
20	39	40	41	42	43	44	45	46	47	48	49	50	20	39	40	41	42	20	
30	56	57	58	59	60	61	62	63	64	65	66	67	30	56	57	58	59	30	
40	73	74	75	76	77	78	79	80	81	82	83	84	40	73	74	75	76	40	
50	90	91	92	93	94	95	96	97	98	99	00	01	50	90	91	92	93	50	
6	00	01	02	03	04	05	06	07	08	09	10	11	6	00	01	02	03	6	
10	23	24	25	26	27	28	29	30	31	32	33	34	10	23	24	25	26	10	
20	40	41	42	43	44	45	46	47	48	49	50	51	20	40	41	42	43	20	
30	57	58	59	60	61	62	63	64	65	66	67	68	30	57	58	59	60	30	
40	74	75	76	77	78	79	80	81	82	83	84	85	40	74	75	76	77	40	
50	91	92	93	94	95	96	97	98	99	00	01	02	50	91	92	93	94	50	
7	00	01	02	03	04	05	06	07	08	09	10	11	7	00	01	02	03	7	
10	24	25	26	27	28	29	30	31	32	33	34	35	10	24	25	26	27	10	
20	41	42	43	44	45	46	47	48	49	50	51	52	20	41	42	43	44	20	
30	58	59	60	61	62	63	64	65	66	67	68	69	30	58	59	60	61	30	
40	75	76	77	78	79	80	81	82	83	84	85	86	40	75	76	77	78	40	
50	92	93	94	95	96	97	98	99	00	01	02	03	50	92	93	94	95	50	
8	00	01	02	03	04	05	06	07	08	09	10	11	8	00	01	02	03	8	
10	25	26	27	28	29	30	31	32	33	34	35	36	10	25	26	27	28	10	
20	42	43	44	45	46	47	48	49	50	51	52	53	20	42	43	44	45	20	
30	59	60	61	62	63	64	65	66	67	68	69	70	30	59	60	61	62	30	
40	76	77	78	79	80	81	82	83	84	85	86	87	40	76	77	78	79	40	
50	93	94	95	96	97	98	99	00	01	02	03	04	50	93	94	95	96	50	
9	00	01	02	03	04	05	06	07	08	09	10</								

AZIMUTH OR TRUE BEARING.

LATITUDE 20°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 20°.	
Hour Angle.		18°	19°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.
		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
0	10	3 34	3 23	3 12	3 03	2 54	2 45	2 38	2 30	2 22	2 16	2 09	2 02	0	10
0	20	7 05	6 43	6 23	6 05	5 46	5 30	5 13	4 58	4 44	4 31	4 17	4 05	0	20
0	30	10 29	9 58	9 29	9 01	8 35	8 11	7 47	7 25	7 03	6 43	6 24	6 05	0	30
0	40	13 48	13 08	12 31	11 54	11 20	10 49	10 18	9 48	9 21	8 54	8 28	8 03	0	40
0	50	16 57	16 09	15 24	14 40	13 59	13 20	12 42	12 07	11 33	11 00	10 29	9 58	0	50
1	00	19 57	19 02	18 09	17 19	16 32	15 46	15 03	14 21	13 41	13 03	12 27	11 51	1	00
1	10	22 45	21 43	20 45	19 49	18 57	18 06	17 16	16 29	15 45	15 01	14 20	13 39	1	10
1	20	25 30	24 15	23 11	22 11	21 13	20 16	19 23	18 32	17 41	16 54	16 08	15 23	1	20
1	30	27 45	26 35	25 28	24 23	23 21	22 21	21 23	20 28	19 34	18 42	17 51	17 03	1	30
1	40	29 57	28 44	27 34	26 25	25 20	24 17	23 15	22 17	21 19	20 23	19 30	18 37	1	40
1	50	31 57	30 42	29 29	28 19	27 10	26 04	25 00	23 58	22 58	21 59	21 02	20 07	1	50
2	00	33 47	32 30	31 15	30 04	28 54	27 45	26 38	25 34	24 31	23 30	22 30	21 32	2	00
2	10	35 26	34 08	32 53	31 38	30 27	29 17	28 08	27 02	25 56	24 52	23 51	22 50	2	10
2	20	36 55	35 37	34 20	33 06	31 52	30 41	29 31	28 22	27 16	26 11	25 07	24 04	2	20
2	30	38 15	36 56	35 39	34 24	33 10	31 58	30 46	29 37	28 29	27 22	26 17	25 13	2	30
2	40	39 26	38 08	36 51	35 35	34 21	33 07	31 56	30 46	29 37	28 29	27 22	26 17	2	40
2	50	40 29	39 11	37 54	36 39	35 24	34 11	32 59	31 48	30 38	29 29	28 21	27 15	2	50
3	00	41 24	40 07	38 51	37 35	36 21	35 07	33 55	32 45	31 34	30 24	29 16	28 08	3	00
3	10	42 13	40 57	39 41	38 26	37 11	35 58	34 46	33 36	32 23	31 13	30 05	28 57	3	10
3	20	42 55	41 39	40 24	39 10	37 56	36 43	35 31	34 19	33 08	31 58	30 49	29 41	3	20
3	30	43 31	42 16	41 02	39 48	38 35	37 22	36 10	35 00	33 48	32 38	31 29	30 21	3	30
3	40	44 02	42 48	41 35	40 21	39 08	37 56	36 45	35 34	34 23	33 13	32 04	30 55	3	40
3	50	44 27	43 14	42 01	40 49	39 37	38 25	37 14	36 04	34 54	33 44	32 34	31 26	3	50
4	00	44 47	43 35	42 24	41 12	40 00	38 50	37 39	36 29	35 20	34 10	33 01	31 52	4	00
4	10	45 02	43 51	42 41	41 30	40 20	39 10	38 00	36 51	35 41	34 32	33 23	32 15	4	10
4	20	45 13	44 03	42 54	41 44	40 35	39 26	38 16	37 07	35 58	34 50	33 41	32 33	4	20
4	30	45 21	44 12	43 03	41 54	40 45	39 37	38 28	37 20	36 12	35 04	33 56	32 49	4	30
4	40	45 24	44 16	43 08	41 58	40 50	39 42	38 33	37 25	36 17	35 09	34 01	32 53	4	40
4	50	45 24	44 17	43 09	42 03	40 56	39 48	38 42	37 35	36 28	35 21	34 15	33 08	4	50
5	00	45 19	44 13	43 07	42 02	40 56	39 49	38 43	37 37	36 31	35 25	34 19	33 12	5	00
5	10	45 12	44 07	43 02	41 57	40 51	39 47	38 41	37 37	36 31	35 25	34 19	33 14	5	10
5	20	45 00	43 57	42 53	41 48	40 44	39 40	38 36	37 32	36 27	35 22	34 17	33 13	5	20
5	30	44 47	43 44	42 40	41 37	40 34	39 31	38 27	37 24	36 19	35 16	34 12	33 08	5	30
5	40	44 29	43 26	42 25	41 23	40 21	39 18	38 15	37 13	36 09	35 07	34 03	33 00	5	40
5	50	44 10	43 08	42 07	41 05	40 04	39 03	38 00	36 59	35 56	34 54	33 52	32 49	5	50
6	00	43 47	42 46	41 46	40 45	39 44	38 43	37 43	36 42	35 40	34 39	33 37	32 35	6	00
6	10	43 21	42 21	41 21	40 21	39 22	38 22	37 21	36 22	35 21	34 21	33 20	32 19	6	10
6	20	42 52	41 54	40 54	39 55	38 57	37 58	36 58	36 00	35 00	34 01	33 01	32 01	6	20
6	30	42 20	41 23	40 25	39 27	38 29	37 30	36 32	35 34	34 35	33 36	32 38	31 38	6	30
6	40	41 46	40 49	39 52	38 55	37 58	37 00	36 03	35 06	34 08	33 11	32 13	31 15	6	40
6	50	41 09	40 13	39 16	38 20	37 25	36 28	35 32	34 35	33 39	32 42	31 45	30 48	6	50
7	00	40 28	39 34	38 38	37 43	36 48	35 53	34 57	34 02	33 06	32 11	31 15	30 18	7	00
7	10	39 45	38 52	37 57	37 03	36 09	35 15	34 20	33 26	32 31	31 37	30 42	29 46	7	10
7	20	38 59	38 06	37 14	36 20	35 27	34 33	33 40	32 47	31 54	31 00	30 06	29 12	7	20
7	30	38 11	37 19	36 27	35 35	34 43	33 50	32 58	32 06	31 14	30 22	29 29	28 36	7	30
7	40	37 20	36 29	35 38	34 46	33 55	33 05	32 13	31 23	30 31	29 40	28 48	27 56	7	40
7	50	36 26	35 36	34 46	33 56	33 06	32 16	31 25	30 36	29 46	28 56	28 06	27 15	7	50
8	00	35 29	34 40	33 51	33 02	32 13	31 24	30 36	29 48	28 59	28 09	27 20	26 32	8	00
8	10	34 29	33 42	32 54	32 06	31 19	30 31	29 44	28 56	28 08	27 21	26 33	25 46	8	10
8	20	33 27	32 41	31 54	31 07	30 22	29 35	28 49	28 02	27 16	26 30	25 44	24 57	8	20
8	30	32 22	31 37	30 51	30 06	29 21	28 36	27 51	27 07	26 21	25 36	24 52	24 07	8	30
8	40	31 14	30 29	29 45	29 02	28 18	27 35	26 51	26 08	25 24	24 41	23 58	23 15	8	40
8	50	30 03	29 20	28 37	27 55	27 12	26 31	25 49	25 07	24 25	23 44	23 01	22 19	8	50
9	00	28 48	28 08	27 27	26 45	26 05	25 24	24 44	24 04	23 23	22 43	22 03	21 22	9	00
9	10	27 32	26 53	26 13	25 34	24 54	24 16	23 37	22 58	22 20	21 41	21 03	20 24	9	10
9	20	26 12	25 34	24 56	24 19	23 42	23 04	22 28	21 51	21 14	20 37	20 00	19 23	9	20
9	30	24 51	24 14	23 38	22 62	22 26	21 51	21 15	20 41	20 05	19 31	18 55	18 21	9	30
9	40	23 26	22 51	22 17	21 42	21 08	20 35	20 02	19 28	18 55	18 23	17 50	17 17	9	40
9	50	21 58	21 25	20 53	20 21	19 49	19 17	18 46	18 15	17 44	17 13	16 41	16 11	9	50
10	00	20 28	19 58	19 27	18 56	18 27	17 58	17 28	16 58	16 29	16 01	15 32	15 02	10	00
10	10	18 55	18 27	17 59	17 30	17 02	16 35	16 08	15 40	15 13	14 47	14 20	13 53	10	10
10	20	17 20	16 54	16 28	16 02	15 37	15 11	14 46	14 21	13 56	13 32	13 07	12 42	10	20
10	30	15 44	15 19	14 55	14 32	14 08	13 46	13 22	13 00	12 37	12 15	11 52	11 30	10	30
10	40	14 04	13 42	13 21	12 59	12 39	12 18	11 57	11 37	11 17	10 57	10 37	10 17	10	40
10	50	12 23	12 03	11 45	11 26	11 08	10 49	10 31	10 14	9 56	9 38	9 20	9 02	10	50
11	00	10 40	10 24	10 07	9 51	9 35	9 19	9 03	8 48	8 33	8 18	8 02	7 46	11	00
11	10	8 56	8 42	8 28	8 15	8 01	7 48	7 34	7 21	7 08	6 55	6 43	6 30	11	10
11	20	7 10	6 59	6 48	6 37	6 27	6 16	6 05	5 54	5 44	5 34	5 23	5 13	11	20
11	30	5 23	5 16	5 07	4 58	4 50	4 42	4 34	4 27	4 19	4 11	4 03	3 56	11	30
11	40	3 36	3 30	3 25	3 20	3 14	3 09	3 03	2 58	2 53	2 47	2 42	2 37	11	40
11	50	1 48	1 45	1 42	1 39	1 37	1 34	1 32	1 29	1 27	1 24	1 22	1 19	11	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 20°.			DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 20°.		
Hour Angle.			60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.			
h.	m.		0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	h.	m.		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00	0 00	
	10	1 57	1 51	1 45	1 40	1 35	1 29	1 24	1 20	1 16	1 11	1 06	1 00		10	1 00	
	20	3 52	3 41	3 30	3 19	3 09	2 58	2 49	2 40	2 31	2 22	2 14	2 06		20	3 00	
	30	5 47	5 30	5 14	4 58	4 42	4 27	4 13	3 59	3 46	3 33	3 20	3 08		30	5 00	
	40	7 39	7 17	6 55	6 34	6 14	5 54	5 35	5 18	5 00	4 42	4 26	4 10		40	7 00	
	50	9 30	9 02	8 35	8 09	7 44	7 20	6 57	6 34	6 12	5 51	5 30	5 09		50	9 00	
1	00	11 17	10 44	10 13	9 42	9 12	8 44	8 16	7 49	7 24	6 58	6 33	6 08	1	00	11 00	
	10	13 00	12 24	11 48	11 13	10 39	10 06	9 34	9 04	8 33	8 04	7 36	7 06		10	13 00	
	20	14 40	13 59	13 18	12 40	12 02	11 25	10 49	10 15	9 41	9 08	8 36	8 04		20	14 40	
	30	16 16	15 31	14 47	14 03	13 22	12 41	12 02	11 24	10 47	10 10	9 36	9 01		30	16 16	
	40	17 47	16 58	16 11	15 25	14 40	13 55	13 12	12 31	11 51	11 10	10 32	10 00		40	17 47	
	50	19 13	18 21	17 31	16 41	15 53	15 05	14 19	13 36	12 52	12 09	11 28	10 50		50	19 13	
2	00	20 35	19 41	18 47	17 54	17 03	16 13	15 24	14 37	13 51	13 05	12 20	11 38	2	00	20 35	
	10	21 51	20 55	19 59	19 03	18 09	17 17	16 26	15 36	14 46	13 58	13 11	12 26		10	21 51	
	20	23 04	22 04	21 06	20 08	19 12	18 18	17 24	16 31	15 40	14 49	14 00	13 11		20	23 04	
	30	24 11	23 09	22 09	21 10	20 11	19 14	18 19	17 24	16 30	15 38	14 46	13 53		30	24 11	
	40	25 12	24 09	23 08	22 07	21 07	20 08	19 10	18 14	17 19	16 23	15 30	14 36		40	25 12	
	50	26 09	25 05	24 02	22 59	21 59	20 58	19 59	19 01	18 03	17 06	16 10	15 16		50	26 09	
3	00	27 02	25 57	24 52	23 49	22 47	21 45	20 43	19 44	18 45	17 46	16 49	15 52	3	00	27 02	
	10	27 50	26 44	25 39	24 34	23 30	22 27	21 23	20 24	19 24	18 23	17 25	16 26		10	27 50	
	20	28 33	27 26	26 21	25 15	24 10	23 06	22 03	21 01	19 59	18 58	17 58	16 57		20	28 33	
	30	29 12	28 04	26 58	25 52	24 47	23 42	22 38	21 35	20 32	19 30	18 29	17 27		30	29 12	
	40	29 47	28 39	27 33	26 25	25 20	24 14	23 09	22 06	21 03	20 00	18 58	17 55		40	29 47	
	50	30 18	29 10	28 03	26 55	25 49	24 43	23 39	22 34	21 30	20 25	19 23	18 20		50	30 18	
4	00	30 44	29 36	28 29	27 22	26 15	25 10	24 03	22 58	21 54	20 49	19 46	18 42	4	00	30 44	
	10	31 06	29 59	28 52	27 45	26 38	25 32	24 25	23 21	22 16	21 11	20 07	19 03		10	31 06	
	20	31 26	30 18	29 11	28 04	26 58	25 51	24 45	23 40	22 34	21 28	20 24	19 20		20	31 26	
	30	31 41	30 34	29 27	28 20	27 13	26 07	25 01	23 56	22 50	21 44	20 40	19 36		30	31 41	
	40	31 53	30 46	29 40	28 33	27 27	26 20	25 14	24 09	23 03	21 57	20 52	19 48		40	31 53	
	50	32 02	30 55	29 49	28 43	27 36	26 30	25 24	24 19	23 13	22 08	21 03	20 00		50	32 02	
5	00	32 06	31 01	29 55	28 50	27 44	26 38	25 32	24 27	23 21	22 16	21 10	20 07	5	00	32 06	
	10	32 09	31 04	29 59	28 53	27 47	26 42	25 37	24 32	23 26	22 21	21 17	20 12		10	32 09	
	20	32 08	31 03	29 59	28 53	27 48	26 44	25 39	24 34	23 29	22 24	21 20	20 15		20	32 08	
	30	32 03	31 00	29 58	28 51	27 47	26 43	25 38	24 34	23 30	22 25	21 21	20 16		30	32 03	
	40	31 57	30 53	29 50	28 46	27 42	26 38	25 36	24 32	23 28	22 23	21 20	20 15		40	31 57	
	50	31 47	30 44	29 42	28 38	27 36	26 32	25 29	24 26	23 23	22 19	21 16	20 12		50	31 47	
6	00	31 34	30 32	29 31	28 28	27 26	26 23	25 21	24 19	23 16	22 12	21 10	20 07	6	00	31 34	
	10	31 19	30 18	29 17	28 15	27 14	26 12	25 10	24 09	23 07	22 04	21 03	20 00		10	31 19	
	20	31 01	30 01	29 00	28 00	26 59	25 59	24 58	23 57	22 56	21 54	20 53	20 00		20	31 01	
	30	30 40	29 40	28 42	27 41	26 42	25 42	24 42	23 42	22 42	21 41	20 42	19 42		30	30 40	
	40	30 17	29 18	28 21	27 22	26 22	25 24	24 24	23 25	22 26	21 27	20 27	19 28		40	30 17	
	50	29 51	28 54	27 56	26 59	26 01	25 03	24 04	23 07	22 09	21 10	20 12	19 13		50	29 51	
7	00	29 22	28 26	27 30	26 33	25 37	24 40	23 42	22 46	21 48	20 50	19 53	18 55	7	00	29 22	
	10	28 51	27 56	27 01	26 06	25 10	24 14	23 18	22 23	21 26	20 30	19 33	18 37		10	28 51	
	20	28 19	27 25	26 31	25 36	24 42	23 47	22 52	21 58	21 02	20 07	19 12	18 17		20	28 19	
	30	27 43	26 51	25 58	25 04	24 11	23 17	22 24	21 31	20 36	19 42	18 49	17 55		30	27 43	
	40	27 05	26 14	25 22	24 30	23 38	22 46	21 53	21 01	20 09	19 15	18 23	17 30		40	27 05	
	50	26 25	25 35	24 45	23 54	23 03	22 12	21 21	20 30	19 39	18 48	17 57	17 06		50	26 25	
8	00	25 43	24 54	24 05	23 16	22 26	21 36	20 46	19 58	19 08	18 18	17 28	16 38	8	00	25 43	
	10	24 58	24 10	23 23	22 35	21 47	20 59	20 11	19 23	18 34	17 45	16 58	16 08		10	24 58	
	20	24 11	23 25	22 39	21 53	21 06	20 20	19 33	18 47	18 00	17 13	16 26	15 38		20	24 11	
	30	23 22	22 38	21 53	21 08	20 23	19 38	18 53	18 08	17 23	16 38	15 53	15 08		30	23 22	
	40	22 31	21 49	21 05	20 22	19 38	18 55	18 11	17 28	16 45	16 01	15 18	14 35		40	22 31	
	50	21 38	20 57	20 16	19 34	18 53	18 10	17 28	16 47	16 05	15 23	14 41	14 00		50	21 38	
9	00	20 43	20 03	19 23	18 44	18 03	17 24	16 43	16 03	15 23	14 44	14 04	13 25	9	00	20 43	
	10	19 46	19 08	18 30	17 52	17 14	16 35	15 58	15 19	14 41	14 03	13 25	12 47		10	19 46	
	20	18 47	18 11	17 35	16 58	16 22	15 46	15 10	14 33	13 57	13 20	12 45	12 09		20	18 47	
	30	17 47	17 12	16 38	16 03	15 29	14 54	14 20	13 46	13 11	12 37	12 03	11 29		30	17 47	
	40	16 44	16 11	15 39	15 07	14 34	14 01	13 29	12 57	12 25	11 52	11 20	10 48		40	16 44	
	50	15 40	15 09	14 39	14 08	13 38	13 08	12 37	12 07	11 37	11 06	10 36	10 06		50	15 40	
10	00	14 35	14 06	13 38	13 09	12 40	12 12	11 44	11 16	10 48	10 20	9 51	9 23	10	00	14 35	
	10	13 27	13 00	12 34	12 08	11 42	11 16	10 49	10 23	9 57	9 31	9 06	8 42		10	13 27	
	20	12 18	11 54	11 30	11 06	10 42	10 18	9 55	9 30	9 06	8 42	8 19	7 55		20	12 18	
	30	11 08	10 47	10 25	10 02	9 41	9 19	8 58	8 37	8 15	7 53	7 31	7 09		30	11 08	
	40	9 57	9 37	9 18	8 58	8 39	8 19	8 00	7 41	7 21	7 02	6 43	6 24		40	9 57	
	50	8 45	8 28	8 10	7 54	7 36	7 19	7 02	6 45	6 29	6 11	5 55	5 39		50	8 45	
11	00	7 32	7 17	7 02	6 47	6 32	6 17	6 03	5 49	5 34	5 19	5 05	4 50	11	00	7 32	
	10	6 18	6 06	5 53	5 41	5 28	5 16	5 03	4 51	4 39	4 26	4 15	4 04		10	6 18	
	20	5 03	4 53	4 43	4 33	4 24	4 13	4 03	3 54	3 44	3 34	3 24	3 14		20	5 03	
	30	3 47	3 40	3 33	3 25	3 18	3 10	3 03	2 55	2 47	2 37	2 27	2 17		30	3 47	
	40	2 33	2 27	2 22	2 17	2 12	2 07	2 02	1 58	1 52	1 48	1 42	1 36		40	2 33	
	50	1 17	1 13	1 11	1 08	1 06	1 04	1 01	0 59	0 57	0 54	0 51	0 48		50	1 17	
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00	0 00	

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East: and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 21°.														DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 21°.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /		h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		h.	m.	0 /		0 /		0 /		0 /		0 /		0 /		0 /																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		00	00	00	00	00	00	00	00	00	00	00	00	00	00			00	00	00	00	00	00	00	00	00	00	00	00			00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

AZIMUTH OR TRUE BEARING.

LATITUDE 21°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 21°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	7 45	7 11	6 42	6 15	5 51	5 30	5 10	4 51	4 35	4 20	4 06	3 53	1	10
	20	15 11	14 07	13 10	12 19	11 33	10 52	10 13	9 38	9 06	8 36	8 08	7 42		20
	30	22 01	20 33	19 14	18 02	16 57	15 58	15 03	14 12	13 27	12 44	12 03	11 26		30
	40	28 05	26 21	24 45	23 19	21 58	20 45	19 36	18 33	17 33	16 39	15 48	14 59		40
	50	33 23	31 28	29 42	28 04	26 32	25 07	23 48	22 34	21 25	20 21	19 20	18 23		50
1	00	37 55	35 55	34 02	32 16	30 37	29 05	27 38	26 16	24 59	23 46	22 39	21 34	1	00
	10	41 47	39 44	37 48	35 59	34 15	32 38	31 05	29 37	28 15	26 56	25 42	24 31		10
	20	45 02	43 00	41 03	39 12	37 27	35 46	34 10	32 39	31 12	29 49	28 29	27 14		20
	30	47 47	45 46	43 52	42 01	40 14	38 33	36 55	35 21	33 52	32 26	31 03	29 45		30
	40	50 06	48 08	46 15	44 26	42 39	40 58	39 20	37 45	36 14	34 46	33 21	32 00		40
	50	52 02	50 08	48 17	46 30	44 46	43 06	41 28	39 53	38 21	36 52	35 26	34 03		50
2	00	53 39	51 50	50 02	48 17	46 35	44 56	43 20	41 45	40 13	38 45	37 18	35 54	2	00
	10	55 01	53 15	51 31	49 49	48 09	46 32	44 57	43 23	41 52	40 24	38 58	37 33		10
	20	56 09	54 27	52 46	51 07	49 30	47 55	46 21	44 49	43 20	41 52	40 26	39 02		20
	30	57 07	55 27	53 49	52 14	50 39	49 06	47 35	46 05	44 36	43 09	41 44	40 20		30
	40	57 52	56 17	54 43	53 09	51 38	50 07	48 38	47 10	45 43	44 18	42 53	41 30		40
	50	58 30	56 58	55 27	53 57	52 27	50 59	49 32	48 06	46 40	45 16	43 53	42 31		50
3	00	59 00	57 31	56 03	54 35	53 09	51 43	50 18	48 53	47 29	46 07	44 45	43 24	3	00
	10	59 24	57 58	56 33	55 07	53 43	52 19	50 56	49 33	48 11	46 50	45 30	44 10		10
	20	59 41	58 17	56 55	55 33	54 10	52 49	51 28	50 07	48 47	47 27	46 08	44 49		20
	30	59 53	58 33	57 12	55 52	54 32	53 13	51 53	50 33	49 15	47 58	46 40	45 23		30
	40	60 01	58 42	57 24	56 06	54 48	53 30	52 13	50 56	49 39	48 22	47 06	45 50		40
	50	60 03	58 47	57 31	56 16	54 59	53 44	52 28	51 12	49 57	48 42	47 27	46 12		50
4	00	60 02	58 48	57 34	56 20	55 06	53 52	52 38	51 23	50 10	48 57	47 44	46 30	4	00
	10	59 58	58 39	57 33	56 20	55 08	53 56	52 44	51 31	50 19	49 07	47 55	46 43		10
	20	59 50	58 30	57 28	56 17	55 07	53 57	52 45	51 34	50 23	49 12	48 02	46 51		20
	30	59 38	58 20	57 20	56 11	55 01	53 52	52 43	51 33	50 24	49 15	48 04	46 55		30
	40	59 24	58 17	57 09	56 01	54 53	53 46	52 38	51 29	50 20	49 12	48 04	46 55		40
	50	59 07	58 00	56 55	55 48	54 41	53 35	52 28	51 20	50 14	49 07	47 59	46 52		50
5	00	58 47	57 42	56 36	55 31	54 26	53 21	52 15	51 09	50 04	48 59	47 52	46 46	5	00
	10	58 24	57 20	56 16	55 12	54 08	53 04	51 59	50 54	49 50	48 45	47 41	46 35		10
	20	57 59	56 56	55 53	54 50	53 47	52 45	51 41	50 37	49 34	48 30	47 26	46 22		20
	30	57 30	56 29	55 27	54 26	53 24	52 22	51 19	50 17	49 14	48 11	47 09	46 06		30
	40	57 00	55 59	54 59	53 58	52 57	51 56	50 54	49 53	48 51	47 50	46 48	45 45		40
	50	56 27	55 28	54 27	53 28	52 28	51 28	50 27	49 26	48 26	47 26	46 25	45 23		50
6	00	55 51	54 52	53 54	52 55	51 55	50 57	49 57	48 57	47 58	46 58	45 58	44 58	6	00
	10	55 13	54 15	53 17	52 18	51 21	50 23	49 24	48 24	47 27	46 28	45 29	44 29		10
	20	54 33	53 35	52 38	51 41	50 44	49 47	48 49	47 51	46 53	45 55	44 57	43 58		20
	30	53 50	52 53	51 57	51 00	50 04	49 08	48 10	47 13	46 16	45 19	44 23	43 25		30
	40	53 04	52 08	51 12	50 17	49 21	48 25	47 29	46 33	45 37	44 41	43 45	42 48		40
	50	52 15	51 20	50 25	49 30	48 36	47 41	46 46	45 50	44 55	44 00	43 04	42 09		50
7	00	51 24	50 30	49 36	48 42	47 47	46 54	45 59	45 04	44 10	43 16	42 21	41 26	7	00
	10	50 36	49 37	48 43	47 49	46 56	46 03	45 10	44 17	43 25	42 32	41 39	40 42		10
	20	49 34	48 40	47 48	46 56	46 03	45 11	44 17	43 22	42 31	41 39	40 48	39 56		20
	30	48 34	47 42	46 51	46 00	45 08	44 16	43 25	42 32	41 34	40 43	39 52	39 02		30
	40	47 32	46 41	45 49	44 58	44 07	43 16	42 25	41 34	40 43	39 52	39 02	38 11		40
	50	46 26	45 35	44 45	43 55	43 04	42 14	41 24	40 34	39 44	38 55	38 05	37 15		50
8	00	45 17	44 27	43 38	42 48	41 58	41 10	40 20	39 31	38 43	37 53	37 05	36 16	8	00
	10	44 05	43 15	42 28	41 38	40 50	40 02	39 14	38 26	37 38	36 50	36 03	35 14		10
	20	42 50	42 02	41 14	40 26	39 38	38 51	38 04	37 16	36 30	35 44	34 56	34 10		20
	30	41 31	40 44	39 57	39 10	38 23	37 38	36 51	36 05	35 19	34 34	33 48	33 03		30
	40	40 08	39 21	38 36	37 50	37 05	36 20	35 34	34 49	34 05	33 21	32 37	31 53		40
	50	38 42	37 57	37 12	36 27	35 43	34 59	34 16	33 32	32 49	32 05	31 23	30 40		50
9	00	37 12	36 28	35 45	35 00	34 18	33 35	32 52	32 10	31 28	30 47	30 06	29 24	9	00
	10	35 38	34 56	34 13	33 31	32 49	32 08	31 27	30 46	30 06	29 26	28 45	28 06		10
	20	34 00	33 19	32 38	31 57	31 17	30 38	29 58	29 18	28 40	28 01	27 23	26 45		20
	30	32 19	31 38	30 59	30 20	29 42	29 04	28 25	27 48	27 11	26 33	25 57	25 20		30
	40	30 33	29 55	29 17	28 39	28 03	27 26	26 50	26 14	25 38	25 03	24 28	23 54		40
	50	28 43	28 07	27 31	26 55	26 20	25 45	25 11	24 37	24 03	23 30	22 56	22 24		50
10	00	26 50	26 15	25 42	25 08	24 34	24 02	23 29	22 57	22 25	21 54	21 23	20 52	10	00
	10	24 52	24 19	23 47	23 16	22 45	22 15	21 43	21 14	20 44	20 15	19 46	19 17		10
	20	22 51	22 21	21 51	21 21	20 52	20 25	19 57	19 29	19 01	18 34	18 07	17 41		20
	30	20 45	20 18	19 51	19 24	18 57	18 31	18 05	17 40	17 15	16 51	16 26	16 02		30
	40	18 35	18 12	17 47	17 23	16 59	16 35	16 12	15 49	15 27	15 04	14 42	14 21		40
	50	16 25	16 03	15 41	15 19	14 58	14 37	14 16	13 56	13 36	13 16	12 57	12 38		50
11	00	14 11	13 51	13 32	13 13	12 54	12 36	12 18	12 00	11 43	11 26	11 10	10 52	11	00
	10	11 53	11 37	11 20	11 04	10 49	10 34	10 19	10 03	9 49	9 35	9 20	9 06		10
	20	9 33	9 20	9 07	8 54	8 41	8 29	8 17	8 04	7 53	7 41	7 30	7 18		20
	30	7 12	7 02	6 52	6 42	6 32	6 23	6 14	6 04	5 56	5 47	5 39	5 30		30
	40	4 49	4 42	4 35	4 29	4 22	4 16	4 10	4 03	3 58	3 52	3 46	3 40		40
	50	2 25	2 21	2 18	2 14	2 11	2 08	2 05	2 02	1 59	1 56	1 54	1 51		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 21°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 21°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	3 40	3 30	3 19	3 08	2 59	2 50	2 41	2 34	2 26	2 18	2 12	2 05		10
	20	7 19	6 56	6 35	6 15	5 56	5 39	5 22	5 06	4 51	4 37	4 23	4 10		20
	30	10 51	10 18	9 47	9 18	8 50	8 24	8 00	7 36	7 14	6 53	6 32	6 13		30
	40	14 15	13 32	12 53	12 15	11 39	11 05	10 33	10 02	9 34	9 06	8 39	8 14		40
	50	17 29	16 39	15 50	15 05	14 22	13 41	13 02	12 25	11 50	11 15	10 43	10 12		50
1	00	20 33	19 34	18 39	17 47	16 57	16 10	15 25	14 41	14 00	13 20	12 42	12 06	1	00
	10	23 24	22 20	21 18	20 21	19 25	18 32	17 41	16 52	16 06	15 21	14 37	13 57		10
	20	26 02	24 53	23 48	22 45	21 44	20 46	19 50	18 56	18 05	17 16	16 27	15 42		20
	30	28 28	27 16	26 06	24 59	23 54	22 51	21 52	20 54	19 58	19 05	18 13	17 23		30
	40	30 41	29 26	28 12	27 02	25 54	24 49	23 46	22 45	21 45	20 48	19 53	18 59		40
	50	32 42	31 24	30 09	28 57	27 46	26 37	25 31	24 27	23 25	22 24	21 20	20 29		50
2	00	34 33	33 13	31 56	30 41	29 28	28 18	27 10	26 03	24 59	23 56	22 54	21 55	2	00
	10	36 11	34 51	33 33	32 17	31 03	29 50	28 40	27 31	26 25	25 20	24 16	23 15		10
	20	37 40	36 19	35 00	33 43	32 28	31 15	30 03	28 53	27 44	26 38	25 33	24 29		20
	30	38 58	37 36	36 19	35 02	33 46	32 32	31 19	30 07	28 58	27 49	26 42	25 37		30
	40	40 09	38 48	37 29	36 12	34 56	33 43	32 28	31 16	30 05	28 55	27 48	26 41		40
	50	41 10	39 50	38 32	37 15	35 58	34 43	33 30	32 18	31 06	29 56	28 47	27 40		50
3	00	42 04	40 45	39 27	38 10	36 54	35 40	34 26	33 13	32 01	30 50	29 41	28 32	3	00
	10	42 51	41 33	40 16	38 59	37 44	36 30	35 16	34 03	32 51	31 40	30 29	29 21		10
	20	43 31	42 14	40 58	39 42	38 27	37 13	36 00	34 47	33 35	32 24	31 14	30 05		20
	30	44 06	42 50	41 34	40 20	39 05	37 51	36 39	35 26	34 14	33 03	31 53	30 43		30
	40	44 35	43 20	42 05	40 51	39 37	38 24	37 12	35 59	34 48	33 37	32 27	31 18		40
	50	44 59	43 45	42 31	41 17	40 04	38 52	37 41	36 29	35 18	34 07	32 57	31 48		50
4	00	45 17	44 03	42 51	41 39	40 27	39 16	38 04	36 53	35 42	34 31	33 22	32 13	4	00
	10	45 31	44 19	43 08	41 56	40 45	39 34	38 24	37 14	36 03	34 53	33 44	32 35		10
	20	45 40	44 30	43 19	42 09	40 59	39 48	38 39	37 29	36 19	35 10	34 02	32 53		20
	30	45 46	44 36	43 26	42 17	41 08	39 59	38 50	37 41	36 32	35 23	34 15	33 07		30
	40	45 47	44 39	43 30	42 22	41 14	40 06	38 57	37 49	36 41	35 32	34 25	33 18		40
	50	45 45	44 38	43 30	42 23	41 16	40 08	38 59	37 51	36 47	35 39	34 32	33 24		50
5	00	45 39	44 33	43 27	42 20	41 14	40 07	39 01	37 55	36 48	35 41	34 35	33 28	5	00
	10	45 31	44 25	43 19	42 14	41 09	40 03	38 58	37 52	36 46	35 41	34 35	33 29		10
	20	45 18	44 14	43 09	42 05	41 00	39 55	38 51	37 46	36 42	35 37	34 31	33 26		20
	30	45 02	43 59	42 56	41 53	40 48	39 45	38 41	37 37	36 33	35 29	34 25	33 21		30
	40	44 43	43 41	42 39	41 36	40 34	39 31	38 28	37 26	36 22	35 19	34 15	33 12		40
	50	44 22	43 21	42 19	41 18	40 16	39 14	38 13	37 11	36 08	35 05	34 03	33 01		50
6	00	43 58	42 58	41 56	40 57	39 56	38 54	37 53	36 53	35 51	34 49	33 48	32 46	6	00
	10	43 31	42 31	41 31	40 32	39 32	38 32	37 32	36 32	35 31	34 31	33 30	32 29		10
	20	43 00	42 01	41 03	40 05	39 05	38 06	37 07	36 08	35 08	34 09	33 09	32 09		20
	30	42 27	41 30	40 32	39 35	38 36	37 38	36 40	35 42	34 44	33 44	32 46	31 47		30
	40	41 52	40 55	39 58	39 01	38 04	37 07	36 10	35 12	34 15	33 17	32 20	31 22		40
	50	41 13	40 18	39 21	38 26	37 30	36 33	35 37	34 41	33 45	32 48	31 51	30 54		50
7	00	40 32	39 37	38 42	37 47	36 52	35 57	35 02	34 06	33 11	32 16	31 20	30 24	7	00
	10	39 48	38 54	38 00	37 06	36 12	35 18	34 24	33 30	32 35	31 41	30 46	29 52		10
	20	39 01	38 09	37 16	36 23	35 30	34 37	33 44	32 50	31 58	31 04	30 10	29 17		20
	30	38 12	37 20	36 28	35 36	34 45	33 53	33 01	32 09	31 16	30 24	29 32	28 39		30
	40	37 20	36 29	35 38	34 48	33 57	33 06	32 15	31 24	30 33	29 42	28 51	27 59		40
	50	36 25	35 35	34 46	33 56	33 07	32 16	31 27	30 38	29 47	28 57	28 07	27 17		50
8	00	35 28	34 38	33 50	33 01	32 13	31 25	30 37	29 48	29 00	28 10	27 22	26 33	8	00
	10	34 47	33 49	32 52	32 05	31 18	30 30	29 43	28 56	28 09	27 22	26 34	25 47		10
	20	33 24	32 38	31 51	31 06	30 20	29 33	28 48	28 02	27 16	26 30	25 44	24 59		20
	30	32 18	31 33	30 48	30 03	29 18	28 33	27 49	27 05	26 21	25 36	24 52	24 08		30
	40	31 10	30 25	29 41	28 59	28 15	27 32	26 49	26 06	25 23	24 40	23 58	23 15		40
	50	29 58	29 16	28 34	27 51	27 10	26 28	25 47	25 05	24 24	23 41	23 01	22 20		50
9	00	28 43	28 03	27 21	26 41	26 02	25 21	24 41	24 01	23 21	22 42	22 02	21 22	9	00
	10	27 27	26 47	26 08	25 30	24 51	24 11	23 33	22 55	22 17	21 39	21 01	20 23		10
	20	26 07	25 29	24 52	24 15	23 38	23 00	22 24	21 47	21 11	20 35	19 58	19 23		20
	30	24 44	24 09	23 32	22 57	22 22	21 47	21 12	20 37	20 03	19 28	18 54	18 20		30
	40	23 19	22 45	22 11	21 37	21 04	20 31	19 59	19 26	18 53	18 19	17 47	17 15		40
	50	21 52	21 20	20 48	20 16	19 45	19 13	18 43	18 12	17 41	17 09	16 39	16 08		50
10	00	20 22	19 51	19 21	18 52	18 23	17 53	17 24	16 55	16 26	15 58	15 30	15 01	10	00
	10	18 49	18 21	17 53	17 25	16 58	16 31	16 04	15 38	15 11	14 44	14 18	13 52		10
	20	17 14	16 48	16 23	15 58	15 32	15 07	14 43	14 18	13 54	13 29	13 05	12 41		20
	30	15 37	15 14	14 51	14 28	14 05	13 41	13 20	12 57	12 35	12 13	11 50	11 29		30
	40	13 58	13 37	13 17	12 55	12 35	12 15	11 54	11 34	11 14	10 54	10 35	10 15		40
	50	12 18	12 00	11 40	11 23	11 04	10 46	10 29	10 11	9 53	9 36	9 18	9 00		50
11	00	10 36	10 19	10 04	9 47	9 32	9 16	9 01	8 45	8 30	8 15	8 00	7 46	11	00
	10	8 52	8 39	8 25	8 12	7 59	7 45	7 32	7 19	7 07	6 54	6 41	6 29		10
	20	7 08	6 56	6 43	6 30	6 17	6 03	5 50	5 37	5 24	5 12	5 00	4 48		20
	30	5 21	5 14	5 05	4 57	4 49	4 41	4 33	4 25	4 17	4 09	4 02	3 54		30
	40	3 34	3 29	3 24	3 18	3 13	3 07	3 02	2 57	2 52	2 46	2 41	2 36		40
	50	1 48	1 45	1 42	1 39	1 36	1 34	1 31	1 28	1 26	1 23	1 21	1 18		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 22°.		DECLINATION—SAME NAME AS—LATITUDE												LATITUDE 22°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	8 17	7 40	7 06	6 36	6 10	5 46	5 25	5 05	4 47	4 31	4 15	4 01		10
	20	16 11	14 59	13 56	13 06	12 09	11 23	10 41	10 03	9 29	8 56	8 27	7 59		20
	30	23 21	21 44	20 17	18 59	17 48	16 43	15 44	14 49	13 59	13 13	12 30	11 50		30
	40	29 41	27 47	26 02	24 27	23 00	21 41	20 26	19 19	18 15	17 17	16 22	15 32		40
	50	35 06	33 01	31 06	29 20	27 42	26 11	24 46	23 28	22 13	21 05	20 01	19 00		50
1	00	39 41	37 33	35 31	33 38	31 52	30 14	28 41	27 14	25 52	24 36	23 24	22 15	1	00
	10	43 33	41 23	39 19	37 23	35 34	33 50	32 12	30 40	29 12	27 49	26 30	25 17		10
	20	46 46	44 37	42 34	40 37	38 46	37 00	35 19	33 43	32 12	30 44	29 23	28 03		20
	30	49 26	47 21	45 20	43 24	41 33	39 46	38 03	36 26	34 52	33 22	31 56	30 34		30
	40	51 40	49 39	47 41	45 46	43 57	42 11	40 28	38 50	37 16	35 43	34 16	32 51		40
	50	53 31	51 34	49 39	47 49	46 01	44 16	42 34	40 56	39 21	37 49	36 20	34 54		50
2	00	55 05	53 11	51 21	49 32	47 48	46 03	44 25	42 47	41 13	39 40	38 11	36 45	2	00
	10	56 21	54 32	52 46	51 01	49 18	47 38	46 00	44 24	42 51	41 19	39 49	38 23		10
	20	57 24	55 39	53 56	52 16	50 36	48 58	47 22	45 49	44 16	42 45	41 17	39 51		20
	30	58 16	56 36	54 56	53 18	51 42	50 07	48 33	47 01	45 30	44 01	42 34	41 09		30
	40	58 58	57 22	55 46	54 11	52 38	51 05	49 33	48 03	46 35	45 07	43 41	42 17		40
	50	59 32	57 59	56 27	54 55	53 24	51 54	50 25	48 56	47 29	46 04	44 39	43 15		50
3	00	59 58	58 29	56 59	55 30	54 02	52 34	51 07	49 42	48 26	46 52	45 29	44 06	3	00
	10	60 18	58 51	57 24	55 58	54 34	53 09	51 44	50 20	48 57	47 34	46 12	44 51		10
	20	60 32	59 08	57 44	56 20	54 58	53 35	52 13	50 50	49 29	48 08	46 48	45 29		20
	30	60 40	59 19	57 58	56 37	55 17	53 55	52 35	51 15	49 56	48 37	47 18	46 00		30
	40	60 45	59 26	58 07	56 48	55 30	54 11	52 53	51 35	50 17	48 59	47 42	46 26		40
	50	60 45	59 29	58 11	56 54	55 38	54 22	53 05	51 49	50 33	49 17	48 01	46 46		50
4	00	60 41	59 26	58 12	56 57	55 43	54 28	53 13	51 58	50 43	49 29	48 15	47 01	4	00
	10	60 33	59 21	58 08	56 55	55 42	54 30	53 16	52 03	50 50	49 38	48 25	47 12		10
	20	60 23	59 12	58 00	56 50	55 38	54 27	53 16	52 04	50 53	49 42	48 30	47 19		20
	30	60 09	59 00	57 49	56 40	55 31	54 21	53 12	52 02	50 51	49 42	48 32	47 22		30
	40	59 52	58 45	57 36	56 28	55 21	54 12	53 03	51 55	50 46	49 38	48 29	47 20		40
	50	59 32	58 26	57 19	56 13	55 06	53 59	52 52	51 45	50 38	49 30	48 23	47 16		50
5	00	59 09	58 04	56 59	55 54	54 49	53 44	52 37	51 31	50 25	49 20	48 13	47 06	5	00
	10	58 45	57 41	56 37	55 33	54 28	53 24	52 20	51 15	50 10	49 05	48 00	46 55		10
	20	58 17	57 15	56 11	55 09	54 06	53 03	51 59	50 56	49 52	48 48	47 44	46 40		20
	30	57 47	56 46	55 44	54 42	53 41	52 38	51 35	50 33	49 30	48 28	47 25	46 22		30
	40	57 14	56 14	55 13	54 13	53 12	52 10	51 09	50 08	49 06	48 05	47 03	46 01		40
	50	56 40	55 41	54 40	53 40	52 41	51 41	50 40	49 40	48 40	47 38	46 38	45 37		50
6	00	56 02	55 03	54 05	53 06	52 08	51 08	50 09	49 09	48 10	47 10	46 10	45 10	6	00
	10	55 22	54 24	53 26	52 28	51 31	50 32	49 35	48 36	47 37	46 39	45 39	44 40		10
	20	54 40	53 43	52 46	51 49	50 52	49 54	48 57	48 00	47 01	46 03	45 05	44 08		20
	30	53 55	52 59	52 03	51 07	50 10	49 14	48 17	47 21	46 24	45 26	44 30	43 33		30
	40	53 08	52 13	51 17	50 22	49 26	48 31	47 35	46 39	45 43	44 47	43 51	42 55		40
	50	52 18	51 23	50 29	49 34	48 39	47 44	46 50	45 55	45 00	44 04	43 09	42 14		50
7	00	51 25	50 31	49 37	48 44	47 50	46 56	46 02	45 08	44 14	43 19	42 25	41 31	7	00
	10	50 30	49 37	48 44	47 51	46 58	46 04	45 12	44 18	43 25	42 31	41 38	40 45		10
	20	49 32	48 39	47 47	46 55	46 02	45 10	44 18	43 26	42 33	41 41	40 48	39 56		20
	30	48 31	47 40	46 47	45 56	45 05	44 14	43 23	42 31	41 39	40 47	39 56	39 05		30
	40	47 27	46 37	45 45	44 55	44 04	43 13	42 23	41 33	40 42	39 51	39 01	38 11		40
	50	46 20	45 30	44 41	43 50	43 01	42 11	41 22	40 32	39 42	38 53	38 03	37 14		50
8	00	45 10	44 21	43 32	42 43	41 54	41 05	40 16	39 28	38 39	37 50	37 03	36 15	8	00
	10	44 57	43 09	42 21	41 33	40 44	39 56	39 08	38 21	37 34	36 47	35 59	35 12		10
	20	44 41	42 53	42 06	41 19	40 31	39 43	38 55	38 08	37 20	36 33	35 46	34 59		20
	30	44 21	42 34	41 48	41 02	40 15	39 28	38 41	37 54	37 07	36 20	35 34	34 47		30
	40	39 57	39 12	38 27	37 42	36 56	36 12	35 28	34 44	34 00	33 15	32 32	31 49		40
	50	38 30	37 46	37 01	36 19	35 35	34 51	34 08	33 25	32 42	32 00	31 17	30 36		50
9	00	37 00	36 17	35 33	34 51	34 09	33 26	32 44	32 03	31 21	30 41	29 59	29 20	9	00
	10	35 26	34 44	34 01	33 21	32 39	31 59	31 19	30 38	29 58	29 18	28 39	28 00		10
	20	33 48	33 07	32 26	31 47	31 07	30 28	29 49	29 10	28 32	27 54	27 16	26 38		20
	30	32 06	31 26	30 43	30 09	29 31	28 53	28 16	27 39	27 02	26 27	25 50	25 14		30
	40	30 20	29 43	29 05	28 29	27 52	27 15	26 40	26 05	25 30	24 55	24 21	23 47		40
	50	28 30	27 55	27 19	26 45	26 09	25 35	25 02	24 29	23 55	23 23	22 50	22 18		50
10	00	26 37	26 03	25 29	24 56	24 24	23 52	23 21	22 49	22 18	21 47	21 16	20 46	10	00
	10	24 40	24 08	23 36	23 05	22 35	22 04	21 35	21 05	20 37	20 08	19 39	19 11		10
	20	22 39	22 10	21 42	21 14	20 43	20 16	19 48	19 20	18 54	18 27	18 01	17 35		20
	30	20 35	20 07	19 40	19 14	18 48	18 23	17 57	17 33	17 08	16 44	16 20	15 57		30
	40	18 27	18 02	17 38	17 14	16 50	16 27	16 05	15 43	15 20	14 58	14 36	14 15		40
	50	16 16	15 54	15 32	15 11	14 50	14 30	14 10	13 50	13 30	13 11	12 51	12 33		50
11	00	14 02	13 43	13 24	13 06	12 47	12 29	12 12	11 55	11 38	11 21	11 05	10 48	11	00
	10	11 46	11 30	11 14	10 59	10 43	10 28	10 13	9 59	9 44	9 30	9 17	9 02		10
	20	9 27	9 15	9 02	8 49	8 37	8 25	8 12	8 01	7 50	7 39	7 27	7 16		20
	30	7 08	6 57	6 48	6 38	6 29	6 19	6 11	6 01	5 53	5 44	5 36	5 28		30
	40	4 45	4 38	4 33	4 26	4 20	4 14	4 07	4 02	3 56	3 50	3 44	3 39		40
	50	2 23	2 20	2 16	2 13	2 10	2 06	2 04	2 01	1 58	1 55	1 52	1 49		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 22°.		DECLINATION—SAME NAME AS LATITUDE.												LATITUDE 22°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	3 49	3 36	3 25	3 14	3 04	2 55	2 46	2 37	2 30	2 22	2 15	2 09		10
	20	7 34	7 09	6 47	6 27	6 06	5 48	5 31	5 15	4 58	4 44	4 30	4 15		20
	30	11 12	10 37	10 06	9 35	9 06	8 39	8 13	7 48	7 25	7 03	6 42	6 21		30
	40	14 43	13 58	13 17	12 37	11 59	11 24	10 51	10 18	9 48	9 19	8 51	8 24		40
	50	18 04	17 09	16 19	15 31	14 46	14 04	13 22	12 44	12 07	11 31	10 57	10 25		50
1	00	21 11	20 10	19 12	18 17	17 25	16 36	15 48	15 03	14 20	13 39	12 59	12 21	1	00
	10	24 05	22 59	21 54	20 54	19 55	19 00	18 07	17 17	16 28	15 41	14 57	14 14		10
	20	26 46	25 34	24 26	23 20	22 17	21 17	20 18	19 23	18 30	17 39	16 49	16 01		20
	30	29 14	27 58	26 46	25 36	24 28	23 24	22 22	21 22	20 24	19 30	18 36	17 44		30
	40	31 29	30 10	28 54	27 42	26 31	25 23	24 17	23 14	22 13	21 13	20 17	19 21		40
	50	33 30	32 09	30 52	29 36	28 23	27 13	26 04	24 57	23 53	22 51	21 51	20 52		50
2	00	35 20	33 58	32 39	31 22	30 06	28 54	27 43	26 35	25 28	24 23	23 20	22 18	2	00
	10	36 58	35 35	34 15	32 57	31 40	30 26	29 14	28 03	26 54	25 48	24 42	23 39		10
	20	38 26	37 03	35 42	34 23	33 06	31 50	30 37	29 25	28 15	27 06	25 59	24 53		20
	30	39 44	38 21	37 01	35 41	34 23	33 07	31 52	30 39	29 28	28 19	27 10	26 02		30
	40	40 52	39 30	38 10	36 51	35 32	34 16	33 01	31 47	30 35	29 24	28 15	27 06		40
	50	41 52	40 31	39 11	37 52	36 34	35 18	34 03	32 49	31 36	30 24	29 13	28 04		50
3	00	42 45	41 24	40 05	38 46	37 29	36 13	34 58	33 44	32 30	31 18	30 06	28 57	3	00
	10	43 31	42 11	40 52	39 35	38 18	37 02	35 47	34 32	33 19	32 07	30 55	29 45		10
	20	44 10	42 51	41 34	40 17	39 00	37 45	36 30	35 16	34 02	32 50	31 38	30 27		20
	30	44 42	43 24	42 08	40 52	39 36	38 22	37 07	35 54	34 41	33 29	32 17	31 06		30
	40	45 09	43 53	42 38	41 23	40 08	38 54	37 40	36 27	35 14	34 02	32 51	31 40		40
	50	45 31	44 16	43 02	41 47	40 33	39 20	38 07	36 55	35 43	34 31	33 20	32 09		50
4	00	45 48	44 33	43 20	42 07	40 54	39 42	38 30	37 18	36 07	34 55	33 44	32 34	4	00
	10	45 59	44 47	43 35	42 23	41 11	40 00	38 49	37 37	36 26	35 16	34 05	32 55		10
	20	46 07	44 56	43 45	42 34	41 23	40 13	39 02	37 52	36 41	35 32	34 22	33 12		20
	30	46 12	45 01	43 51	42 41	41 31	40 22	39 12	38 03	36 53	35 44	34 35	33 26		30
	40	46 11	45 02	43 53	42 44	41 36	40 27	39 18	38 09	37 01	35 52	34 43	33 35		40
	50	46 07	44 59	43 52	42 44	41 36	40 29	39 21	38 13	37 05	35 57	34 49	33 42		50
5	00	46 00	44 54	43 47	42 40	41 33	40 26	39 20	38 12	37 05	35 59	34 51	33 45	5	00
	10	45 50	44 43	43 38	42 32	41 27	40 21	39 15	38 09	37 02	35 56	34 50	33 45		10
	20	45 36	44 31	43 26	42 22	41 17	40 12	39 07	38 02	36 57	35 51	34 45	33 40		20
	30	45 19	44 15	43 11	42 08	41 04	40 00	38 56	37 52	36 48	35 44	34 39	33 34		30
	40	44 58	43 56	42 54	41 51	40 47	39 45	38 42	37 39	36 35	35 32	34 29	33 25		40
	50	44 36	43 34	42 33	41 31	40 29	39 27	38 25	37 22	36 20	35 18	34 15	33 13		50
6	00	44 10	43 09	42 09	41 08	40 07	39 06	38 05	37 03	36 02	35 01	34 00	33 57	6	00
	10	43 40	42 41	41 42	40 42	39 42	38 43	37 42	36 42	35 41	34 41	33 39	32 38		10
	20	43 09	42 11	41 13	40 13	39 14	38 16	37 17	36 17	35 18	34 18	33 18	32 18		20
	30	42 36	41 38	40 40	39 42	38 44	37 47	36 49	35 50	34 52	33 53	32 54	31 55		30
	40	41 59	41 01	40 05	39 08	38 11	37 15	36 18	35 20	34 22	33 23	32 27	31 29		40
	50	41 18	40 23	39 27	38 32	37 35	36 40	35 44	34 48	33 51	32 54	31 58	31 01		50
7	00	40 36	39 41	38 48	37 53	36 57	36 03	35 08	34 12	33 17	32 21	31 25	30 30	7	00
	10	39 51	38 58	38 04	37 10	36 16	35 23	34 29	33 34	32 40	31 45	30 51	29 56		10
	20	39 04	38 11	37 19	36 26	35 33	34 41	33 47	32 55	32 01	31 07	30 15	29 21		20
	30	38 13	37 21	36 30	35 39	34 47	33 56	33 04	32 11	31 19	30 27	29 35	28 43		30
	40	37 21	36 30	35 40	34 49	33 58	33 08	32 17	31 27	30 35	29 44	28 53	28 03		40
	50	36 24	35 35	34 46	33 57	33 07	32 18	31 28	30 39	29 49	29 00	28 10	27 20		50
8	00	35 26	34 37	33 49	33 01	32 13	31 25	30 37	29 49	29 00	28 12	27 23	26 35	8	00
	10	34 25	33 38	32 51	32 04	31 17	30 31	29 43	28 56	28 09	27 22	26 35	25 48		10
	20	33 21	32 35	31 50	31 03	30 18	29 33	28 48	28 01	27 16	26 30	25 44	25 00		20
	30	32 14	31 30	30 46	30 01	29 16	28 33	27 49	27 04	26 20	25 36	24 52	24 08		30
	40	31 05	30 22	29 39	28 56	28 13	27 30	26 48	26 05	25 22	24 40	23 57	23 14		40
	50	29 54	29 11	28 30	27 48	27 07	26 26	25 45	25 04	24 22	23 41	23 00	22 20		50
9	00	28 39	27 58	27 18	26 38	25 58	25 18	24 38	23 59	23 20	22 41	22 01	21 22	9	00
	10	27 21	26 42	26 04	25 26	24 47	24 09	23 31	22 53	22 16	21 38	21 00	20 23		10
	20	26 01	25 24	24 47	24 10	23 33	22 58	22 22	21 45	21 09	20 34	19 57	19 22		20
	30	24 38	24 03	23 28	22 52	22 18	21 44	21 10	20 35	20 00	19 26	18 52	18 18		30
	40	23 13	22 40	22 07	21 34	21 00	20 27	19 55	19 22	18 50	18 18	17 45	17 13		40
	50	21 45	21 14	20 43	20 12	19 40	19 10	18 39	18 09	17 37	17 07	16 38	16 08		50
10	00	20 15	19 46	19 17	18 48	18 18	17 50	17 21	16 53	16 24	15 55	15 27	14 59	10	00
	10	18 43	18 16	17 49	17 22	16 54	16 28	16 00	15 35	15 08	14 43	14 16	13 50		10
	20	17 09	16 44	16 18	15 53	15 28	15 04	14 40	14 15	13 51	13 27	13 03	12 40		20
	30	15 32	15 09	14 47	14 23	14 01	13 39	13 16	12 54	12 32	12 10	11 49	11 27		30
	40	13 54	13 33	13 13	12 52	12 32	12 12	11 51	11 32	11 12	10 53	10 35	10 13		40
	50	12 14	11 55	11 37	11 19	11 02	10 44	10 26	10 08	9 51	9 34	9 17	8 59		50
11	00	10 32	10 16	10 01	9 45	9 29	9 14	8 59	8 44	8 29	8 14	7 59	7 44	11	00
	10	8 49	8 35	8 22	8 06	7 50	7 33	7 17	7 01	6 46	6 33	6 18	6 03		10
	20	7 04	6 54	6 43	6 32	6 23	6 12	6 02	5 52	5 41	5 31	5 22	5 12		20
	30	5 19	5 11	5 02	4 55	4 47	4 39	4 32	4 24	4 16	4 09	4 01	3 54		30
	40	3 34	3 28	3 22	3 17	3 11	3 07	3 01	2 57	2 52	2 46	2 41	2 36		40
	50	1 47	1 44	1 42	1 39	1 36	1 34	1 31	1 29	1 26	1 23	1 21	1 19		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 22°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 22°.	
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0
	10	2 02	1 55	1 50	1 44	1 38	1 33	1 28	1 23	1 18	1 14	1 09	10
	20	4 03	3 51	3 38	3 27	3 16	3 05	2 56	2 45	2 36	2 26	2 18	20
	30	6 02	5 44	5 26	5 09	4 53	4 36	4 21	4 07	3 53	3 39	3 26	30
	40	8 00	7 36	7 12	6 49	6 28	6 07	5 47	5 28	5 09	4 51	4 33	40
	50	9 54	9 24	8 55	8 28	8 02	7 36	7 12	6 47	6 24	6 02	5 40	50
1	00	11 45	11 10	10 37	10 04	9 32	9 02	8 33	8 05	7 37	7 11	6 45	1
	10	13 32	12 52	12 14	11 37	11 01	10 27	9 53	9 20	8 49	8 18	7 49	10
	20	15 16	14 31	13 49	13 07	12 27	11 48	11 10	10 35	9 59	9 25	8 52	20
	30	16 55	16 05	15 18	14 33	13 50	13 08	12 26	11 46	11 07	10 28	9 52	30
	40	18 27	17 35	16 45	15 56	15 09	14 23	13 38	12 54	12 12	11 31	10 51	40
	50	19 56	19 00	18 07	17 14	16 24	15 34	14 47	14 00	13 14	12 30	11 47	50
2	00	21 19	20 21	19 25	18 30	17 35	16 43	15 53	15 02	14 14	13 27	12 41	2
	10	22 37	21 36	20 38	19 40	18 44	17 49	16 55	16 03	15 12	14 22	13 32	10
	20	23 50	22 47	21 46	20 45	19 47	18 50	17 55	16 59	16 05	15 13	14 21	20
	30	24 57	23 53	22 50	21 48	20 47	19 48	18 50	17 52	16 57	16 03	15 08	30
	40	26 00	24 53	23 48	22 45	21 43	20 42	19 42	18 43	17 45	16 49	15 52	40
	50	26 56	25 49	24 43	23 38	22 35	21 32	20 30	19 30	18 30	17 31	16 34	50
3	00	27 48	26 40	25 33	24 27	23 22	22 19	21 16	20 13	19 12	18 13	17 13	3
	10	28 35	27 27	26 19	25 12	24 07	23 01	21 57	20 53	19 51	18 50	17 49	10
	20	29 18	28 09	27 01	25 53	24 46	23 40	22 35	21 31	20 27	19 25	18 22	20
	30	29 57	28 47	27 38	26 30	25 22	24 16	23 10	22 04	21 00	19 56	18 53	30
	40	30 30	29 20	28 11	27 02	25 55	24 47	23 41	22 35	21 30	20 25	19 21	40
	50	31 00	29 49	28 41	27 32	26 24	25 17	24 09	23 02	21 57	20 52	19 46	50
4	00	31 24	30 15	29 05	27 57	26 49	25 41	24 34	23 27	22 20	21 14	20 09	4
	10	31 46	30 36	29 27	28 19	27 11	26 02	24 55	23 48	22 41	21 35	20 29	10
	20	32 03	30 53	29 45	28 37	27 29	26 21	25 13	24 06	22 59	21 53	20 46	20
	30	32 17	31 08	29 59	28 51	27 44	26 36	25 28	24 21	23 15	22 09	21 02	30
	40	32 28	31 19	30 11	29 03	27 56	26 48	25 41	24 33	23 26	22 20	21 14	40
	50	32 34	31 26	30 19	29 12	28 05	26 58	25 50	24 43	23 37	22 31	21 23	50
5	00	32 38	31 30	30 24	29 17	28 10	27 03	25 56	24 49	23 43	22 37	21 30	5
	10	32 38	31 32	30 25	29 19	28 13	27 07	26 01	24 54	23 48	22 42	21 35	10
	20	32 36	31 30	30 24	29 18	28 13	27 07	26 02	24 55	23 50	22 44	21 38	20
	30	32 30	31 25	30 20	29 15	28 09	27 04	26 00	24 55	23 49	22 44	21 38	30
	40	32 21	31 16	30 12	29 08	28 04	27 00	25 56	24 50	23 46	22 41	21 37	40
	50	32 10	31 06	30 02	28 59	27 55	26 52	25 48	24 45	23 41	22 37	21 33	50
6	00	31 55	30 53	29 50	28 48	27 45	26 42	25 40	24 36	23 33	22 30	21 26	6
	10	31 38	30 36	29 34	28 33	27 31	26 29	25 27	24 25	23 22	22 20	21 17	10
	20	31 18	30 17	29 17	28 17	27 16	26 14	25 13	24 12	23 11	22 09	21 06	20
	30	30 56	29 56	28 57	27 57	26 58	25 57	24 57	23 56	22 56	21 55	20 52	30
	40	30 31	29 32	28 34	27 35	26 36	25 38	24 38	23 39	22 38	21 39	20 39	40
	50	30 04	29 06	28 09	27 11	26 14	25 16	24 17	23 19	22 20	21 22	20 22	50
7	00	29 34	28 37	27 41	26 45	25 49	24 52	23 54	22 56	21 59	21 02	20 03	7
	10	29 02	28 06	27 11	26 16	25 20	24 25	23 29	22 33	21 37	20 41	19 43	10
	20	28 28	27 33	26 39	25 45	24 51	23 56	23 02	22 07	21 12	20 17	19 21	20
	30	27 50	26 58	26 05	25 12	24 19	23 26	22 33	21 39	20 45	19 51	18 57	30
	40	27 12	26 20	25 28	24 37	23 46	22 53	22 02	21 09	20 16	19 24	18 31	40
	50	26 31	25 40	24 50	24 00	23 09	22 19	21 28	20 37	19 46	18 55	18 03	50
8	00	25 47	24 57	24 09	23 20	22 31	21 42	20 53	20 03	19 13	18 24	17 34	8
	10	25 01	24 14	23 27	22 40	21 52	21 04	20 16	19 28	18 40	17 52	17 04	10
	20	24 14	23 27	22 42	21 56	21 10	20 24	19 38	18 51	18 04	17 18	16 31	20
	30	23 24	22 39	21 55	21 11	20 27	19 41	18 57	18 12	17 27	16 43	15 57	30
	40	22 32	21 49	21 06	20 24	19 41	18 59	18 15	17 32	16 48	16 05	15 22	40
	50	21 38	20 57	20 16	19 35	18 54	18 13	17 32	16 50	16 08	15 27	14 45	50
9	00	20 42	20 03	19 23	18 44	18 05	17 26	16 46	16 06	15 27	14 47	14 06	9
	10	19 45	19 07	18 29	17 52	17 15	16 37	15 59	15 21	14 43	14 06	13 28	10
	20	18 46	18 09	17 34	16 58	16 22	15 47	15 11	14 35	13 59	13 23	12 46	20
	30	17 44	17 10	16 36	16 02	15 29	14 55	14 22	13 47	13 13	12 39	12 05	30
	40	16 42	16 09	15 38	15 06	14 34	14 02	13 30	12 58	12 26	11 54	11 22	40
	50	15 37	15 07	14 38	14 07	13 37	13 07	12 37	12 08	11 38	11 08	10 38	50
10	00	14 31	14 03	13 35	13 08	12 40	12 12	11 44	11 16	10 49	10 21	9 52	10
	10	13 25	12 58	12 32	12 06	11 41	11 15	10 49	10 23	9 58	9 33	9 07	10
	20	12 15	11 51	11 28	11 04	10 41	10 18	9 54	9 30	9 07	8 44	8 19	20
	30	11 06	10 44	10 23	10 01	9 40	9 19	8 57	8 35	8 15	7 54	7 32	30
	40	9 55	9 35	9 16	8 57	8 38	8 19	8 00	7 41	7 22	7 02	6 43	40
	50	8 43	8 25	8 09	7 52	7 35	7 18	7 02	6 45	6 28	6 12	5 54	50
11	00	7 30	7 15	7 00	6 46	6 32	6 17	6 03	5 49	5 33	5 19	5 05	11
	10	6 16	6 03	5 52	5 39	5 28	5 15	5 03	4 51	4 39	4 27	4 15	10
	20	5 01	4 52	4 41	4 32	4 23	4 13	4 03	3 54	3 44	3 34	3 24	20
	30	3 47	3 40	3 31	3 25	3 18	3 10	3 03	2 55	2 44	2 34	2 24	30
	40	2 31	2 26	2 17	2 11	2 06	1 57	1 51	1 43	1 34	1 24	1 14	40
	50	1 16	1 14	1 10	1 08	1 06	1 03	1 01	0 59	0 56	0 53	0 51	50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 23°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 23°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	65 57	48 17	36 40	29 01	23 46	20 00	17 10	15 01	13 17	11 53	10 43	9 44	1	00
	20	76 42	65 21	55 35	47 32	41 01	35 46	31 30	28 01	25 07	22 41	20 37	18 51		10
	30	80 14	72 13	64 45	57 59	51 59	46 44	42 10	38 13	34 48	31 49	29 12	26 54		20
	40	81 48	75 39	69 43	64 08	58 55	54 10	49 50	45 54	42 22	39 11	36 20	33 46		30
	50	83 32	77 33	72 41	67 59	63 29	59 15	55 17	51 36	48 11	45 01	42 07	39 27		40
1	00	82 52	78 40	74 32	70 31	66 35	62 49	59 14	55 50	52 37	49 34	46 44	44 06	1	00
	10	82 57	79 20	75 46	72 14	68 46	65 25	62 10	59 02	56 02	53 11	50 28	47 53		10
	20	82 54	79 43	76 33	73 25	70 19	67 18	64 21	61 28	58 42	56 00	53 26	50 57		20
	30	82 44	79 53	77 03	74 15	71 27	68 42	65 59	63 21	60 46	58 15	55 49	53 28		30
	40	82 30	79 55	77 21	74 48	72 15	69 44	67 14	64 47	62 23	60 02	57 44	55 30		40
	50	82 12	79 51	77 30	75 09	72 49	70 29	68 10	65 54	63 40	61 27	59 17	57 10		50
2	00	81 52	79 42	77 32	75 21	73 12	71 03	68 53	66 46	64 40	62 35	60 32	58 31	2	00
	10	81 30	79 29	77 28	75 26	73 25	71 25	69 25	67 25	65 26	63 28	61 32	59 37		10
	20	81 06	79 13	77 20	75 26	73 33	71 39	69 46	67 53	66 02	64 10	62 19	60 30		20
	30	80 41	78 55	77 08	75 32	73 35	71 48	70 00	68 14	66 28	64 42	62 56	61 12		30
	40	80 15	78 35	76 54	75 13	73 31	71 50	70 09	68 28	66 47	65 05	63 25	61 45		40
	50	79 47	78 12	76 36	75 01	73 24	71 48	70 11	68 35	66 58	65 22	63 46	62 11		50
3	00	79 18	77 48	76 17	74 45	73 14	71 42	70 10	68 38	67 06	65 33	64 01	62 29	3	00
	10	78 49	77 22	75 55	74 28	73 00	71 32	70 03	68 36	67 07	65 38	64 10	62 41		10
	20	78 18	76 54	75 31	74 08	72 43	71 19	69 55	68 29	67 05	65 39	64 14	62 49		20
	30	77 46	76 26	75 06	73 45	72 24	71 03	69 41	68 20	66 58	65 36	64 14	62 52		30
	40	77 13	75 57	74 39	73 21	72 03	70 44	69 26	68 07	66 48	65 29	64 09	62 50		40
	50	76 40	75 25	74 11	72 55	71 40	70 25	69 08	67 52	66 36	65 18	64 01	62 44		50
4	00	76 05	74 53	73 41	72 28	71 15	70 01	68 48	67 34	66 19	65 05	63 50	62 35	4	00
	10	75 30	74 20	73 09	71 58	70 48	69 36	68 24	67 13	66 00	64 48	63 36	62 23		10
	20	74 54	73 45	72 37	71 27	70 19	69 10	67 59	66 50	65 40	64 28	63 18	62 07		20
	30	74 16	73 10	72 03	70 55	69 48	68 40	67 32	66 24	65 16	64 07	62 58	61 49		30
	40	73 37	72 32	71 27	70 21	69 16	68 10	67 03	65 57	64 50	63 42	62 36	61 28		40
	50	72 57	71 54	70 50	69 46	68 42	67 38	66 32	65 27	64 22	63 16	62 10	61 05		50
5	00	72 16	71 14	70 12	69 09	68 06	67 03	65 59	64 55	63 51	62 47	61 43	60 38	5	00
	10	71 34	70 33	69 32	68 30	67 28	66 27	65 24	64 22	63 20	62 16	61 13	60 10		10
	20	70 51	69 51	68 51	67 50	66 49	65 49	64 47	63 46	62 45	61 42	60 41	59 39		20
	30	70 06	69 07	68 08	67 08	66 09	65 09	64 09	63 09	62 08	61 08	60 07	59 05		30
	40	69 21	68 21	67 23	66 25	65 26	64 27	63 29	62 29	61 29	60 29	59 30	58 30		40
	50	68 35	67 35	66 38	65 40	64 42	63 44	62 45	61 47	60 49	59 50	58 51	57 52		50
6	00	67 43	66 46	65 49	64 53	63 55	62 58	62 01	61 03	60 06	59 08	58 10	57 12	6	00
	10	66 52	65 55	64 59	64 03	63 07	62 11	61 14	60 17	59 21	58 23	57 26	56 29		10
	20	66 09	65 04	64 08	63 13	62 17	61 21	60 25	59 29	58 33	57 37	56 41	55 44		20
	30	65 24	64 09	63 14	62 19	61 24	60 30	59 35	58 40	57 46	56 51	55 57	54 57		30
	40	64 08	63 13	62 19	61 24	60 30	59 35	58 40	57 46	56 51	55 57	55 02	54 07		40
	50	63 09	62 14	61 21	60 27	59 33	58 39	57 45	56 51	55 57	55 03	54 09	53 14		50
7	00	62 08	61 14	60 20	59 27	58 34	57 41	56 47	55 54	55 00	54 07	53 13	52 20	7	00
	10	61 04	60 11	59 18	58 25	57 31	56 38	55 46	54 53	54 00	53 08	52 15	51 23		10
	20	59 57	59 05	58 12	57 19	56 27	55 35	54 43	53 51	52 58	52 06	51 14	50 22		20
	30	58 48	57 56	57 04	56 12	55 20	54 28	53 36	52 45	51 53	51 01	50 11	49 19		30
	40	57 36	56 44	55 53	55 02	54 10	53 18	52 27	51 36	50 45	49 54	49 04	48 14		40
	50	56 22	55 30	54 39	53 48	52 56	52 06	51 16	50 25	49 35	48 44	47 55	47 04		50
8	00	55 03	54 12	53 21	52 31	51 40	50 49	50 00	49 10	48 21	47 30	46 42	45 52	8	00
	10	53 41	52 51	52 01	51 10	50 20	49 30	48 41	47 52	47 03	46 14	45 25	44 38		10
	20	52 16	51 25	50 36	49 46	48 57	48 08	47 19	46 30	45 43	44 54	44 05	43 19		20
	30	50 47	49 57	49 07	48 18	47 29	46 41	45 53	45 05	44 18	43 31	42 44	41 57		30
	40	49 13	48 23	47 35	46 46	45 59	45 11	44 24	43 37	42 50	42 04	41 18	40 33		40
	50	47 35	46 46	45 58	45 10	44 23	43 36	42 50	42 04	41 18	40 33	39 48	39 03		50
9	00	45 51	45 04	44 17	43 29	42 43	41 57	41 12	40 27	39 42	38 59	38 15	37 31	9	00
	10	44 04	43 16	42 31	41 45	40 59	40 14	39 30	38 46	38 03	37 20	36 37	35 55		10
	20	42 11	41 25	40 40	39 55	39 11	38 27	37 44	37 01	36 19	35 38	34 57	34 16		20
	30	40 14	39 29	38 44	38 00	37 18	36 35	35 53	35 12	34 31	33 51	33 11	32 32		30
	40	38 10	37 26	36 43	36 00	35 19	34 38	33 58	33 18	32 39	32 00	31 22	30 44		40
	50	36 00	35 18	34 37	33 56	33 16	32 37	31 58	31 20	30 42	30 05	29 29	28 52		50
10	00	33 45	33 04	32 25	31 46	31 08	30 30	29 54	29 17	28 42	28 06	27 32	26 58	10	00
	10	31 24	30 45	30 08	29 31	28 54	28 19	27 45	27 10	26 37	26 03	25 30	24 59		10
	20	28 56	28 20	27 46	27 11	26 37	26 04	25 31	24 58	24 28	23 57	23 26	22 56		20
	30	26 25	25 51	25 17	24 46	24 14	23 43	23 14	22 43	22 15	21 45	21 17	20 50		30
	40	23 45	23 14	22 44	22 15	21 46	21 18	20 51	20 24	19 57	19 31	19 06	18 41		40
	50	21 01	20 33	20 07	19 40	19 13	18 48	18 24	18 00	17 36	17 13	16 50	16 28		50
11	00	18 12	17 47	17 24	17 00	16 37	16 16	15 54	15 33	15 12	14 51	14 32	14 13	11	00
	10	15 18	14 57	14 37	14 17	13 58	13 39	13 20	13 03	12 45	12 28	12 11	11 55		10
	20	12 20	12 02	11 46	11 29	11 14	10 58	10 44	10 29	10 15	10 01	9 48	9 35		20
	30	9 18	9 05	8 52	8 40	8 28	8 17	8 04	7 54	7 43	7 33	7 22	7 12		30
	40	6 13	6 08	5 57	5 48	5 40	5 32	5 25	5 17	5 10	5 03	4 56	4 49		40
	50	3 07	3 02	2 59	2 54	2 50	2 47	2 43	2 39	2 35	2 32	2 28	2 25		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 23°.			DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 23°.		
Hour Angle.			36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.		
h.	m.		0	0	0	0	0	0	0	0	0	0	0	0	h.	m.	
0	00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	00	0
	10	8 54	8 11	7 34	7 00	6 31	6 05	5 41	5 20	5 00	4 42	4 26	4 11		1	00	10
	20	17 19	15 58	14 48	13 45	12 49	11 59	11 13	10 31	9 54	9 20	8 47	8 18		20	20	20
	30	24 52	23 05	21 29	20 02	18 44	17 33	16 28	15 29	14 35	13 46	12 59	12 17		30	30	30
	40	31 27	29 21	27 27	25 43	24 08	22 42	21 21	20 08	19 00	17 58	16 59	16 05		40	40	40
	50	37 00	34 44	32 39	30 44	28 58	27 20	25 49	24 25	23 06	21 53	20 44	19 40		50	50	50
1	00	41 37	39 17	37 08	35 07	33 14	31 29	29 50	28 17	26 50	25 29	24 12	23 00	1	00	00	00
	10	45 26	43 08	40 57	38 53	36 57	35 08	33 23	31 46	30 14	28 45	27 23	26 05		10	10	10
	20	48 35	46 19	44 11	42 08	40 10	38 18	36 32	34 51	33 15	31 43	30 16	28 53		20	20	20
	30	51 11	49 00	46 54	44 53	42 56	41 04	39 17	37 34	35 57	34 22	32 53	31 26		30	30	30
	40	53 20	51 14	49 10	47 12	45 18	43 27	41 41	39 58	38 19	36 44	35 12	33 44		40	40	40
	50	55 05	53 04	51 06	49 11	47 19	45 30	43 45	42 04	40 25	38 49	37 16	35 47		50	50	50
2	00	56 33	54 37	52 42	50 51	49 02	47 17	45 34	43 52	42 15	40 40	39 07	37 37	2	00	00	00
	10	57 44	55 53	54 03	52 16	50 31	48 47	47 06	45 28	43 51	42 16	40 44	39 15		10	10	10
	20	58 42	56 56	55 10	53 26	51 45	50 04	48 25	46 49	45 14	43 41	42 10	40 42		20	20	20
	30	59 29	57 47	56 05	54 25	52 47	51 10	49 33	47 59	46 27	44 55	43 25	41 57		30	30	30
	40	60 06	58 29	56 51	55 15	53 39	52 05	50 31	48 59	47 28	45 59	44 31	43 04		40	40	40
	50	60 36	59 01	57 27	55 54	54 21	52 50	51 19	49 50	48 21	46 53	45 27	44 01		50	50	50
3	00	60 58	59 27	57 57	56 27	54 57	53 28	52 00	50 32	49 06	47 39	46 15	44 51	3	00	00	00
	10	61 14	59 46	58 18	56 52	55 25	53 58	52 32	51 07	49 43	48 19	46 56	45 34		10	10	10
	20	61 24	59 59	58 34	57 10	55 47	54 22	52 59	51 36	50 14	48 51	47 30	46 09		20	20	20
	30	61 29	60 07	58 45	57 24	56 02	54 41	53 19	51 58	50 38	49 17	47 57	46 38		30	30	30
	40	61 30	60 10	58 51	57 32	56 12	54 53	53 34	52 15	50 57	49 38	48 19	47 01		40	40	40
	50	61 27	60 10	58 53	57 35	56 18	55 01	53 44	52 27	51 10	49 53	48 36	47 20		50	50	50
4	00	61 20	60 05	58 50	57 35	56 19	55 04	53 49	52 34	51 19	50 04	48 50	47 34	4	00	00	00
	10	61 10	59 57	58 43	57 30	56 17	55 04	53 50	52 37	51 23	50 10	48 56	47 43		10	10	10
	20	60 57	59 45	58 33	57 22	56 11	54 59	53 47	52 35	51 23	50 11	48 59	47 48		20	20	20
	30	60 40	59 30	58 21	57 11	56 00	54 51	53 41	52 30	51 19	50 09	48 59	47 48		30	30	30
	40	60 21	59 12	58 04	56 57	55 48	54 39	53 30	52 22	51 13	50 03	48 54	47 45		40	40	40
	50	59 58	58 52	57 46	56 39	55 32	54 25	53 17	52 10	51 02	49 54	48 46	47 38		50	50	50
5	00	59 34	58 28	57 23	56 18	55 12	54 06	53 01	51 54	50 48	49 41	48 35	47 28	5	00	00	00
	10	59 07	58 03	56 59	55 55	54 50	53 45	52 41	51 36	50 31	49 26	48 21	47 15		10	10	10
	20	58 36	57 34	56 31	55 29	54 26	53 22	52 18	51 15	50 11	49 07	48 03	46 59		20	20	20
	30	58 05	57 03	56 01	55 00	53 57	52 55	51 53	50 51	49 48	48 45	47 42	46 39		30	30	30
	40	57 29	56 29	55 29	54 28	53 27	52 26	51 25	50 24	49 22	48 20	47 18	46 16		40	40	40
	50	56 53	55 53	54 54	53 54	52 54	51 55	50 55	49 54	48 53	47 53	46 52	45 51		50	50	50
6	00	56 13	55 15	54 17	53 19	52 19	51 20	50 21	49 22	48 22	47 22	46 22	45 23	6	00	00	00
	10	55 32	54 35	53 37	52 39	51 41	50 43	49 44	48 46	47 48	46 49	45 50	44 51		10	10	10
	20	54 48	53 51	52 55	51 58	51 00	50 03	49 06	48 09	47 12	46 13	45 16	44 17		20	20	20
	30	54 02	53 06	52 10	51 14	50 17	49 22	48 25	47 28	46 32	45 35	44 38	43 41		30	30	30
	40	53 12	52 17	51 22	50 27	49 31	48 36	47 40	46 45	45 50	44 53	43 57	43 02		40	40	40
	50	52 20	51 26	50 32	49 39	48 44	47 49	46 54	46 00	45 05	44 10	43 16	42 20		50	50	50
7	00	51 27	50 33	49 40	48 47	47 52	46 56	46 06	45 13	44 21	43 28	42 30	41 36	7	00	00	00
	10	50 30	49 38	48 45	47 52	46 58	46 06	45 13	44 21	43 28	42 34	41 41	40 49		10	10	10
	20	49 31	48 37	47 47	46 55	46 03	45 10	44 19	43 27	42 35	41 43	40 51	39 58		20	20	20
	30	48 26	47 37	46 46	45 55	45 04	44 12	43 22	42 30	41 40	40 49	39 57	39 06		30	30	30
	40	47 23	46 33	45 42	44 53	44 02	43 12	42 22	41 32	40 41	39 51	39 01	38 11		40	40	40
	50	46 15	45 25	44 36	43 47	42 58	42 08	41 19	40 30	39 41	38 51	38 03	37 14		50	50	50
8	00	45 03	44 15	43 26	42 38	41 49	41 01	40 13	39 25	38 37	37 49	37 01	36 13	8	00	00	00
	10	44 50	43 02	42 14	41 27	40 39	39 51	39 04	38 17	37 31	36 43	35 57	35 10		10	10	10
	20	42 33	41 46	40 58	40 12	39 26	38 39	37 53	37 07	36 22	35 35	34 50	34 04		20	20	20
	30	41 12	40 26	39 40	38 54	38 09	37 23	36 38	35 54	35 09	34 24	33 41	32 56		30	30	30
	40	39 48	39 03	38 18	37 33	36 49	36 05	35 21	34 38	33 54	33 10	32 28	31 45		40	40	40
	50	38 19	37 35	36 52	36 09	35 25	34 42	34 00	33 18	32 36	31 54	31 12	30 31		50	50	50
9	00	36 48	36 06	35 24	34 41	34 00	33 18	32 37	31 56	31 15	30 34	29 55	29 14	9	00	00	00
	10	35 13	34 32	33 51	33 10	32 30	31 50	31 10	30 31	29 52	29 12	28 34	27 55		10	10	10
	20	33 35	32 55	32 16	31 37	30 57	30 19	29 41	29 02	28 25	27 47	27 10	26 33		20	20	20
	30	31 53	31 15	30 36	29 59	29 21	28 44	28 08	27 32	27 55	26 19	25 44	25 09		30	30	30
	40	30 07	29 30	28 54	28 18	27 42	27 06	26 32	25 57	25 22	24 48	24 15	23 41		40	40	40
	50	28 18	27 42	27 07	26 33	25 59	25 26	24 53	24 21	23 47	23 16	22 44	22 12		50	50	50
10	00	26 24	25 51	25 19	24 47	24 14	23 42	23 12	22 40	22 10	21 39	21 10	20 41	10	00	00	00
	10	24 28	23 56	23 26	22 55	22 25	21 56	21 27	20 58	20 30	20 01	19 34	19 06		10	10	10
	20	22 27	21 58	21 30	21 02	20 34	20 06	19 40	19 13	18 47	18 21	17 55	17 30		20	20	20
	30	20 23	19 57	19 30	19 05	18 40	18 15	17 50	17 25	17 02	16 38	16 15	15 51		30	30	30
	40	18 16	17 52	17 28	17 06	16 42	16 19	15 57	15 36	15 14	14 53	14 31	14 10		40	40	40
	50	16 06	15 46	15 24	15 03	14 42	14 22	14 03	13 43	13 24</							

AZIMUTH OR TRUE BEARING.

LATITUDE 23°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 23°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.													h.	m.
		0	0	0	0	0	0	0	0	0	0	0	0		
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	3 57	3 44	3 32	3 20	3 10	3 00	2 50	2 42	2 34	2 26	2 18	2 11	1	00
	20	7 51	7 24	7 01	6 39	6 19	5 58	5 40	5 23	5 06	4 51	4 36	4 21		10
	30	11 37	11 00	10 25	9 52	9 22	8 53	8 27	8 01	7 37	7 14	6 52	6 31		20
	40	15 14	14 27	13 42	13 01	12 21	11 43	11 08	10 35	10 04	9 33	9 04	8 37		30
	50	18 39	17 43	16 50	16 00	15 12	14 26	13 44	13 04	12 25	11 48	11 13	10 40		40
1	00	21 52	20 47	19 47	18 49	17 55	17 02	16 13	15 26	14 41	13 59	13 18	12 38	1	00
	10	24 50	23 40	22 33	21 29	20 28	19 30	18 35	17 43	16 52	16 04	15 17	14 32		10
	20	27 34	26 19	25 07	23 57	22 52	21 49	20 48	19 51	18 56	18 02	17 11	16 22		20
	30	30 03	28 44	27 29	26 15	25 06	23 58	22 54	21 52	20 53	19 55	18 59	18 06		30
	40	32 19	30 57	29 39	28 22	27 09	25 58	24 51	23 45	22 42	21 40	20 42	19 44		40
	50	34 21	32 57	31 36	30 17	29 02	27 49	26 38	25 30	24 24	23 20	22 17	21 17		50
2	00	36 11	34 46	33 23	32 04	30 46	29 31	28 18	27 08	25 59	24 52	23 47	22 44	2	00
	10	37 48	36 23	34 59	33 39	32 21	31 04	29 49	28 37	27 26	26 17	25 10	24 05		10
	20	39 17	37 50	36 26	35 04	33 45	32 28	31 12	29 58	28 46	27 36	26 27	25 20		20
	30	40 31	39 07	37 43	36 22	35 02	33 44	32 28	31 13	29 59	28 48	27 38	26 29		30
	40	41 39	40 15	38 52	37 31	36 11	34 52	33 36	32 21	31 06	29 54	28 43	27 32		40
	50	42 38	41 14	39 52	38 31	37 12	35 54	34 37	33 21	32 07	30 53	29 41	28 30		50
3	00	43 27	42 06	40 45	39 24	38 06	36 48	35 31	34 16	33 01	31 48	30 35	29 23	3	00
	10	44 12	42 51	41 31	40 11	38 53	37 36	36 19	35 04	33 50	32 35	31 22	30 11		10
	20	44 49	43 29	42 10	40 51	39 34	38 17	37 01	35 46	34 32	33 18	32 05	30 53		20
	30	45 19	44 01	42 43	41 25	40 09	38 53	37 38	36 23	35 09	33 56	32 43	31 31		30
	40	45 45	44 28	43 11	41 54	40 39	39 24	38 09	36 55	35 41	34 29	33 16	32 04		40
	50	46 05	44 49	43 33	42 16	41 04	39 49	38 35	37 21	36 09	34 56	33 44	32 32		50
4	00	46 20	45 05	43 51	42 37	41 23	40 10	38 57	37 44	36 32	35 19	34 07	32 56	4	00
	10	46 30	45 17	44 04	42 50	41 38	40 26	39 14	38 02	36 50	35 38	34 28	33 17		10
	20	46 36	45 24	44 12	43 00	41 49	40 38	39 26	38 15	37 04	35 54	34 43	33 33		20
	30	46 37	45 27	44 17	43 06	41 56	40 45	39 35	38 25	37 15	36 05	34 55	33 45		30
	40	46 36	45 27	44 17	43 06	41 56	40 45	39 35	38 25	37 15	36 05	34 55	33 45		40
	50	46 30	45 22	44 15	43 06	41 58	40 49	39 40	38 32	37 25	36 16	35 08	33 59		50
5	00	46 22	45 15	44 07	43 00	41 54	40 46	39 39	38 31	37 24	36 17	35 09	34 01	5	00
	10	46 10	45 04	43 58	42 51	41 45	40 39	39 33	38 27	37 20	36 13	35 07	34 00		10
	20	45 54	44 49	43 45	42 39	41 34	40 19	39 24	38 18	37 13	36 08	35 02	33 55		20
	30	45 35	44 32	43 28	42 24	41 21	40 16	39 11	38 07	37 02	35 58	34 53	33 48		30
	40	45 13	44 11	43 08	42 05	41 03	40 00	38 57	37 53	36 49	35 46	34 42	33 38		40
	50	44 50	43 48	42 46	41 44	40 42	39 41	38 38	37 35	36 33	35 30	34 27	33 24		50
6	00	44 22	43 22	42 21	41 20	40 19	39 18	38 17	37 15	36 14	35 12	34 10	33 08	6	00
	10	43 52	42 53	41 53	40 53	39 54	38 53	37 53	36 53	35 52	34 51	33 50	32 49		10
	20	43 20	42 21	41 22	40 23	39 25	38 26	37 26	36 27	35 28	34 28	33 28	32 28		20
	30	42 44	41 47	40 49	39 51	38 54	37 56	36 58	35 58	35 00	34 02	33 03	32 04		30
	40	42 06	41 09	40 12	39 16	38 19	37 22	36 26	35 28	34 30	33 33	32 35	31 37		40
	50	41 24	40 29	39 34	38 38	37 42	36 47	35 50	34 54	33 58	33 01	32 05	31 07		50
7	00	40 41	39 47	38 52	37 58	37 03	36 08	35 14	34 19	33 23	32 28	31 32	30 36	7	00
	10	39 55	39 02	38 08	37 15	36 21	35 28	34 34	33 40	32 45	31 51	30 57	29 62		10
	20	39 06	38 14	37 21	36 29	35 36	34 44	33 51	32 58	32 06	31 12	30 19	29 26		20
	30	38 15	37 24	36 32	35 41	34 50	33 58	33 07	32 15	31 23	30 32	29 40	28 47		30
	40	37 21	36 31	35 41	34 51	34 01	33 10	32 20	31 29	30 38	29 48	28 58	28 07		40
	50	36 24	35 35	34 46	33 57	33 09	32 20	31 31	30 41	29 52	29 03	28 13	27 24		50
8	00	35 26	34 37	33 49	33 02	32 13	31 26	30 38	29 50	29 02	28 14	27 25	26 38	8	00
	10	34 23	33 37	32 50	32 04	31 17	30 30	29 44	28 57	28 10	27 23	26 35	25 50		10
	20	33 19	32 34	31 48	31 02	30 17	29 32	28 47	28 01	27 16	26 31	25 46	25 01		20
	30	32 12	31 28	30 43	29 59	29 15	28 32	27 48	27 04	26 21	25 37	24 53	24 09		30
	40	31 02	30 19	29 36	28 53	28 11	27 28	26 47	26 04	25 22	24 40	23 57	23 15		40
	50	29 50	29 09	28 27	27 45	27 05	26 24	25 43	25 02	24 21	23 41	23 00	22 19		50
9	00	28 34	27 54	27 14	26 35	25 55	25 16	24 37	23 58	23 19	22 39	22 01	21 21	9	00
	10	27 16	26 38	25 59	25 22	24 44	24 06	23 29	22 51	22 14	21 36	20 59	20 22		10
	20	25 56	25 19	24 43	24 06	23 31	22 55	22 19	21 43	21 07	20 32	19 57	19 20		20
	30	24 34	23 58	23 23	22 49	22 15	21 40	21 06	20 32	19 59	19 25	18 51	18 17		30
	40	23 09	22 34	22 02	21 30	20 57	20 24	19 52	19 20	18 48	18 16	17 45	17 13		40
	50	21 40	21 09	20 39	20 07	19 37	19 06	18 36	18 06	17 36	17 06	16 35	16 06		50
10	00	20 11	19 41	19 12	18 43	18 15	17 46	17 18	16 49	16 22	15 54	15 26	14 58	10	00
	10	18 39	18 11	17 44	17 18	16 51	16 24	15 58	15 31	15 06	14 40	14 14	13 49		10
	20	17 05	16 39	16 14	15 49	15 25	15 01	14 37	14 13	13 49	13 25	13 01	12 38		20
	30	15 27	15 05	14 43	14 20	13 57	13 36	13 14	12 52	12 30	12 09	11 47	11 26		30
	40	13 50	13 30	13 09	12 49	12 29	12 09	11 49	11 29	11 10	10 51	10 32	10 12		40
	50	12 09	11 52	11 33	11 16	10 58	10 41	10 23	10 06	9 49	9 32	9 15	8 59		50
11	00	10 29	10 13	9 58	9 42	9 26	9 12	8 57	8 42	8 27	8 12	7 58	7 43	11	00
	10	8 46	8 32	8 20	8 07	7 54	7 41	7 28	7 17	7 05	6 51	6 39	6 27		10
	20	7 02	6 51	6 41	6 31	6 20	6 10	6 00	5 50	5 40	5 30	5 20	5 11		20
	30	5 17	5 09	5 02	4 54	4 46	4 38	4 31	4 23	4 16	4 08	4 01	3 54		30
	40	3 32	3 26	3 22	3 17	3 11	3 06	3 01	2 56	2 51	2 46	2 41	2 36		40
	50	1 46	1 43	1 41	1 38	1 35	1 33	1 30	1 28	1 25	1 23	1 20	1 18		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 23°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 23°.		
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.	
h.	m.	0	1	2	3	4	5	6	7	8	9	10	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	2 05	1 58	1 52	1 46	1 40	1 35	1 29	1 25	1 19	1 14	1 10		10
	20	4 08	3 56	3 44	3 31	3 20	3 09	2 58	2 49	2 38	2 29	2 20		20
	30	6 11	5 52	5 33	5 16	4 59	4 43	4 26	4 11	3 57	3 43	3 29		30
	40	8 10	7 45	7 21	6 58	6 35	6 15	5 54	5 34	5 14	4 55	4 37		40
	50	10 07	9 36	9 07	8 38	8 11	7 45	7 19	6 55	6 31	6 07	5 45		50
1	00	12 01	11 25	10 50	10 16	9 43	9 12	8 42	8 13	7 45	7 18	6 51	1	00
	10	13 59	13 09	12 28	11 51	11 14	10 38	10 03	9 30	8 58	8 26	7 56		10
	20	15 35	14 49	14 05	13 21	12 41	12 02	11 22	10 45	10 09	9 33	9 00		20
	30	17 14	16 25	15 36	14 49	14 05	13 21	12 39	11 57	11 17	10 39	10 00		30
	40	18 50	17 56	17 03	16 14	15 25	14 38	13 51	13 07	12 23	11 41	11 00		40
	50	20 19	19 22	18 26	17 33	16 41	15 51	15 01	14 13	13 27	12 41	11 57		50
2	00	21 43	20 43	19 45	18 48	17 54	17 00	16 07	15 17	14 26	13 38	12 51	2	00
	10	23 01	21 59	20 58	19 59	19 02	18 06	17 11	16 17	15 25	14 34	13 44		10
	20	24 14	23 10	22 07	21 06	20 06	19 08	18 10	17 14	16 19	15 25	14 33		20
	30	25 21	24 16	23 11	22 08	21 07	20 07	19 06	18 08	17 12	16 15	15 20		30
	40	26 24	25 17	24 11	23 05	22 03	21 01	19 59	18 59	18 00	17 01	16 05		40
	50	27 21	26 13	25 04	23 58	22 54	21 51	20 47	19 46	18 45	17 45	16 46		50
3	00	28 13	27 04	25 55	24 48	23 42	22 37	21 32	20 29	19 27	18 26	17 26	3	00
	10	29 00	27 50	26 41	25 32	24 26	23 19	22 14	21 10	20 06	19 03	18 01		10
	20	29 42	28 32	27 22	26 13	25 06	23 59	22 52	21 46	20 42	19 38	18 35		20
	30	30 19	29 09	27 59	26 49	25 42	24 34	23 26	22 20	21 15	20 10	19 05		30
	40	30 53	29 42	28 31	27 22	26 14	25 06	23 57	22 51	21 44	20 38	19 34		40
	50	31 22	30 11	29 00	27 50	26 41	25 34	24 25	23 18	22 12	21 04	19 59		50
4	00	31 46	30 36	29 25	28 15	27 07	25 58	24 49	23 41	22 35	21 28	20 21	4	00
	10	32 06	30 57	29 46	28 37	27 28	26 19	25 10	24 03	22 56	21 47	20 41		10
	20	32 23	31 13	30 03	28 54	27 46	26 37	25 28	24 20	23 14	22 05	20 58		20
	30	32 35	31 27	30 17	29 08	28 00	26 52	25 43	24 35	23 28	22 20	21 13		30
	40	32 45	31 37	30 28	29 19	28 11	27 03	25 55	24 47	23 39	22 32	21 25		40
	50	32 52	31 44	30 35	29 27	28 19	27 11	26 03	24 56	23 49	22 41	21 34		50
5	00	32 54	31 47	30 38	29 31	28 25	27 18	26 09	25 03	23 55	22 48	21 40	5	00
	10	32 53	31 47	30 39	29 33	28 27	27 20	26 12	25 06	24 00	22 53	21 46		10
	20	32 50	31 44	30 38	29 32	28 26	27 19	26 13	25 07	24 01	22 54	21 49		20
	30	32 43	31 39	30 33	29 27	28 22	27 16	26 11	25 06	24 00	22 54	21 48		30
	40	32 33	31 29	30 24	29 20	28 16	27 12	26 06	25 01	23 56	22 51	21 46		40
	50	32 22	31 18	30 14	29 10	28 07	27 03	25 58	24 54	23 50	22 46	21 41		50
6	00	32 06	31 04	30 00	28 58	27 55	26 52	25 48	24 45	23 42	22 38	21 34	6	00
	10	31 47	30 47	29 45	28 43	27 41	26 39	25 37	24 34	23 32	22 28	21 25		10
	20	31 28	30 28	29 26	28 25	27 24	26 24	25 22	24 20	23 18	22 16	21 14		20
	30	31 04	30 05	29 05	28 05	27 05	26 05	25 05	24 04	23 04	22 03	21 01		30
	40	30 39	29 40	28 42	27 42	26 44	25 45	24 46	23 46	22 46	21 46	20 46		40
	50	30 11	29 14	28 16	27 15	26 20	25 23	24 25	23 26	22 27	21 27	20 29		50
7	00	29 40	28 44	27 47	26 51	25 54	24 58	24 01	23 04	22 06	21 08	20 10	7	00
	10	29 08	28 13	27 17	26 21	25 27	24 31	23 35	22 38	21 42	20 45	19 49		10
	20	28 33	27 39	26 45	25 50	24 56	24 02	23 07	22 12	21 17	20 21	19 26		20
	30	27 55	27 02	26 09	25 17	24 24	23 32	22 37	21 43	20 51	19 56	19 01		30
	40	27 16	26 24	25 33	24 41	23 49	22 58	22 06	21 14	20 21	19 28	18 36		40
	50	26 34	25 44	24 53	24 03	23 13	22 23	21 32	20 42	19 50	18 59	18 08		50
8	00	25 49	25 02	24 12	23 23	22 35	21 45	20 57	20 08	19 18	18 28	17 38	8	00
	10	25 03	24 16	23 29	22 41	21 55	21 07	20 20	19 32	18 44	17 55	17 07		10
	20	24 15	23 30	22 43	21 58	21 13	20 27	19 41	18 54	18 08	17 21	16 34		20
	30	23 25	22 41	21 57	21 13	20 29	19 44	19 00	18 14	17 30	16 45	15 59		30
	40	22 32	21 50	21 08	20 25	19 43	19 00	18 17	17 34	16 51	16 07	15 24		40
	50	21 38	20 58	20 17	19 36	18 55	18 14	17 33	16 52	16 11	15 28	14 47		50
9	00	20 43	20 04	19 24	18 45	18 06	17 27	16 47	16 07	15 29	14 48	14 08	9	00
	10	19 45	19 07	18 30	17 52	17 15	16 38	16 00	15 23	14 45	14 07	13 29		10
	20	18 45	18 09	17 33	16 58	16 23	15 47	15 12	14 36	14 01	13 24	12 49		20
	30	17 44	17 11	16 36	16 03	15 30	14 55	14 21	13 48	13 14	12 40	12 06		30
	40	16 41	16 09	15 38	15 06	14 34	14 03	13 31	12 59	12 27	11 55	11 23		40
	50	15 37	15 06	14 37	14 07	13 37	13 08	12 38	12 08	11 38	11 08	10 36		50
10	00	14 30	14 03	13 35	13 07	12 40	12 13	11 45	11 17	10 50	10 21	9 54	10	00
	10	13 23	12 57	12 32	12 06	11 41	11 15	10 50	10 24	9 59	9 33	9 07		10
	20	12 14	11 51	11 27	11 04	10 40	10 18	9 54	9 31	9 07	8 43	8 21		20
	30	11 05	10 43	10 22	10 01	9 40	9 18	8 58	8 36	8 15	7 54	7 33		30
	40	9 54	9 35	9 15	8 56	8 38	8 19	7 59	7 41	7 22	7 03	6 44		40
	50	8 41	8 25	8 08	7 51	7 35	7 18	7 02	6 45	6 29	6 11	5 55		50
11	00	7 28	7 14	6 59	6 46	6 31	6 17	6 03	5 49	5 34	5 20	5 05	11	00
	10	6 16	6 03	5 51	5 39	5 27	5 15	5 03	4 51	4 39	4 27	4 15		10
	20	5 01	4 51	4 42	4 31	4 22	4 12	4 03	3 54	3 44	3 34	3 25		20
	30	3 46	3 38	3 31	3 25	3 17	3 10	3 02	2 55	2 48	2 41	2 33		30
	40	2 31	2 26	2 21	2 17	2 12	2 07	2 02	1 57	1 52	1 48	1 43		40
	50	1 15	1 13	1 11	1 08	1 06	1 04	1 01	0 58	0 56	0 54	0 52		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the **latitude and declination are of different name**, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 24°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 24°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.	
h.	m.	o	o	o	o	o	o	o	o	o	o	o	o	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	9 37	8 48	8 05	7 27	6 54	6 25	5 59	5 35	5 14	4 55	4 37	4 22		10
	20	18 38	17 06	15 46	14 36	13 34	12 37	11 47	11 02	10 21	9 44	9 09	8 38		20
	30	26 37	24 36	22 48	21 12	19 46	18 28	17 16	16 13	15 14	14 21	13 31	12 46		30
	40	33 25	31 06	29 01	27 07	25 23	23 49	22 22	21 03	19 49	18 42	17 39	16 42		40
	50	39 04	36 37	34 22	32 17	30 22	28 36	26 58	25 27	24 02	22 44	21 31	20 23		50
1	00	43 42	41 12	38 54	36 44	34 42	32 50	31 04	29 25	27 53	26 26	25 05	23 48	1	00
	10	47 28	45 01	42 42	40 32	38 28	36 30	34 41	32 57	31 19	29 47	28 20	26 56		10
	20	50 32	48 09	45 53	43 43	41 40	39 42	37 50	36 04	34 22	32 46	31 15	29 47		20
	30	53 02	50 45	48 33	46 26	44 23	42 27	40 35	38 48	37 04	35 27	33 52	32 22		30
	40	55 04	52 53	50 46	48 43	46 43	44 48	42 58	41 11	39 27	37 48	36 12	34 40		40
	50	56 44	54 39	52 37	50 37	48 41	46 49	45 00	43 14	41 31	39 53	38 17	36 43		50
2	00	58 05	56 05	54 08	52 14	50 21	48 32	46 46	45 01	43 20	41 42	40 06	38 34	2	00
	10	59 10	57 16	55 24	53 34	51 45	49 59	48 15	46 33	44 54	43 17	41 42	40 10		10
	20	60 03	58 14	56 27	54 40	52 55	51 13	49 32	47 53	46 15	44 39	43 07	41 35		20
	30	60 45	59 00	57 18	55 35	53 54	52 15	50 37	49 00	47 24	45 51	44 20	42 49		30
	40	61 17	59 37	57 58	56 20	54 43	53 06	51 31	49 57	48 24	46 53	45 23	43 54		40
	50	61 41	60 06	58 31	56 56	55 22	53 49	52 17	50 45	49 15	47 46	46 17	44 49		50
3	00	61 59	60 27	58 55	57 24	55 53	54 23	52 53	51 24	49 56	48 29	47 03	45 36	3	00
	10	62 11	60 42	59 14	57 46	56 18	54 50	53 24	51 57	50 31	49 06	47 41	46 17		10
	20	62 17	60 52	59 27	58 02	56 36	55 11	53 47	52 22	50 59	49 36	48 13	46 51		20
	30	62 19	60 57	59 34	58 11	56 49	55 26	54 04	52 42	51 20	50 00	48 38	47 17		30
	40	62 17	60 56	59 37	58 17	56 56	55 36	54 16	52 56	51 37	50 18	48 59	47 39		40
	50	62 10	60 53	59 35	58 17	56 59	55 41	54 24	53 06	51 48	50 31	49 13	47 56		50
4	00	62 00	60 45	59 30	58 14	56 58	55 42	54 26	53 11	51 55	50 39	49 23	48 08	4	00
	10	61 47	60 34	59 20	58 07	56 53	55 38	54 25	53 10	51 56	50 43	49 28	48 14		10
	20	61 30	60 19	59 08	57 56	56 44	55 32	54 20	53 07	51 55	50 43	49 30	48 17		20
	30	61 12	60 01	58 52	57 42	56 32	55 21	54 10	53 00	51 49	50 38	49 27	48 16		30
	40	60 49	59 41	58 33	57 25	56 16	55 07	53 58	52 49	51 40	50 30	49 21	48 11		40
	50	60 25	59 18	58 12	57 06	55 58	54 50	53 43	52 35	51 27	50 19	49 11	48 03		50
5	00	59 58	58 53	57 48	56 42	55 37	54 30	53 24	52 18	51 11	50 05	48 58	47 51	5	00
	10	59 28	58 24	57 21	56 16	55 13	54 08	53 03	51 58	50 52	49 47	48 41	47 36		10
	20	58 57	57 54	56 52	55 49	54 45	53 42	52 38	51 35	50 31	49 26	48 22	47 18		20
	30	58 22	57 21	56 20	55 18	54 16	53 14	52 11	51 08	50 06	49 03	48 00	46 56		30
	40	57 46	56 45	55 45	54 44	53 44	52 42	51 41	50 40	49 38	48 36	47 34	46 32		40
	50	57 07	56 07	55 08	54 09	53 09	52 09	51 08	50 08	49 08	48 08	47 06	46 05		50
6	00	56 25	55 27	54 30	53 31	52 32	51 33	50 34	49 34	48 35	47 36	46 35	45 35	6	00
	10	55 42	54 45	53 48	52 50	51 52	50 54	49 56	48 57	47 59	47 01	46 02	45 02		10
	20	54 56	54 00	53 04	52 07	51 10	50 13	49 16	48 18	47 21	46 24	45 26	44 28		20
	30	54 07	53 13	52 18	51 21	50 26	49 29	48 33	47 36	46 40	45 44	44 46	43 50		30
	40	53 17	52 22	51 28	50 33	49 38	48 43	47 47	46 52	45 57	45 01	44 05	43 09		40
	50	52 24	51 30	50 36	49 43	48 49	47 54	46 59	46 05	45 10	44 16	43 21	42 26		50
7	00	51 39	50 36	49 42	48 49	47 56	47 02	46 09	45 16	44 22	43 29	42 35	41 40	7	00
	10	50 30	49 38	48 46	47 54	47 01	46 09	45 16	44 24	43 31	42 39	41 46	40 52		10
	20	49 29	48 38	47 47	46 55	46 04	45 12	44 21	43 29	42 37	41 45	40 53	40 01		20
	30	48 25	47 35	46 44	45 54	45 03	44 12	43 22	42 31	41 41	40 50	39 59	39 08		30
	40	47 19	46 29	45 40	44 50	44 00	43 11	42 20	41 31	40 41	39 52	39 02	38 12		40
	50	46 11	45 21	44 32	43 44	42 55	42 06	41 17	40 28	39 39	38 51	38 02	37 14		50
8	00	44 58	44 10	43 21	42 33	41 45	40 57	40 10	39 22	38 34	37 48	36 59	36 12	8	00
	10	43 43	42 56	42 08	41 21	40 34	39 47	39 00	38 14	37 28	36 42	35 55	35 09		10
	20	42 24	41 37	40 52	40 06	39 20	38 34	37 48	37 03	36 18	35 33	34 47	34 02		20
	30	41 03	40 17	39 32	38 47	38 02	37 18	36 33	35 48	35 05	34 21	33 37	32 53		30
	40	39 38	38 53	38 09	37 25	36 41	35 59	35 15	34 32	33 49	33 07	32 23	31 41		40
	50	38 10	37 25	36 43	36 01	35 18	34 35	33 53	33 12	32 31	31 50	31 08	30 27		50
9	00	36 37	35 55	35 14	34 32	33 51	33 10	32 30	31 49	31 09	30 29	29 49	29 09	9	00
	10	35 02	34 21	33 41	33 01	32 22	31 42	31 02	30 24	29 45	29 07	28 27	27 50		10
	20	33 23	32 44	32 05	31 27	30 49	30 10	29 33	28 55	28 18	27 42	27 04	26 27		20
	30	31 40	31 03	30 26	29 49	29 13	28 36	28 00	27 23	26 48	26 13	25 38	25 03		30
	40	29 54	29 19	28 43	28 07	27 33	26 58	26 23	25 50	25 15	24 43	24 09	23 36		40
	50	28 05	27 30	26 58	26 24	25 51	25 18	24 45	24 13	23 40	23 10	22 38	22 06		50
10	00	26 12	25 40	25 08	24 36	24 05	23 34	23 04	22 33	22 03	21 33	21 04	20 35	10	00
	10	24 15	23 46	23 15	22 45	22 16	21 48	21 19	20 51	20 23	19 55	19 27	19 00		10
	20	22 16	21 48	21 20	20 52	20 25	19 58	19 32	19 06	18 41	18 15	17 50	17 25		20
	30	20 12	19 47	19 22	18 56	18 32	18 07	17 43	17 19	16 55	16 32	16 09	15 46		30
	40	18 06	17 43	17 20	16 57	16 34	16 13	15 51	15 29	15 08	14 47	14 26	14 06		40
	50	15 57	15 37	15 16	14 56	14 36	14 16	13 57	13 38	13 19	13 01	12 42	12 24		50
11	00	13 45	13 28	13 10	12 53	12 35	12 18	12 02	11 44	11 28	11 12	10 57	10 40	11	00
	10	11 31	11 17	11 01	10 46	10 32	10 18	10 04	9 50	9 36	9 23	9 09	8 56		10
	20	9 16	9 03	8 51	8 40	8 28	8 16	8 05	7 54	7 43	7 32	7 21	7 10		20
	30	6 58	6 49	6 40	6 30	6 22	6 13	6 05	5 56	5 48	5 39	5 31	5 24		30
	40	4 40	4 33	4 28	4 21	4 15	4 10	4 04	3 58	3 53	3 47	3 41	3 36		40
	50	2 20	2 17	2 14	2 11	2 08	2 05	2 02	1 59	1 56	1 53	1 51	1 49		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 24°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 24°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00
	10	4 06	3 52	3 40	3 28	3 16	3 06	2 56	2 46	2 38	2 30	2 22	2 15		10
	20	8 09	7 42	7 16	6 52	6 31	6 10	5 50	5 32	5 15	4 58	4 43	4 28		20
	30	12 03	11 24	10 47	10 12	9 40	9 10	8 41	8 14	7 48	7 24	7 02	6 40		30
	40	15 47	14 57	14 09	13 26	12 44	12 05	11 27	10 53	10 19	9 47	9 18	8 49		40
	50	19 19	18 19	17 23	16 30	15 40	14 52	14 07	13 25	12 45	12 06	11 29	10 55		50
1	00	22 36	21 29	20 24	19 23	18 26	17 32	16 40	15 51	15 04	14 19	13 36	12 55	1	00
	10	25 38	24 24	23 13	22 07	21 02	20 02	19 04	18 10	17 17	16 27	15 38	14 53		10
	20	28 24	27 05	25 50	24 38	23 29	22 23	21 21	20 21	19 23	18 27	17 35	16 44		20
	30	30 56	29 33	28 14	26 58	25 44	24 35	23 28	22 23	21 21	20 22	19 25	18 30		30
	40	33 12	31 46	30 24	29 06	27 50	26 36	25 26	24 18	23 13	22 10	21 08	20 09		40
	50	35 14	33 47	32 23	31 02	29 44	28 28	27 14	26 03	24 55	23 49	22 45	21 43		50
2	00	37 03	35 36	34 10	32 48	31 28	30 10	28 55	27 42	26 31	25 22	24 16	23 11	2	00
	10	39 40	37 12	35 47	34 24	33 02	31 43	30 27	29 12	27 59	26 48	25 40	24 32		10
	20	40 05	38 38	37 12	35 49	34 27	33 07	31 49	30 34	29 20	28 07	26 57	25 48		20
	30	41 20	39 54	38 28	37 05	35 43	34 23	33 05	31 48	30 33	29 19	28 07	26 57		30
	40	42 27	41 01	39 36	38 13	36 51	35 31	34 12	32 54	31 39	30 25	29 12	28 00		40
	50	43 23	41 58	40 35	39 12	37 50	36 31	35 12	33 55	32 39	31 24	30 11	28 58		50
3	00	44 12	42 49	41 26	40 05	38 44	37 24	36 06	34 49	33 32	32 17	31 03	29 51	3	00
	10	44 54	43 32	42 10	40 50	39 30	38 11	36 53	35 36	34 20	33 05	31 51	30 38		10
	20	45 30	44 08	42 46	41 28	40 09	38 51	37 34	36 17	35 02	33 46	32 33	31 20		20
	30	45 59	44 39	43 19	42 01	40 43	39 26	38 09	36 53	35 38	34 24	33 10	31 56		30
	40	46 22	45 03	43 45	42 28	41 11	39 55	38 39	37 24	36 09	34 55	33 42	32 29		40
	50	46 39	45 23	44 06	42 50	41 34	40 19	39 04	37 50	36 36	35 22	34 10	32 57		50
4	00	46 52	45 37	44 22	43 08	41 53	40 38	39 24	38 10	36 57	35 45	34 32	33 20	4	00
	10	47 01	45 47	44 33	43 20	42 06	40 53	39 40	38 27	37 15	36 02	34 51	33 39		10
	20	47 05	45 53	44 40	43 28	42 15	41 03	39 51	38 39	37 28	36 17	35 06	33 54		20
	30	47 05	45 54	44 42	43 32	42 21	41 10	39 58	38 48	37 37	36 27	35 17	34 06		30
	40	47 02	45 52	44 42	43 32	42 22	41 12	40 03	38 53	37 42	36 33	35 24	34 13		40
	50	46 56	45 46	44 37	43 29	42 20	41 11	40 02	38 53	37 45	36 36	35 27	34 18		50
5	00	46 44	45 37	44 28	43 21	42 14	41 06	39 58	38 51	37 43	36 35	35 27	34 19	5	00
	10	46 30	45 23	44 18	43 11	42 05	40 58	39 51	38 45	37 37	36 31	35 24	34 17		10
	20	46 13	45 08	44 02	42 58	41 52	40 47	39 41	38 35	37 30	36 23	35 18	34 11		20
	30	45 53	44 49	43 45	42 41	41 36	40 32	39 27	38 23	37 18	36 13	35 08	34 03		30
	40	45 30	44 27	43 24	42 22	41 19	40 15	39 11	38 08	37 04	36 00	34 56	33 52		40
	50	45 04	44 02	43 00	41 59	40 57	39 54	38 52	37 49	36 46	35 44	34 41	33 37		50
6	00	44 35	43 35	42 34	41 33	40 32	39 31	38 30	37 28	36 26	35 24	34 23	33 20	6	00
	10	44 04	43 04	42 05	41 05	40 05	39 05	38 04	37 05	36 03	35 02	34 01	33 00		10
	20	43 30	42 31	41 32	40 35	39 35	38 36	37 37	36 37	35 38	34 38	33 38	32 38		20
	30	42 53	41 56	40 59	40 01	39 03	38 05	37 06	36 08	35 09	34 11	33 12	32 12		30
	40	42 14	41 17	40 20	39 24	38 27	37 30	36 33	35 36	34 39	33 41	32 44	31 45		40
	50	41 32	40 36	39 41	38 46	37 49	36 54	35 58	35 02	34 06	33 09	32 13	31 16		50
7	00	40 47	39 53	38 58	38 04	37 10	36 15	35 20	34 25	33 30	32 34	31 39	30 43	7	00
	10	40 00	39 06	38 13	37 20	36 27	35 33	34 39	33 45	32 51	31 57	31 03	30 08		10
	20	39 10	38 18	37 26	36 34	35 41	34 48	33 55	33 03	32 11	31 18	30 25	29 31		20
	30	38 17	37 26	36 35	35 45	34 53	34 02	33 10	32 19	31 27	30 36	29 44	28 52		30
	40	37 22	36 33	35 43	34 53	34 03	33 13	32 22	31 32	30 42	29 52	29 01	28 10		40
	50	36 25	35 36	34 48	34 00	33 11	32 22	31 32	30 44	29 54	29 06	28 16	27 27		50
8	00	35 25	34 37	33 50	33 03	32 15	31 27	30 39	29 52	29 04	28 17	27 29	26 40	8	00
	10	34 22	33 36	32 50	32 04	31 17	30 31	29 45	28 58	28 12	27 25	26 39	25 53		10
	20	33 17	32 32	31 46	31 02	30 17	29 32	28 47	28 03	27 18	26 33	25 48	25 02		20
	30	32 10	31 25	30 41	29 59	29 15	28 31	27 47	27 04	26 20	25 36	24 54	24 10		30
	40	30 59	30 17	29 33	28 52	28 10	27 28	26 45	26 03	25 22	24 40	23 59	23 16		40
	50	29 46	29 05	28 24	27 43	27 03	26 22	25 42	25 01	24 21	23 41	23 01	22 20		50
9	00	28 30	27 51	27 12	26 32	25 53	25 14	24 35	23 56	23 17	22 39	22 00	21 22	9	00
	10	27 13	26 34	25 56	25 19	24 41	24 04	23 27	22 50	22 13	21 36	20 59	20 22		10
	20	25 51	25 15	24 40	24 04	23 28	22 52	22 16	21 41	21 05	20 30	19 55	19 20		20
	30	24 29	23 55	23 19	22 46	22 12	21 38	21 04	20 31	19 57	19 23	18 51	18 16		30
	40	23 03	22 31	21 57	21 26	20 53	20 21	19 49	19 18	18 46	18 15	17 43	17 11		40
	50	21 36	21 05	20 34	20 04	19 33	19 03	18 33	18 03	17 34	17 04	16 34	16 04		50
10	00	20 06	19 37	19 07	18 39	18 12	17 43	17 15	16 48	16 20	15 52	15 24	14 57	10	00
	10	18 33	18 07	17 40	17 14	16 47	16 21	15 55	15 29	15 04	14 39	14 13	13 47		10
	20	16 59	16 35	16 11	15 46	15 22	14 59	14 34	14 11	13 46	13 24	13 00	12 37		20
	30	15 23	15 01	14 39	14 17	13 55	13 32	13 11	12 50	12 28	12 07	11 46	11 25		30
	40	13 45	13 25	13 05	12 46	12 26	12 06	11 47	11 27	11 08	10 49	10 31	10 11		40
	50	12 06	11 49	11 31	11 13	10 56	10 39	10 21	10 05	9 48	9 31	9 14	8 57		50
11	00	10 25	10 10	9 55	9 40	9 24	9 09	8 54	8 40	8 25	8 11	7 57	7 43	11	00
	10	8 43	8 30	8 17	8 04	7 52	7 40	7 27	7 15	7 03	6 51	6 38	6 26		10
	20	7 00	6 49	6 39	6 28	6 19	6 09	5 59	5 49	5 39	5 30	5 20	5 10		20
	30	5 15	5 07	5 00	4 53	4 45	4 37	4 30	4 22	4 15	4 08	4 01	3 53		30
	40	3 30	3 25	3 21	3 13	3 05	3 00	2 55	2 50	2 45	2 40	2 35	2 30		40
	50	1 46	1 43	1 40	1 38	1 35	1 33	1 30	1 28	1 25	1 23	1 20	1 18		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or west of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 24°.				DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 24°.			
Hour Angle.		60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.				
h.	m.	0	0	0	0	0	0	0	0	0	0	0	h.	m.			
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00			
	10	2 07	2 01	1 54	1 48	1 43	1 37	1 31	1 26	1 21	1 16	1 11		10			
	20	4 14	4 01	3 48	3 35	3 24	3 13	3 01	2 51	2 42	2 31	2 22		20			
	30	6 19	5 59	5 41	5 22	5 05	4 48	4 32	4 16	4 01	3 46	3 33		30			
	40	8 22	7 55	7 30	7 07	6 44	6 21	6 01	5 40	5 20	5 01	4 42		40			
	50	10 21	9 49	9 18	8 49	8 20	7 53	7 27	7 02	6 38	6 14	5 51		50			
1	00	12 17	11 39	11 03	10 29	9 55	9 33	8 52	8 22	7 53	7 25	6 58	1	00			
	10	14 08	13 26	12 45	12 05	11 26	10 50	10 15	9 40	9 07	8 35	8 04		10			
	20	15 55	15 07	14 22	13 38	12 55	12 14	11 35	10 56	10 19	9 43	9 08		20			
	30	17 36	16 44	15 55	15 07	14 20	13 35	12 52	12 10	11 29	10 48	10 10		30			
	40	19 12	18 17	17 24	16 32	15 41	14 53	14 06	13 20	12 35	11 52	11 10		40			
	50	20 42	19 44	18 47	17 52	16 59	16 06	15 16	14 28	13 39	12 52	12 08		50			
2	00	22 07	21 06	20 07	19 09	18 12	17 17	16 24	15 32	14 41	13 51	13 03	2	00			
	10	23 27	22 22	21 21	20 20	19 21	18 24	17 27	16 32	15 38	14 46	13 56		10			
	20	24 40	23 34	22 29	21 27	20 26	19 25	18 27	17 30	16 34	15 40	14 45		20			
	30	25 48	24 40	23 35	22 30	21 27	20 25	19 24	18 25	17 27	16 29	15 33		30			
	40	26 50	25 41	24 33	23 28	22 22	21 19	20 17	19 16	18 15	17 16	16 18		40			
	50	27 47	26 37	25 28	24 21	23 15	22 09	21 05	20 02	19 01	17 59	17 00		50			
3	00	28 38	27 28	26 18	25 10	24 03	22 56	21 51	20 46	19 43	18 40	17 39	3	00			
	10	29 25	28 14	27 03	25 54	24 46	23 38	22 32	21 27	20 22	19 18	18 16		10			
	20	30 07	28 55	27 45	26 35	25 26	24 17	23 10	22 04	20 58	19 53	18 49		20			
	30	30 44	29 32	28 21	27 11	26 01	24 52	23 44	22 37	21 31	20 25	19 19		30			
	40	31 16	30 04	28 53	27 43	26 33	25 24	24 15	23 07	21 59	20 53	19 48		40			
	50	31 44	30 32	29 22	28 11	27 00	25 51	24 42	23 34	22 26	21 19	20 13		50			
4	00	32 08	30 57	29 46	28 35	27 25	26 15	25 06	23 58	22 49	21 42	20 35	4	00			
	10	32 28	31 16	30 06	28 56	27 45	26 35	25 27	24 18	23 10	22 02	20 54		10			
	20	32 43	31 32	30 22	29 13	28 03	26 54	25 45	24 35	23 27	22 19	21 11		20			
	30	32 55	31 46	30 36	29 26	28 17	27 07	25 58	24 50	23 42	22 33	21 25		30			
	40	33 04	32 54	30 45	29 36	28 27	27 18	26 10	25 02	23 53	22 45	21 37		40			
	50	33 09	32 00	30 52	29 43	28 35	27 26	26 18	25 10	24 02	22 54	21 47		50			
5	00	33 11	32 03	30 55	29 47	28 39	27 31	26 24	25 16	24 08	23 01	21 53	5	00			
	10	33 10	32 02	30 55	29 47	28 41	27 34	26 26	25 19	24 11	23 05	21 58		10			
	20	33 05	31 59	30 52	29 46	28 39	27 32	26 26	25 19	24 12	23 05	21 59		20			
	30	32 57	31 52	30 46	29 41	28 35	27 28	26 23	25 17	24 11	23 05	21 59		30			
	40	32 47	31 43	30 38	29 32	28 28	27 22	26 18	25 13	24 07	23 02	21 55		40			
	50	32 34	31 30	30 27	29 23	28 18	27 14	26 10	25 05	24 00	22 55	21 51		50			
6	00	32 17	31 15	30 12	29 09	28 06	27 03	26 00	24 56	23 52	22 48	21 43	6	00			
	10	31 59	30 57	29 55	28 53	27 51	26 49	25 46	24 44	23 40	22 37	21 34		10			
	20	31 37	30 36	29 36	28 35	27 33	26 32	25 31	24 29	23 27	22 25	21 23		20			
	30	31 14	30 14	29 14	28 14	27 14	26 14	25 13	24 13	23 11	22 11	21 10		30			
	40	30 47	29 49	28 50	27 51	26 52	25 53	24 54	23 54	22 53	21 54	20 54		40			
	50	30 19	29 21	28 23	27 26	26 28	25 29	24 32	23 33	22 34	21 35	20 35		50			
7	00	29 47	28 51	27 54	26 58	26 01	25 04	24 08	23 10	22 12	21 14	20 16	7	00			
	10	29 13	28 19	27 23	26 28	25 33	24 37	23 41	22 46	21 49	20 52	19 55		10			
	20	28 38	27 44	26 50	25 56	25 02	24 08	23 13	22 19	21 23	20 27	19 32		20			
	30	27 59	27 07	26 15	25 22	24 29	23 36	22 43	21 50	20 55	20 01	19 07		30			
	40	27 20	26 28	25 37	24 46	23 54	23 03	22 10	21 19	20 25	19 33	18 40		40			
	50	26 37	25 48	24 58	24 08	23 17	22 26	21 36	20 46	19 55	19 03	18 12		50			
8	00	25 52	25 04	24 15	23 27	22 38	21 49	21 01	20 11	19 21	18 31	17 42	8	00			
	10	25 06	24 19	23 32	22 45	21 58	21 10	20 23	19 36	18 47	17 59	17 11		10			
	20	24 17	23 32	22 46	22 01	21 15	20 29	19 43	18 57	18 11	17 25	16 38		20			
	30	23 27	22 43	21 59	21 15	20 30	19 46	18 57	18 17	17 32	16 48	16 03		30			
	40	22 34	21 52	21 09	20 27	19 45	18 57	18 19	17 37	16 53	16 10	15 27		40			
	50	21 39	20 59	20 18	19 37	18 57	18 15	17 35	16 55	16 13	15 31	14 50		50			
9	00	20 43	20 04	19 25	18 47	18 08	17 28	16 49	16 10	15 31	14 51	14 11	9	00			
	10	19 45	19 08	18 31	17 53	17 16	16 39	16 02	15 24	14 46	14 09	13 31		10			
	20	18 45	18 10	17 35	16 59	16 24	15 48	15 13	14 37	14 02	13 26	12 50		20			
	30	17 43	17 10	16 36	16 03	15 30	14 56	14 23	13 49	13 16	12 42	12 08		30			
	40	16 40	16 08	15 38	15 06	14 34	14 03	13 31	13 00	12 28	11 57	11 25		40			
	50	15 35	15 06	14 36	14 07	13 38	13 08	12 39	12 09	11 39	11 10	10 40		50			
10	00	14 29	14 02	13 35	13 07	12 40	12 12	11 45	11 17	10 50	10 23	9 54	10	00			
	10	13 22	12 56	12 31	12 06	11 41	11 15	10 50	10 25	9 59	9 33	9 08		10			
	20	12 13	11 50	11 27	11 03	10 41	10 17	9 54	9 31	9 08	8 44	8 22		20			
	30	11 03	10 42	10 21	10 00	9 40	9 18	8 58	8 37	8 16	7 54	7 33		30			
	40	9 52	9 34	9 15	8 56	8 37	8 19	8 00	7 41	7 22	7 03	6 45		40			
	50	8 40	8 25	8 08	7 51	7 35	7 18	7 01	6 45	6 28	6 12	5 56		50			
11	00	7 28	7 13	7 00	6 45	6 31	6 17	6 03	5 49	5 34	5 20	5 05	11	00			
	10	6 15	6 02	5 50	5 39	5 27	5 15	5 03	4 51	4 39	4 27	4 16		10			
	20	5 00	4 51	4 41	4 32	4 22	4 12	4 03	3 54	3 44	3 34	3 25		20			
	30	3 45	3 38	3 32	3 24	3 17	3 10	3 02	2 55	2 49	2 41	2 34		30			
	40	2 31	2 25	2 21	2 16	2 12	2 06	2 02	1 58	1 52	1 48	1 43		40			
	50	1 16	1 13	1 11	1 08	1 05	1 03	1 01	0 59	0 56	0 54	0 51		50			
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00			

AZIMUTH OR TRUE BEARING.

LATITUDE 25°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 25°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	Hour Angle.	
h.	m.	0	0	0	0	0	0	0	0	0	0	0	0	h.	m.
0	00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	180 00	0	00
	10	113 12	89 25	65 34	47 47	36 11	28 34	23 21	19 38	16 50	14 42	13 00	11 36	1	00
	20	101 21	88 57	76 26	64 55	55 04	46 58	40 27	35 11	30 57	27 29	24 37	22 12		10
	30	96 46	88 25	80 00	71 51	64 16	57 26	51 23	46 06	41 32	37 30	34 10	31 11		20
	40	94 10	87 53	81 33	75 18	69 17	63 36	58 21	53 32	49 09	45 13	41 41	38 29		30
	50	92 24	87 21	82 15	77 12	72 15	67 28	62 55	58 38	54 37	50 53	47 17	44 16		40
1	00	91 03	86 49	82 33	78 19	74 06	70 01	66 02	62 12	58 35	55 07	51 53	48 49	1	50
	10	89 55	86 17	82 37	78 57	75 18	71 43	68 13	64 48	61 29	58 19	55 18	52 24		10
	20	88 50	85 44	82 32	79 18	76 05	72 54	69 45	66 41	63 41	60 46	57 56	55 14		20
	30	88 03	85 12	82 19	79 26	76 34	73 42	70 52	68 03	65 19	62 38	60 00	57 26		30
	40	87 14	84 39	82 03	79 27	76 50	74 14	71 39	69 05	66 33	64 04	61 38	59 14		40
	50	86 27	84 06	81 43	79 21	76 57	74 33	72 11	69 49	67 29	65 10	62 54	60 38		50
2	00	85 43	83 32	81 21	79 09	76 57	74 45	72 32	70 21	68 10	66 01	63 53	61 45	2	00
	10	85 00	82 59	80 57	78 54	76 51	74 48	72 45	70 42	68 40	66 38	64 38	62 38		10
	20	84 18	82 25	80 31	78 37	76 41	74 46	72 51	70 55	69 00	67 05	65 12	63 18		20
	30	83 36	81 50	80 03	78 16	76 28	74 39	72 50	71 02	69 13	67 25	65 37	63 49		30
	40	82 56	81 15	79 35	77 53	76 10	74 29	72 45	71 02	69 20	67 36	65 54	64 12		40
	50	82 15	80 40	79 05	77 28	75 51	74 14	72 37	70 58	69 20	67 43	66 05	64 26		50
3	00	81 35	80 04	78 33	77 01	75 30	73 57	72 24	70 50	69 17	67 43	66 09	64 36	3	00
	10	80 55	79 28	78 00	76 33	75 05	73 37	72 07	70 39	69 09	67 40	66 09	64 38		10
	20	80 14	78 51	77 28	76 04	74 40	73 14	71 49	70 23	68 58	67 32	66 06	64 34		20
	30	79 34	78 14	76 54	75 33	74 11	72 50	71 28	70 06	68 43	67 20	65 58	64 34		30
	40	78 52	77 36	76 18	75 01	73 42	72 24	71 04	69 45	68 25	67 05	65 46	64 25		40
	50	78 11	76 57	75 42	74 26	73 11	71 55	70 39	69 22	68 05	66 48	65 30	64 12		50
4	00	77 29	76 17	75 05	73 52	72 39	71 25	70 12	68 57	67 42	66 28	65 13	63 57	4	00
	10	76 47	75 37	74 26	73 16	72 05	70 53	69 42	68 30	67 17	66 05	64 52	63 38		10
	20	76 04	74 56	73 48	72 39	71 30	70 21	69 11	68 01	66 51	65 40	64 29	63 17		20
	30	75 20	74 14	73 07	72 00	70 54	69 46	68 37	67 30	66 21	65 12	64 03	62 53		30
	40	74 36	73 31	72 26	71 21	70 15	69 09	68 03	66 57	65 50	64 42	63 35	62 27		40
	50	73 50	72 47	71 44	70 40	69 36	68 32	67 27	66 22	65 16	64 10	63 05	61 59		50
5	00	73 04	72 02	71 00	69 57	68 55	67 52	66 48	65 45	64 41	63 37	62 33	61 28	5	00
	10	72 17	71 16	70 15	69 14	68 13	67 10	66 09	65 07	64 03	63 00	61 58	60 54		10
	20	71 28	70 29	69 28	68 28	67 28	66 28	65 27	64 26	63 25	62 23	61 21	60 20		20
	30	70 39	69 40	68 41	67 42	66 43	65 44	64 43	63 44	62 43	61 43	60 43	59 41		30
	40	69 48	68 50	67 52	66 54	65 55	64 57	63 59	63 00	62 00	61 01	60 02	59 02		40
	50	68 55	67 59	67 01	66 04	65 07	64 09	63 12	62 13	61 16	60 17	59 19	58 20		50
6	00	68 02	67 06	66 09	65 13	64 16	63 19	62 23	61 25	60 29	59 31	58 34	57 36	6	00
	10	67 07	66 11	65 15	64 19	63 24	62 28	61 32	60 36	59 40	58 43	57 47	56 50		10
	20	66 09	65 15	64 20	63 25	62 30	61 35	60 39	59 44	58 48	57 53	56 57	56 01		20
	30	65 11	64 16	63 22	62 27	61 34	60 39	59 45	58 49	57 55	57 00	56 06	55 10		30
	40	64 10	63 16	62 22	61 29	60 36	59 41	58 47	57 53	57 00	56 05	55 11	54 17		40
	50	63 08	62 14	61 20	60 27	59 34	58 41	57 48	56 55	56 02	55 08	54 16	53 22		50
7	00	62 01	61 10	60 17	59 25	58 32	57 40	56 46	55 54	55 02	54 09	53 17	52 23	7	00
	10	60 54	60 03	59 11	58 18	57 26	56 33	55 42	54 51	53 59	53 06	52 15	51 23		10
	20	59 45	58 53	58 02	57 10	56 19	55 27	54 36	53 44	52 53	52 02	51 11	50 20		20
	30	58 33	57 41	56 50	55 59	55 09	54 17	53 27	52 36	51 45	50 55	50 05	49 14		30
	40	57 17	56 27	55 36	54 45	53 55	53 05	52 14	51 25	50 35	49 45	48 56	48 06		40
	50	55 59	55 09	54 19	53 28	52 39	51 49	51 00	50 10	49 21	48 32	47 44	46 54		50
8	00	54 38	53 48	52 58	52 08	51 20	50 30	49 41	48 53	48 04	47 16	46 28	45 39	8	00
	10	53 13	52 24	51 35	50 45	49 58	49 09	48 20	47 33	46 45	45 58	45 11	44 23		10
	20	51 45	50 56	50 08	49 19	48 32	47 44	46 56	46 09	45 22	44 35	43 48	43 03		20
	30	50 13	49 25	48 37	47 49	47 01	46 15	45 29	44 42	43 55	43 10	42 25	41 39		30
	40	48 36	47 49	47 02	46 15	45 29	44 42	43 56	43 11	42 26	41 41	40 57	40 12		40
	50	46 57	46 10	45 23	44 37	43 52	43 06	42 22	41 36	40 53	40 08	39 26	38 42		50
9	00	45 12	44 26	43 40	42 54	42 10	41 26	40 42	39 59	39 15	38 32	37 51	37 09	9	00
	10	43 23	42 37	41 52	41 08	40 25	39 42	38 59	38 17	37 34	36 53	36 13	35 32		10
	20	41 29	40 44	40 01	39 17	38 35	37 53	37 11	36 31	35 50	35 10	34 31	33 51		20
	30	39 29	38 47	38 04	37 22	36 42	36 00	35 21	34 41	34 02	33 23	32 45	32 07		30
	40	37 25	36 44	36 03	35 22	34 42	34 04	33 25	32 47	32 09	31 32	30 55	30 19		40
	50	35 16	34 36	33 56	33 18	32 40	32 02	31 25	30 49	30 12	29 37	29 03	28 27		50
10	00	33 01	32 23	31 45	31 08	30 32	29 56	29 21	28 46	28 12	27 39	27 06	26 33	10	00
	10	30 41	30 04	29 29	28 54	28 19	27 46	27 13	26 40	26 08	25 36	25 05	24 34		10
	20	28 15	27 41	27 08	26 36	26 03	25 31	25 00	24 30	24 00	23 30	23 02	22 33		20
	30	25 45	25 13	24 41	24 11	23 42	23 13	22 43	22 15	21 48	21 21	20 54	20 28		30
	40	23 08	22 39	22 10	21 42	21 16	20 49	20 23	19 58	19 33	19 08	18 44	18 20		40
	50	20 27	20 01	19 35	19 11	18 47	18 22	17 59	17 37	17 14	16 52	16 31	16 10		50
11	00	17 41	17 18	16 56	16 34	16 13	15 52	15 32	15 12	14 53	14 33	14 15	13 56	11	00
	10	14 52	14 12	13 55	13 36	13 18	13 01	12 44	12 28	12 12	11 56	11 40	11 24		10
	20	11 58	11 42	11 26	11 11	10 57	10 42	10 28	10 15	10 01	9 48	9 36	9 23		20
	30	9 01	8 49	8 37	8 26	8 14	8 04	7 53	7 43	7 33	7 23	7 14	7 03		30
	40	6 03	5 54	5 45	5 38	5 31	5 23	5 17	5 09	5 03	4 56	4 49	4 43		40
	50	3 02	2 57	2 53	2 49	2 46	2 42	2 38	2 35	2 32	2 28	2 25	2 21		50
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

In South latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from South to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from South to West.

When the latitude and declination are of different name, the tables are to be entered with the supplement of the hour angle and the supplement of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

LATITUDE 25°.				DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 25°.			
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	Hour Angle.							
h.	m.	0	1	2	3	4	5	6	7	8	9	10	11	h.	m.						
0	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0	00						
	10	10 26	9 30	8 41	7 58	7 21	6 48	6 19	5 54	5 30	5 09	4 50	4 32	1	00						
	20	20 09	18 24	16 53	15 34	14 24	13 21	12 26	11 37	10 52	10 11	9 33	8 59		10						
	30	28 35	26 18	24 18	22 31	20 55	19 29	18 11	17 01	15 58	15 00	14 06	13 17		20						
	40	35 38	33 04	30 45	28 40	26 46	25 03	23 28	22 03	20 43	19 31	18 24	17 21		30						
	50	41 21	38 41	36 13	33 58	31 53	29 58	28 13	26 35	25 04	23 40	22 22	21 10		40						
1	00	45 58	43 18	40 47	38 28	36 18	34 17	32 24	30 38	29 00	27 27	26 01	24 40	1	50						
	10	49 40	47 04	44 35	42 16	40 05	38 01	36 03	34 14	32 30	30 52	29 19	27 52		10						
	20	52 37	50 07	47 43	45 26	43 16	41 12	39 14	37 22	35 35	33 53	32 17	30 45		20						
	30	54 59	52 37	50 19	48 05	45 58	43 55	41 56	40 05	38 18	36 34	34 56	33 21		30						
	40	56 54	54 39	52 26	50 18	48 14	46 14	44 19	42 27	40 40	38 56	37 16	35 40		40						
	50	58 26	56 18	54 11	52 08	50 08	48 11	46 16	44 29	42 42	40 59	39 20	37 43		50						
2	00	59 40	57 38	55 38	53 40	51 44	49 51	48 01	46 13	44 29	42 47	41 08	39 32	2	00						
	10	60 40	58 43	56 48	54 54	53 03	51 15	49 28	47 43	45 60	44 20	42 43	41 07		10						
	20	61 26	59 35	57 45	55 57	54 09	52 24	50 40	48 58	47 19	45 41	44 05	42 31		20						
	30	62 02	60 17	58 31	56 47	55 04	53 23	51 42	50 03	48 26	46 50	45 16	43 44		30						
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	20	63 12	61 46	60 19	58 53	57 27	56 02	54 36	53 10	51 46	50 21	48 56	47 34		20						
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	50	62 54	61 36	60 18	59 00	57 42	56 23	55 05	53 46	52 28	51 10	49 51	48 33		50						
4	00	62 42	61 25	60 10	58 53	57 38	56 21	55 05	53 48	52 32	51 15	49 59	48 43	4	00						
	10	62 25	61 11	59 58	58 44	57 30	56 15	55 00	53 46	52 31	51 17	50 02	48 48		10						
	20	62 06	60 55	59 43	58 30	57 18	56 06	54 53	53 40	52 27	51 15	50 02	48 48		20						
	30	61 44	60 35	59 24	58 14	57 03	55 52	54 42	53 31	52 19	51 08	49 57	48 46		30						
	40	61 19	60 11	59 03	57 54	56 45	55 36	54 27	53 17	52 08	50 58	49 48	48 38		40						
	50	60 52	59 46	58 39	57 33	56 25	55 17	54 09	53 01	51 53	50 45	49 36	48 28		50						
5	00	60 23	59 18	58 12	57 07	56 01	54 55	53 49	52 42	51 35	50 28	49 21	48 14	5	00						
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	10	55 52	54 56	53 58	53 01	52 03	51 05	50 07	49 10	48 11	47 13	46 14	45 15		10						
	20	55 05	54 09	53 13	52 17	51 20	50 23	49 26	48 28	47 32	46 34	45 36	44 38		20						
	30	54 15	53 20	52 25	51 29	50 33	49 36	48 42	47 45	46 49	45 53	44 56	43 59		30						
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	50	52 28	51 35	50 41	49 47	48 54	48 00	47 05	46 11	45 17	44 23	43 28	42 33		50						
7	00	51 31	50 38	49 46	48 53	48 00	47 07	46 13	45 21	44 27	43 34	42 40	41 47	7	00						
	10	50 31	49 39	48 47	47 55	47 04	46 12	45 19	44 26	43 35	42 42	41 50	40 57		10						
	20	49 29	48 38	47 46	46 56	46 05	45 13	44 22	43 31	42 40	41 48	40 57	40 05		20						
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	10	43 36	42 49	42 03	41 16	40 30	39 44	38 58	38 11	37 26	36 40	35 53	35 06		10						
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	30	40 55	40 10	39 25	38 41	37 56	37 12	36 28	35 44	35 01	34 18	33 34	32 50		30						
	40	39 29	38 45	38 01	37 18	36 35	35 52	35 09	34 26	33 45	33 02	32 20	31 38		40						
	50	38 00	37 17	36 34	35 53	35 11	34 29	33 47	33 06	32 26	31 45	31 04	30 24		50						
9	00	36 27	35 46	35 04	34 24	33 44	33 03	32 23	31 43	31 04	30 24	29 45	29 05	9	00						
	10	34 51	34 11	33 32	32 52	32 13	31 34	30 55	30 17	29 39	29 01	28 24	27 46		10						
	20	33 12	32 33	31 55	31 17	30 40	30 03	29 25	28 48	28 12	27 35	26 59	26 24		20						
	30	31 29	30 53	30 16	29 39	29 04	28 28	27 52	27 17	26 42	26 07	25 32	24 58		30						
	40	29 43	29 08	28 33	27 58	27 24	26 50	26 16	25 43	25 09	24 37	24 04	23 31		40						
	50	27 54	27 20	26 47	26 14	25 41	25 09	24 38	24 05	23 35	23 03	22 32	22 01		50						
10	00	26 01	25 30	24 58	24 27	23 56	23 26	22 56	22 26	21 57	21 28	20 58	20 30	10	00						
	10	24 04	23 34	23 05	22 36	22 08	21 39	21 11	20 43	20 17	19 49	19 22	18 56		10						
	20	22 05	21 38	21 11	20 43	20 17	19 51	19 25	18 59	18 34	18 09	17 44	17 19		20						
	30	20 03	19 38	19 12	18 48	18 24	18 00	17 36	17 12	16 49	16 27	16 04	15 42		30						
	40	17 57	17 34	17 12	16 50	16 27	16 07	15 45	15 24	15 03	14 43	14 21	14 01		40						
	50	15 49	15 28	15 09	14 49	14 29	14 10	13 51	13 32	13 14	12 56	12 39	12 20		50						
11	00	13 39	13 21	13 03	12 46	12 29	12 13	11 56	11 40	11 24	11 08	10 53	10 37	11	00						
	10	11 25	11 11	10 56	10 42	10 28	10 14	9 59	9 46	9 33	9 19	9 06	8 53		10						
	20	9 11	8 58	8 47	8 36	8 25	8 12	8 02	7 50	7 40	7 29	7 19	7 08		20						
	30	6 54	6 46	6 36	6 28	6 19	6 11	6 01	5 53	5 46	5 37	5 30	5 23		30						
	40	4 37	4 31	4 25	4 19	4 12	4 07	4 01	3 57	3 51	3 45	3 40	3 35		40						
	50	2 19	2 16	2 13	2 09	2 06	2 04	2 01	1 58	1 55	1 53	1 50	1 48		50						
12	00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	12	00						

In North latitude, when the star is rising or East of the meridian, the tabulated azimuths are reckoned from North to East; and when the star is setting or West of the meridian, the tabulated azimuths are reckoned from North to West.

AZIMUTH OR TRUE BEARING.

LATITUDE 25°.			DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 25°.		
Hour Angle.			48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.				
h.	m.	0	0 00 4 16 8 28 12 31 16 24 20 01	0 00 4 01 7 59 11 49 15 20 18 58	0 00 3 47 7 32 11 11 14 40 17 59	0 00 3 35 7 07 10 34 13 52 17 01	0 00 3 23 6 44 9 59 13 09 16 09	0 00 3 12 6 22 9 17 12 27 15 19	0 00 3 02 6 01 8 57 11 48 14 32	0 00 2 52 5 42 8 29 11 11 13 48	0 00 2 42 5 24 8 02 10 37 13 05	0 00 2 34 5 07 7 36 10 03 12 26	0 00 2 26 4 50 7 12 9 32 11 47	0 00 2 19 4 35 6 50 9 02 11 10	h.	m.	0		
1	00	23 23	22 11	21 04	20 00	19 00	18 02	17 08	16 17	15 28	14 41	13 57	13 14	12 31	1	00	23 23		
	10	26 29	25 10	23 57	22 47	21 39	20 37	19 36	18 39	17 44	16 51	16 02	15 13	14 24	2	10	26 29		
	20	29 17	27 54	26 37	25 21	24 09	23 01	21 54	20 52	19 51	18 54	17 59	17 07	16 16	3	20	29 17		
	30	31 51	30 24	29 02	27 42	26 27	25 14	24 04	22 56	21 53	20 51	19 51	18 55	17 59	4	30	31 51		
	40	34 08	32 39	31 14	29 52	28 34	27 17	26 04	24 53	23 45	22 40	21 36	20 35	19 36	5	40	34 08		
	50	36 10	34 39	33 13	31 49	30 27	29 09	27 53	26 40	25 29	24 20	23 14	22 10	21 07	6	50	36 10		
2	00	37 59	36 27	35 00	33 34	32 12	30 51	29 34	28 18	27 05	25 54	24 45	23 39	22 34	2	00	37 59		
	10	39 34	38 04	36 36	35 10	33 46	32 25	31 05	29 48	28 33	27 21	26 10	25 00	23 55	3	10	39 34		
	20	40 59	39 28	38 01	36 34	35 10	33 49	32 29	31 10	29 54	28 39	27 27	26 17	25 07	4	20	40 59		
	30	42 12	40 43	39 16	37 50	36 25	35 04	33 44	32 24	31 07	29 52	28 39	27 26	26 13	5	30	42 12		
	40	43 16	41 48	40 22	38 57	37 33	36 11	34 50	33 31	32 13	30 57	29 43	28 30	27 16	6	40	43 16		
	50	44 11	42 45	41 19	39 55	38 31	37 10	35 49	34 30	33 13	31 56	30 40	29 27	28 12	7	50	44 11		
3	00	44 58	43 33	42 09	40 45	39 23	38 02	36 42	35 23	34 05	32 49	31 33	30 19	29 07	3	00	44 58		
	10	45 39	44 14	42 52	41 30	40 08	38 47	37 28	36 10	34 52	33 36	32 20	31 05	29 51	4	10	45 39		
	20	46 12	44 48	43 27	42 07	40 46	39 26	38 07	36 50	35 33	34 17	33 01	31 47	30 32	5	20	46 12		
	30	46 38	45 17	43 58	42 38	41 19	40 00	38 42	37 25	36 08	34 53	33 38	32 23	31 07	6	30	46 38		
	40	47 00	45 40	44 22	43 04	41 45	40 27	39 11	37 54	36 38	35 23	34 09	32 55	31 39	7	40	47 00		
	50	47 15	45 58	44 41	43 24	42 07	40 51	39 35	38 19	37 03	35 49	34 35	33 22	32 07	8	50	47 15		
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	10	47 33	46 22	45 04	43 49	42 35	41 22	40 08	38 54	37 40	36 28	35 15	34 03	32 49	5	10	47 33		
	20	47 35	46 22	45 09	43 56	42 43	41 30	40 18	39 05	37 53	36 41	35 29	34 16	33 03	6	20	47 35		
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5	00	47 06	45 58	44 52	43 44	42 35	41 27	40 20	39 11	38 02	36 54	35 46	34 38	33 29	5	00	47 06		
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6	00	44 48	43 48	42 48	41 47	40 45	39 44	38 43	37 41	36 39	35 37	34 35	33 33	32 30	6	00	44 48		
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	10	40 05	39 12	38 18	37 26	36 32	35 39	34 45	33 51	32 58	32 04	31 09	30 15	29 19	8	10	40 05		
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	10	34 22	33 35	32 48	32 04	31 18	30 32	29 46	29 00	28 14	27 28	26 42	25 55	25 07	9	10	34 22		
	20	33 16	32 31	31 47	31 02	30 17	29 33	28 48	28 04	27 19	26 34	25 49	25 05	24 19	10	20	33 16		
	30	32 08	31 24	30 41	29 57	29 15	28 31	27 47	27 04	26 22	25 38	24 56	24 12	23 27	11	30	32 08		
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	50	12 03	11 45	11 28	11 10	10 53	10 36	10 19	10 02	9 46									