

H. O. No. 120

Azimuths of Celestial Bodies

Whose declinations range from 24 to 70 degrees
for latitudes extending to 70 degrees
from the equator

[SEVENTH EDITION]



UNITED STATES NAVY DEPARTMENT
HYDROGRAPHIC OFFICE - - - - - 1940

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ISSUED BY THE HYDROGRAPHIC OFFICE
UNDER THE AUTHORITY OF THE SECRETARY OF THE NAVY



UNITED STATES
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PREFACE

This work was prepared by the Hydrographic Office in 1902 on account of the value of star observations in determining azimuths, and the growing necessity of frequent observations for azimuth and for position in high-speed ships.

Taken together with the solar azimuth tables of the Hydrographic Office, which give the true bearings of the sun and other celestial bodies within ecliptic limits, the present tables supply the navigator with ready means for finding the azimuths of the great majority of bodies appearing in the firmament and for applying, over a vastly increased extent, the other useful objects of azimuth tables, such as finding the true course in great-circle sailing and laying down the Sumner line of position.

UNITED STATES HYDROGRAPHIC OFFICE,

January 11, 1939.

AZIMUTH OR TRUE BEARING.

LATITUDE 0°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 0°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	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 36	5 20	5 07	4 54	4 41	4 30	4 19	4 09	3 59	3 51	3 42	3 34		10
	20	11 04	10 36	10 07	9 42	9 19	8 56	8 35	8 15	7 56	7 39	7 22	7 06		20
	30	16 20	15 38	14 59	14 22	13 48	13 15	12 45	12 16	11 47	11 22	10 57	10 34		30
	40	21 18	20 25	19 36	18 49	18 05	17 23	16 44	16 08	15 32	14 58	14 26	13 56		40
	50	25 56	24 55	23 56	23 01	22 09	21 20	20 33	19 49	19 06	18 26	17 48	17 10		50
1	00	30 10	29 02	27 57	26 55	25 57	25 02	24 09	23 19	22 30	21 44	21 00	20 17	1	00
	10	34 02	32 49	31 39	30 33	29 29	28 28	27 30	26 35	25 41	24 50	24 02	23 14		10
	20	37 31	36 16	35 02	33 53	32 45	31 40	30 39	29 39	28 41	27 47	26 53	26 02		20
	30	40 41	39 23	38 07	36 55	35 45	34 37	33 32	32 30	31 29	30 31	29 34	28 40		30
	40	43 30	42 11	40 54	39 40	38 29	37 19	36 12	35 07	34 05	33 04	32 04	31 07		40
	50	46 02	44 44	43 26	42 10	40 58	39 46	38 39	37 34	36 27	35 24	34 23	33 24		50
2	00	48 19	47 00	45 43	44 27	43 15	42 03	40 54	39 46	38 40	37 36	36 33	35 32	2	00
	10	50 21	49 03	47 46	46 31	45 18	44 06	42 58	41 48	40 41	39 36	38 32	37 30		10
	20	52 11	50 53	49 37	48 23	47 10	45 58	44 48	43 40	42 33	41 27	40 23	39 19		20
	30	53 49	52 33	51 18	50 04	48 52	47 41	46 31	45 22	44 15	43 10	42 05	41 01		30
	40	55 18	54 03	52 49	51 35	50 24	49 13	48 04	46 56	45 48	44 43	43 37	42 33		40
	50	56 37	55 23	54 10	52 58	51 48	50 37	49 29	48 21	47 14	46 08	45 03	43 59		50
3	00	57 48	56 36	55 24	54 13	53 03	51 54	50 46	49 39	48 32	47 26	46 21	45 17	3	00
	10	58 52	57 42	56 31	55 21	54 12	53 03	51 56	50 49	49 43	48 37	47 33	46 29		10
	20	59 50	58 41	57 31	56 22	55 14	54 06	53 00	51 54	50 48	49 42	48 38	47 34		20
	30	60 42	59 34	58 25	57 17	56 10	55 04	53 57	52 52	51 46	50 42	49 38	48 35		30
	40	61 28	60 21	59 14	58 07	57 00	55 55	54 50	53 45	52 40	51 36	50 32	49 29		40
	50	62 10	61 04	59 58	58 52	57 47	56 41	55 36	54 32	53 28	52 24	51 21	50 18		50
4	00	62 47	61 42	60 37	59 32	58 27	57 22	56 18	55 14	54 11	53 08	52 06	51 03	4	00
	10	63 21	62 16	61 11	60 06	59 02	57 58	56 56	55 53	54 51	53 48	52 45	51 43		10
	20	63 50	62 47	61 43	60 39	59 36	58 33	57 30	56 28	55 25	54 23	53 21	52 19		20
	30	64 16	63 13	62 10	61 07	60 04	59 02	58 00	56 58	55 55	54 54	53 52	52 50		30
	40	64 39	63 37	62 34	61 31	60 30	59 28	58 25	57 25	56 23	55 21	54 20	53 18		40
	50	64 58	63 57	62 55	61 53	60 51	59 50	58 48	57 47	56 46	55 45	54 44	53 43		50
5	00	65 15	64 14	63 12	62 12	61 10	60 08	59 08	58 07	57 06	56 06	55 05	54 04	5	00
	10	65 29	64 29	63 27	62 27	61 25	60 24	59 24	58 23	57 22	56 22	55 22	54 21		10
	20	65 40	64 40	63 39	62 39	61 38	60 37	59 37	58 37	57 36	56 36	55 36	54 35		20
	30	65 49	64 49	63 48	62 48	61 48	60 47	59 47	58 47	57 47	56 46	55 46	54 45		30
	40	65 55	64 55	63 54	62 54	61 55	60 54	59 54	58 54	57 53	56 53	55 54	54 54		40
	50	65 59	64 59	63 58	62 58	61 59	60 59	59 59	58 59	57 58	56 58	55 58	54 58		50
6	00	66 00	65 00	64 00	63 00	62 00	61 00	60 00	59 00	58 00	57 00	56 00	55 00	6	00
	10	66 59	65 59	64 58	63 58	62 58	61 59	60 59	59 59	58 59	57 58	56 58	55 58		10
	20	66 55	65 55	64 55	63 55	62 55	61 55	60 55	59 55	58 55	57 55	56 55	55 55		20
	30	66 49	65 49	64 49	63 49	62 49	61 49	60 49	59 49	58 49	57 49	56 49	55 49		30
	40	66 40	65 40	64 40	63 40	62 40	61 40	60 40	59 40	58 40	57 40	56 40	55 40		40
	50	66 29	65 29	64 29	63 29	62 29	61 29	60 29	59 29	58 29	57 29	56 29	55 29		50
7	00	65 15	64 14	63 12	62 12	61 10	60 08	59 08	58 07	57 06	56 06	55 05	54 04	7	00
	10	64 58	63 57	62 55	61 53	60 51	59 50	58 48	57 47	56 46	55 45	54 44	53 43		10
	20	64 39	63 37	62 34	61 31	60 30	59 28	58 25	57 25	56 23	55 22	54 21	53 20		20
	30	64 16	63 13	62 10	61 07	60 04	59 02	58 00	56 98	55 55	54 54	53 52	52 50		30
	40	63 50	62 47	61 43	60 39	59 36	58 33	57 30	56 28	55 25	54 23	53 21	52 19		40
	50	63 21	62 16	61 11	60 06	59 04	58 02	57 00	55 53	54 51	53 48	52 45	51 43		50
8	00	62 47	61 42	60 37	59 32	58 27	57 22	56 18	55 14	54 11	53 08	52 06	51 03	8	00
	10	62 10	61 04	59 58	58 52	57 47	56 41	55 36	54 32	53 28	52 24	51 21	50 18		10
	20	61 28	60 21	59 14	58 07	57 00	55 55	54 50	53 45	52 40	51 36	50 32	49 29		20
	30	60 42	59 34	58 25	57 17	56 10	55 04	53 57	52 52	51 46	50 42	49 38	48 35		30
	40	59 50	58 41	57 31	56 22	55 14	54 06	53 00	51 54	50 48	49 42	48 38	47 34		40
	50	58 52	57 42	56 31	55 21	54 12	53 03	51 56	50 49	49 43	48 37	47 33	46 29		50
9	00	57 48	56 36	55 24	54 13	53 03	51 51	50 46	49 39	48 32	47 26	46 21	45 17	9	00
	10	56 37	55 23	54 10	52 58	51 48	50 37	49 29	48 21	47 14	46 08	45 03	43 59		10
	20	55 18	54 03	52 49	51 35	50 24	49 13	48 04	46 56	45 48	44 43	43 37	42 33		20
	30	53 49	52 33	51 18	50 04	48 52	47 41	46 31	45 22	44 15	43 10	42 05	41 01		30
	40	52 11	50 53	49 37	48 23	47 10	45 58	44 48	43 40	42 33	41 27	40 23	39 19		40
	50	50 21	49 03	47 46	46 31	45 18	44 06	42 56	41 48	40 41	39 36	38 32	37 30		50
10	00	48 19	47 00	45 43	44 27	43 15	42 03	40 54	39 46	38 40	37 36	36 33	35 32	10	00
	10	46 02	44 44	43 26	42 10	40 58	39 48	38 39	37 32	36 27	35 24	34 23	33 24		10
	20	43 30	42 11	40 54	39 40	38 29	37 19	36 12	35 07	34 05	33 04	32 04	31 07		20
	30	40 41	39 23	38 07	36 55	35 45	34 37	33 32	32 30	31 29	30 31	29 34	28 40		30
	40	37 31	36 16	35 02	33 53	32 45	31 40	30 39	29 39	28 41	27 47	26 53	26 02		40
	50	34 02	32 49	31 39	30 33	29 29	28 28	27 30	26 35	25 41	24 50	24 02	23 14		50
11	00	30 10	29 02	27 57	26 55	25 57	25 02	24 09	23 19	22 30	21 44	21 00	20 17	11	00
	10	25 56	24 55	23 56	23 01	22 09	21 20	20 33	19 49	19 06	18 26	17 48	17 10		10
	20	21 18	20 25	19 36	18 49	18 05	17 23	16 44	16 08	15 32	14 58	14 26	13 56		20
	30	16 20	15 38	14 59	14 22	13 48	13 15	12 45	12 16	11 47	11 22	10 57	10 34		30
	40	11 04	10 36	10 07	9 42	9 19	8 56	8 35	8 15	7 56	7 39	7 22	7 06		40
	50	5 36	5 20	5 07	4 54	4 41	4 30	4 19	4 09	3 59	3 51	3 42	3 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 0°.		DECLINATION—SAME NAME AS—LATITUDE												LATITUDE 0°.	
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	3 27	3 19	3 12	3 05	2 59	2 52	2 46	2 40	2 36	2 30	2 25	2 19		10
	20	6 50	6 36	6 22	6 09	5 55	5 44	5 31	5 20	5 09	4 59	4 48	4 39		20
	30	10 11	9 50	9 29	9 09	8 50	8 33	8 15	7 58	7 42	7 27	7 11	6 56		30
	40	13 26	12 58	12 32	12 07	11 42	11 18	10 56	10 33	10 12	9 51	9 31	9 12		40
	50	16 36	16 02	15 29	14 58	14 28	13 59	13 32	13 04	12 38	12 13	11 48	11 24		50
1	00	19 36	18 58	18 20	17 43	17 08	16 35	16 02	15 31	15 00	14 31	14 02	13 34	1	00
	10	22 29	21 45	21 03	20 22	19 43	19 05	18 28	17 53	17 17	16 44	16 11	15 40		10
	20	25 12	24 24	23 39	22 54	22 11	21 29	20 48	20 09	19 31	18 53	18 16	17 41		20
	30	27 47	26 56	26 06	25 17	24 31	23 46	23 02	22 19	21 37	20 56	20 16	19 38		30
	40	30 11	29 18	28 25	27 34	26 44	25 56	25 09	24 23	23 38	22 55	22 12	21 31		40
	50	32 26	31 30	30 35	29 41	28 50	27 58	27 09	26 21	25 33	24 47	24 01	23 18		50
2	00	34 32	33 35	32 38	31 42	30 48	29 55	29 03	28 12	27 22	26 34	25 47	25 00	2	00
	10	36 29	35 30	34 31	33 33	32 38	31 43	30 50	29 57	29 05	28 15	27 25	26 37		10
	20	38 17	37 17	36 17	35 19	34 21	33 26	32 30	31 35	30 42	29 51	28 59	28 09		20
	30	39 57	38 56	37 56	36 56	35 57	35 00	34 05	33 08	32 13	31 20	30 27	29 35		30
	40	41 30	40 28	39 27	38 26	37 27	36 29	35 32	34 34	33 39	32 45	31 50	30 56		40
	50	42 55	41 52	40 51	39 51	38 51	37 52	36 54	35 55	34 58	34 02	33 07	32 12		50
3	00	44 13	43 11	42 09	41 07	40 07	39 08	38 09	37 10	36 13	35 16	34 20	33 26	3	00
	10	45 25	44 22	43 21	42 19	41 18	40 18	39 19	38 20	37 22	36 24	35 27	34 31		10
	20	46 31	45 29	44 27	43 24	42 24	41 24	40 24	39 25	38 26	37 27	36 29	35 32		20
	30	47 31	46 29	45 27	44 25	43 23	42 23	41 24	40 23	39 24	38 25	37 26	36 30		30
	40	48 26	47 23	46 21	45 19	44 18	43 18	42 18	41 18	40 18	39 20	38 20	37 23		40
	50	49 15	48 13	47 12	46 10	45 08	44 09	43 09	42 07	41 08	40 09	39 09	38 11		50
4	00	50 01	48 58	47 57	46 55	45 54	44 53	43 53	42 53	41 53	40 53	39 54	38 56	4	00
	10	50 41	49 39	48 38	47 36	46 35	45 35	44 34	43 34	42 34	41 34	40 35	39 36		10
	20	51 17	50 16	49 15	48 13	47 13	46 12	45 12	44 11	43 11	42 11	41 11	40 12		20
	30	51 49	50 48	49 48	48 46	47 45	46 45	45 45	44 45	43 44	42 44	41 44	40 45		30
	40	52 17	51 17	50 16	49 14	48 14	47 14	46 14	45 13	44 13	43 14	42 13	41 14		40
	50	52 42	51 41	50 41	49 40	48 39	47 39	46 39	45 38	44 39	43 38	42 39	41 39		50
5	00	53 03	52 03	51 02	50 02	49 01	48 01	47 01	46 01	45 01	44 00	43 00	42 01	5	00
	10	53 21	52 20	51 20	50 19	49 19	48 19	47 20	46 18	45 18	44 19	43 18	42 19		10
	20	53 35	52 35	51 35	50 34	49 34	48 34	47 34	46 34	45 33	44 34	43 34	42 33		20
	30	53 46	52 46	51 46	50 46	49 46	48 46	47 46	46 46	45 45	44 44	43 45	42 46		30
	40	53 54	52 54	51 54	50 53	49 53	48 53	47 54	46 53	45 54	44 54	43 54	42 53		40
	50	53 58	52 59	51 59	50 58	49 58	48 58	47 59	46 58	45 58	44 58	43 58	42 58		50
6	00	54 00	53 00	52 00	51 00	50 00	49 00	48 00	47 00	46 00	45 00	44 00	43 00	6	00
	10	53 58	52 59	51 59	50 58	49 58	48 58	47 59	46 58	45 58	44 58	43 58	42 58		10
	20	53 54	52 54	51 54	50 53	49 53	48 53	47 54	46 53	45 54	44 54	43 54	42 53		20
	30	53 46	52 46	51 46	50 46	49 46	48 46	47 46	46 46	45 45	44 44	43 45	42 46		30
	40	53 35	52 35	51 35	50 34	49 34	48 34	47 34	46 34	45 33	44 34	43 34	42 33		40
	50	53 21	52 20	51 20	50 19	49 19	48 19	47 20	46 18	45 18	44 19	43 18	42 19		50
7	00	53 03	52 03	51 02	50 02	49 01	48 01	47 01	46 01	45 01	44 00	43 00	42 01	7	00
	10	52 42	51 41	50 41	49 40	48 39	47 39	46 39	45 38	44 39	43 38	42 39	41 39		10
	20	52 17	51 17	50 16	49 14	48 14	47 14	46 14	45 13	44 13	43 14	42 13	41 14		20
	30	51 49	50 48	49 48	48 46	47 45	46 45	45 45	44 45	43 44	42 44	41 44	40 45		30
	40	51 17	50 16	49 15	48 13	47 13	46 12	45 12	44 11	43 11	42 11	41 11	40 12		40
	50	50 41	49 39	48 38	47 36	46 36	45 35	44 34	43 34	42 34	41 34	40 35	39 36		50
8	00	50 01	48 58	47 57	46 55	45 54	44 53	43 53	42 53	41 53	40 53	39 54	38 56	8	00
	10	49 15	48 13	47 12	46 10	45 08	44 09	43 09	42 07	41 08	40 09	39 09	38 11		10
	20	48 26	47 23	46 21	45 19	44 18	43 18	42 18	41 18	40 18	39 20	38 20	37 23		20
	30	47 31	46 29	45 27	44 25	43 23	42 23	41 24	40 23	39 24	38 25	37 26	36 30		30
	40	46 31	45 29	44 27	43 24	42 24	41 24	40 24	39 25	38 26	37 27	36 29	35 32		40
	50	45 25	44 22	43 21	42 19	41 18	40 18	39 19	38 20	37 22	36 24	35 27	34 31		50
9	00	44 13	43 11	42 09	41 07	40 07	39 08	38 09	37 10	36 13	35 16	34 20	33 26	9	00
	10	42 55	41 52	40 51	39 51	38 51	37 52	36 54	35 55	34 56	33 57	32 57	31 58		10
	20	41 30	40 28	39 27	38 26	37 27	36 29	35 32	34 34	33 39	32 45	31 50	30 56		20
	30	39 57	38 56	37 56	36 56	35 57	35 00	34 05	33 08	32 13	31 20	30 27	29 35		30
	40	38 17	37 17	36 17	35 19	34 21	33 26	32 30	31 35	30 42	29 51	28 59	28 09		40
	50	36 29	35 30	34 31	33 33	32 38	31 43	30 50	29 57	29 05	28 15	27 25	26 37		50
10	00	34 32	33 35	32 38	31 42	30 48	29 55	29 03	28 12	27 22	26 34	25 47	25 00	10	00
	10	32 26	31 30	30 35	29 41	28 50	27 58	27 09	26 21	25 33	24 47	24 01	23 18		10
	20	30 11	29 18	28 25	27 34	26 44	25 56	25 09	24 23	23 38	22 55	22 12	21 31		20
	30	27 47	26 56	26 06	25 17	24 31	23 46	23 02	22 19	21 37	20 56	20 16	19 38		30
	40	25 12	24 24	23 39	22 54	22 11	21 29	20 48	20 09	19 31	18 53	18 16	17 41		40
	50	22 29	21 45	21 03	20 22	19 43	19 05	18 28	17 53	17 17	16 44	16 11	15 40		50
11	00	19 36	18 58	18 20	17 43	17 08	16 35	16 02	15 31	15 00	14 31	14 02	13 34	11	00
	10	16 36	16 02	15 29	14 58	14 28	13 59	13 32	13 04	12 38	12 13	11 48	11 24		10
	20	13 26	12 58	12 32	12 07	11 42	11 18	10 56	10 33	10 12	9 51	9 31	9 12		20
	30	10 11	9 50	9 29	9 09	8 50	8 33	8 15	7 58	7 42	7 27	7 11	6 56		30
	40	6 50	6 36	6 22	6 09	5 55	5 44	5 31	5 20	5 09	4 59	4 48	4 39		40
	50	3 27	3 19	3 12	3 05	2 59	2 52	2 46	2 40	2 36	2 30	2 25	2 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 0°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 0°.	
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 15	2 10	2 06	2 01	1 57	1 53	1 49	1 45	1 41	1 37	1 33	1 31		10
	20	4 29	4 20	4 11	4 03	3 54	3 45	3 36	3 30	3 22	3 15	3 07	3 00		20
	30	6 42	6 28	6 15	6 02	5 49	5 37	5 25	5 14	5 02	4 51	4 40	4 30		30
	40	8 53	8 35	8 18	8 01	7 43	7 27	7 12	6 56	6 41	6 26	6 11	5 58		40
	50	11 01	10 40	10 18	9 57	9 36	9 15	8 56	8 37	8 18	8 00	7 43	7 24		50
1	00	13 07	12 41	12 15	11 50	11 26	11 03	10 39	10 16	9 54	9 33	9 12	8 50	1	00
	10	15 09	14 39	14 10	13 41	13 13	12 46	12 20	11 53	11 28	11 03	10 38	10 14		10
	20	17 07	16 33	16 01	15 29	14 58	14 28	13 57	13 28	12 51	12 31	12 04	11 35		20
	30	19 00	18 24	17 48	17 13	16 40	16 05	15 33	15 00	14 29	13 57	13 26	12 57		30
	40	20 50	20 11	19 32	18 54	18 17	17 41	17 04	16 29	15 55	15 21	14 48	14 15		40
	50	22 34	21 52	21 11	20 30	19 50	19 12	18 33	17 54	17 18	16 41	16 06	15 30		50
2	00	24 15	23 29	22 46	22 03	21 20	20 39	19 59	19 17	18 38	17 59	17 21	16 44	2	00
	10	25 49	25 02	24 17	23 31	22 47	22 03	21 20	20 37	19 55	19 14	18 33	17 54		10
	20	27 19	26 30	25 42	24 55	24 09	23 23	22 38	21 53	21 09	20 25	19 43	19 01		20
	30	28 43	27 53	27 04	26 14	25 27	24 39	23 52	23 05	22 19	21 34	20 50	20 06		30
	40	30 04	29 12	28 21	27 30	26 40	25 51	25 03	24 14	23 27	22 39	21 52	21 07		40
	50	31 19	30 25	29 33	28 41	27 50	26 59	26 09	25 19	24 30	23 41	22 53	22 06		50
3	00	32 29	31 35	30 41	29 47	28 56	28 03	27 12	26 20	25 30	24 39	23 50	23 02	3	00
	10	33 35	32 40	31 45	30 51	29 57	29 04	28 11	27 18	26 27	25 35	24 44	23 54		10
	20	34 36	33 40	32 44	31 49	30 54	30 00	29 06	28 12	27 19	26 26	25 34	24 43		20
	30	35 32	34 36	33 40	32 43	31 48	30 52	29 58	29 03	28 09	27 15	26 22	25 30		30
	40	36 25	35 27	34 30	33 33	32 37	31 41	30 46	29 50	28 56	28 01	27 06	26 12		40
	50	37 12	36 15	35 18	34 20	33 23	32 26	31 30	30 34	29 38	28 43	27 47	26 52		50
4	00	37 57	36 58	36 01	35 02	34 06	33 08	32 11	31 13	30 17	29 21	28 25	27 30	4	00
	10	38 37	37 38	36 40	35 41	34 44	33 46	32 48	31 51	30 54	29 57	28 59	28 04		10
	20	39 13	38 14	37 15	36 17	35 18	34 20	33 22	32 24	31 26	30 29	29 31	28 35		20
	30	39 45	38 46	37 48	36 48	35 50	34 51	33 53	32 54	31 55	30 57	29 59	29 03		30
	40	40 14	39 14	38 15	37 16	36 18	35 18	34 20	33 20	32 22	31 23	30 25	29 28		40
	50	40 39	39 39	38 41	37 41	36 42	35 42	34 44	33 44	32 45	31 47	30 47	29 49		50
5	00	41 01	40 01	39 02	38 02	37 03	36 03	35 04	34 04	33 05	32 06	31 06	30 08	5	00
	10	41 19	40 20	39 20	38 20	37 21	36 21	35 22	34 21	33 21	32 22	31 23	30 24		10
	20	41 34	40 34	39 34	38 34	37 35	36 35	35 35	34 35	33 35	32 35	31 36	30 37		20
	30	41 45	40 46	39 46	38 46	37 46	36 46	35 47	34 46	33 46	32 46	31 46	30 48		30
	40	41 53	40 54	39 54	38 53	37 54	36 54	35 54	34 54	33 54	32 54	31 54	30 55		40
	50	41 58	40 58	39 59	38 59	37 59	36 58	35 59	34 59	33 58	32 58	31 58	30 59		50
6	00	42 00	41 00	40 00	39 00	38 00	37 00	36 00	35 00	34 00	33 00	32 00	31 00	6	00
	10	41 58	40 58	39 59	38 59	37 59	36 58	35 59	34 59	33 58	32 58	31 58	30 59		10
	20	41 53	40 54	39 54	38 53	37 54	36 54	35 54	34 54	33 54	32 54	31 54	30 55		20
	30	41 45	40 46	39 46	38 46	37 46	36 46	35 47	34 46	33 46	32 46	31 46	30 48		30
	40	41 34	40 34	39 34	38 34	37 35	36 35	35 35	34 35	33 35	32 35	31 36	30 37		40
	50	41 19	40 20	39 20	38 20	37 21	36 21	35 22	34 21	33 21	32 22	31 23	30 24		50
7	00	41 01	40 01	39 02	38 02	37 03	36 03	35 04	34 04	33 05	32 06	31 06	30 08	7	00
	10	40 39	39 39	38 41	37 41	36 42	35 42	34 44	33 44	32 45	31 47	30 47	29 49		10
	20	40 14	39 14	38 15	37 16	36 18	35 18	34 20	33 20	32 22	31 23	30 25	29 28		20
	30	39 45	38 46	37 48	36 48	35 50	34 51	33 53	32 54	31 55	30 57	29 59	29 03		30
	40	39 13	38 14	37 15	36 17	35 18	34 20	33 22	32 24	31 26	30 29	29 31	28 35		40
	50	38 37	37 38	36 40	35 41	34 44	33 46	32 48	31 51	30 54	29 57	28 59	28 04		50
8	00	37 57	36 58	36 01	35 02	34 06	33 08	32 11	31 13	30 17	29 21	28 25	27 30	8	00
	10	37 12	36 15	35 18	34 20	33 23	32 26	31 30	30 34	29 38	28 43	27 47	26 52		10
	20	36 25	35 27	34 30	33 33	32 37	31 41	30 46	29 50	28 56	28 01	27 06	26 12		20
	30	35 32	34 36	33 40	32 43	31 48	30 52	29 58	29 03	28 09	27 15	26 22	25 30		30
	40	34 36	33 40	32 44	31 49	30 54	30 00	29 06	28 12	27 19	26 26	25 34	24 43		40
	50	33 35	32 40	31 45	30 51	29 57	29 04	28 11	27 18	26 27	25 35	24 44	23 54		50
9	00	32 29	31 35	30 41	29 47	28 56	28 03	27 12	26 20	25 30	24 39	23 50	23 02	9	00
	10	31 19	30 25	29 33	28 41	27 50	26 59	26 09	25 19	24 30	23 41	22 53	22 06		10
	20	30 04	29 12	28 21	27 30	26 40	25 51	25 03	24 14	23 27	22 39	21 52	21 07		20
	30	28 43	27 53	27 04	26 14	25 27	24 39	23 52	23 05	22 19	21 34	20 50	20 06		30
	40	27 19	26 30	25 42	24 55	24 09	23 33	22 38	21 53	21 09	20 25	19 43	19 01		40
	50	25 49	25 02	24 17	23 31	22 41	22 03	21 20	20 37	19 55	19 14	18 33	17 54		50
10	00	24 15	23 29	22 46	22 03	21 20	20 39	19 59	19 17	18 38	17 59	17 21	16 44	10	00
	10	22 34	21 52	21 11	20 30	19 50	19 12	18 33	17 54	17 18	16 41	16 06	15 30		10
	20	20 50	20 11	19 32	18 54	18 17	17 41	17 04	16 29	15 55	15 21	14 48	14 15		20
	30	19 00	18 24	17 48	17 13	16 40	16 05	15 33	15 00	14 29	13 57	13 26	12 57		30
	40	17 07	16 33	16 01	15 29	14 58	14 28	13 57	13 28	13 00	12 31	12 04	11 35		40
	50	15 09	14 39	14 10	13 41	13 13	12 46	12 20	11 53	11 28	11 03	10 38	10 14		50
11	00	13 07	12 41	12 15	11 50	11 26	11 03	10 39	10 16	9 54	9 33	9 12	8 50	11	00
	10	11 01	10 40	10 18	9 57	9 36	9 15	8 56	8 37	8 18	8 00	7 43	7 24		10
	20	8 53	8 35	8 18	8 01	7 43	7 27	7 12	6 56	6 41	6 26	6 11	5 58		20
	30	6 42	6 28	6 15	6 02	5 49	5 37	5 25	5 14	5 02	4 51	4 40	4 30		30
	40	4 29	4 20	4 11	4 03	3 54	3 45	3 36	3 30	3 22	3 15	3 07	3 00		40
	50	2 15	2 10	2 06	2 01	1 57	1 53	1 49	1 45	1 41	1 37	1 33	1 31		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 0°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 0°.		
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	1 27	1 23	1 20	1 16	1 13	1 10	1 06	1 03	1 00	0 57	0 54		10
	20	2 52	2 46	2 39	2 33	2 26	2 19	2 14	2 07	2 01	1 55	1 49		20
	30	4 19	4 08	3 59	3 48	3 38	3 29	3 20	3 10	3 01	2 52	2 43		30
	40	5 43	5 30	5 16	5 04	4 50	4 38	4 25	4 13	4 00	3 49	3 37		40
	50	7 07	6 50	6 34	6 18	6 01	5 46	5 30	5 15	4 59	4 45	4 30		50
1	00	8 30	8 10	7 51	7 30	7 12	6 53	6 35	6 16	5 59	5 41	5 23	1	00
	10	9 51	9 28	9 05	8 43	8 20	7 59	7 39	7 16	6 55	6 35	6 15		10
	20	11 10	10 44	10 18	9 53	9 28	9 03	8 39	8 16	7 52	7 28	7 06		20
	30	12 28	11 59	11 30	11 02	10 35	10 07	9 40	9 14	8 47	8 22	7 56		30
	40	13 42	13 10	12 40	12 10	11 39	11 09	10 39	10 10	9 42	9 13	8 45		40
	50	14 55	14 21	13 48	13 14	12 41	12 09	11 37	11 05	10 34	10 03	9 33		50
2	00	16 06	15 30	14 53	14 17	13 43	13 08	12 33	11 58	11 25	10 52	10 20	2	00
	10	17 14	16 34	15 57	15 18	14 41	14 04	13 27	12 51	12 15	11 39	11 04		10
	20	18 19	17 38	16 57	16 18	15 37	14 59	14 20	13 41	13 03	12 25	11 48		20
	30	19 22	18 38	17 56	17 14	16 32	15 51	15 10	14 29	13 49	13 09	12 30		30
	40	20 22	19 37	18 53	18 09	17 24	16 41	15 58	15 15	14 33	13 52	13 10		40
	50	21 18	20 32	19 46	19 00	18 15	17 29	16 45	16 00	15 16	14 32	13 49		50
3	00	22 12	21 24	20 37	19 49	19 01	18 15	17 29	16 42	15 56	15 12	14 26	3	00
	10	23 04	22 14	21 25	20 36	19 46	18 58	18 10	17 23	16 35	15 48	15 02		10
	20	23 51	23 00	22 10	21 19	20 29	19 39	18 50	18 01	17 11	16 24	15 35		20
	30	24 36	23 44	22 53	22 01	21 09	20 18	19 28	18 36	17 46	16 57	16 07		30
	40	25 18	24 25	23 33	22 39	21 47	20 54	20 02	19 10	18 19	17 28	16 36		40
	50	25 57	25 03	24 09	23 15	22 22	21 28	20 35	19 41	18 48	17 56	17 04		50
4	00	26 34	25 38	24 44	23 49	22 54	21 59	21 05	20 11	19 17	18 24	17 29	4	00
	10	27 06	26 11	25 15	24 19	23 24	22 29	21 33	20 38	19 43	18 49	17 54		10
	20	27 36	26 40	25 44	24 47	23 51	22 55	21 58	21 02	20 07	19 11	18 16		20
	30	28 04	27 07	26 11	25 13	24 15	23 18	22 22	21 24	20 28	19 32	18 36		30
	40	28 26	27 30	26 33	25 35	24 37	23 40	22 42	21 45	20 47	19 50	18 53		40
	50	28 50	27 51	26 54	25 55	24 57	23 59	23 00	22 02	21 05	20 07	19 09		50
5	00	29 06	28 09	27 12	26 12	25 14	24 15	23 17	22 17	21 19	20 21	19 22	5	00
	10	29 24	28 25	27 27	26 27	25 28	24 29	23 29	22 30	21 31	20 33	19 34		10
	20	29 37	28 38	27 39	26 39	25 39	24 40	23 41	22 41	21 41	20 43	19 43		20
	30	29 47	28 48	27 48	26 48	25 49	24 48	23 49	22 49	21 50	20 50	19 51		30
	40	29 54	28 54	27 55	26 55	25 55	24 55	23 56	22 56	21 56	20 56	19 56		40
	50	29 58	28 58	27 59	26 58	25 59	24 58	23 59	22 59	21 59	20 59	19 59		50
6	00	30 00	29 00	28 00	27 00	26 00	25 00	24 00	23 00	22 00	21 00	20 00	6	00
	10	29 58	28 58	27 59	26 58	25 59	24 58	23 59	22 59	21 59	20 59	19 59		10
	20	29 54	28 54	27 55	26 55	25 55	24 55	23 56	22 56	21 56	20 56	19 56		20
	30	29 47	28 48	27 48	26 48	25 49	24 48	23 49	22 49	21 50	20 50	19 51		30
	40	29 37	28 38	27 39	26 39	25 39	24 40	23 41	22 41	21 41	20 43	19 43		40
	50	29 24	28 25	27 27	26 27	25 28	24 29	23 29	22 30	21 31	20 33	19 34		50
7	00	29 08	28 09	27 12	26 12	25 14	24 15	23 17	22 17	21 19	20 21	19 22	7	00
	10	28 50	27 51	26 54	25 55	24 57	23 59	23 00	22 02	21 05	20 07	19 09		10
	20	28 28	27 30	26 33	25 35	24 37	23 40	22 42	21 45	20 47	19 50	18 53		20
	30	28 04	27 07	26 11	25 13	24 15	23 18	22 22	21 24	20 28	19 32	18 36		30
	40	27 36	26 40	25 44	24 47	23 51	22 55	21 58	21 02	20 07	19 11	18 16		40
	50	27 06	26 11	25 15	24 19	23 24	22 29	21 33	20 38	19 43	18 49	17 54		50
8	00	26 34	25 38	24 44	23 49	22 54	21 59	21 05	20 11	19 17	18 24	17 29	8	00
	10	25 57	25 03	24 09	23 15	22 22	21 28	20 35	19 41	18 48	17 56	17 04		10
	20	25 18	24 25	23 33	22 39	21 47	20 54	20 02	19 10	18 19	17 28	16 36		20
	30	24 36	23 44	22 52	22 01	21 09	20 18	19 28	18 36	17 46	16 57	16 07		30
	40	23 51	23 00	22 10	21 19	20 29	19 39	18 50	18 01	17 11	16 24	15 35		40
	50	23 04	22 14	21 25	20 36	19 46	18 58	18 10	17 23	16 35	15 48	15 02		50
9	00	22 12	21 24	20 37	19 49	19 01	18 15	17 29	16 42	15 56	15 12	14 26	9	00
	10	21 18	20 32	19 46	19 00	18 15	17 29	16 45	16 00	15 16	14 32	13 49		10
	20	20 22	19 37	18 53	18 09	17 24	16 41	15 58	15 15	14 33	13 52	13 10		20
	30	19 22	18 38	17 56	17 14	16 32	15 51	15 10	14 29	13 49	13 09	12 30		30
	40	18 19	17 38	16 57	16 18	15 37	14 59	14 20	13 41	13 03	12 25	11 48		40
	50	17 14	16 34	15 57	15 18	14 41	14 04	13 27	12 51	12 15	11 39	11 04		50
10	00	16 06	15 30	14 53	14 17	13 43	13 08	12 33	11 58	11 25	10 52	10 20	10	00
	10	14 55	14 21	13 48	13 14	12 41	12 09	11 37	11 05	10 34	10 03	9 33		10
	20	13 42	13 10	12 40	12 10	11 39	11 09	10 39	10 10	9 42	9 13	8 45		20
	30	12 28	11 59	11 30	11 02	10 35	10 07	9 40	9 14	8 47	8 22	7 56		30
	40	11 10	10 44	10 18	9 53	9 28	9 03	8 39	8 16	7 52	7 28	7 06		40
	50	9 51	9 28	9 05	8 43	8 20	7 59	7 38	7 16	6 55	6 35	6 15		50
11	00	8 30	8 10	7 51	7 30	7 12	6 53	6 35	6 16	5 59	5 41	5 23	11	00
	10	7 07	6 50	6 34	6 18	6 01	5 46	5 30	5 15	4 59	4 45	4 30		10
	20	5 43	5 30	5 16	5 04	4 50	4 38	4 25	4 13	4 00	3 49	3 37		20
	30	4 19	4 08	3 59	3 48	3 38	3 29	3 20	3 10	3 01	2 52	2 43		30
	40	2 52	2 46	2 39	2 33	2 26	2 19	2 14	2 07	2 01	1 55	1 49		40
	50	1 27	1 23	1 20	1 16	1 13	1 10	1 06	1 03	1 00	0 57	0 54		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 1°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 1°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	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	5 49	5 33	5 18	5 04	4 51	4 39	4 27	4 17	4 07	3 57	3 47	3 39		10
	20	11 31	10 59	10 30	10 03	9 37	9 13	8 51	8 29	8 10	7 51	7 33	7 17		20
	30	16 58	16 12	15 30	14 51	14 14	13 40	13 07	12 37	12 08	11 40	11 14	10 49		30
	40	22 06	21 09	20 16	19 26	18 40	17 55	17 14	16 34	15 57	15 22	14 48	14 16		40
	50	26 49	25 43	24 42	23 44	22 49	21 57	21 07	20 21	19 36	18 54	18 14	17 35		50
1	00	31 06	29 56	28 48	27 43	26 42	25 42	24 47	23 54	23 04	22 15	21 29	20 45	1	00
	10	35 03	33 46	32 34	31 24	30 17	29 13	28 12	27 14	26 18	25 25	24 34	23 45		10
	20	38 34	37 15	35 58	34 45	33 34	32 26	31 21	30 20	29 21	28 23	27 28	26 34		20
	30	41 44	40 22	39 04	37 48	36 35	35 25	34 17	33 12	32 10	31 09	30 11	29 14		30
	40	44 33	43 11	41 51	40 34	39 20	38 08	36 58	35 51	34 46	33 43	32 41	31 42		40
	50	47 03	45 41	44 21	43 04	41 49	40 36	39 25	38 16	37 10	36 05	35 02	34 00		50
2	00	49 18	47 56	46 37	45 20	44 04	42 51	41 39	40 30	39 21	38 15	37 11	36 08	2	00
	10	51 18	49 57	48 39	47 22	46 06	44 52	43 41	42 31	41 22	40 15	39 10	38 06		10
	20	53 05	51 45	50 28	49 11	47 57	46 44	45 32	44 23	43 12	42 05	40 59	39 55		20
	30	54 41	53 23	52 07	50 51	49 37	48 25	47 13	46 03	44 54	43 46	42 40	41 34		30
	40	56 06	54 50	53 35	52 20	51 07	49 55	48 45	47 34	46 26	45 19	44 12	43 06		40
	50	57 23	56 08	54 54	53 41	52 29	51 18	50 07	48 58	47 50	46 42	45 36	44 30		50
3	00	58 31	57 18	56 06	54 54	53 42	52 32	51 28	50 14	49 06	47 59	46 53	45 48	3	00
	10	59 33	58 21	57 10	55 58	54 49	53 39	52 30	51 23	50 16	49 10	48 04	46 58		10
	20	60 28	59 18	58 07	56 58	55 48	54 40	53 32	52 25	51 18	50 13	49 07	48 02		20
	30	61 17	60 08	58 58	57 50	56 42	55 34	54 28	53 22	52 16	51 10	50 05	49 01		30
	40	62 01	60 53	59 45	58 38	57 31	56 24	55 18	54 12	53 07	52 02	50 58	49 53		40
	50	62 40	61 33	60 27	59 21	58 13	57 08	56 02	54 57	53 53	52 49	51 45	50 41		50
4	00	63 15	62 09	61 03	59 58	58 53	57 48	56 43	55 39	54 35	53 30	52 27	51 24	4	00
	10	63 46	62 41	61 37	60 32	59 27	58 22	57 18	56 15	55 12	54 08	53 05	52 02		10
	20	64 13	63 08	62 04	61 01	59 57	58 53	57 51	56 47	55 44	54 42	53 39	52 37		20
	30	64 36	63 33	62 30	61 27	60 23	59 21	58 18	57 15	56 13	55 11	54 09	53 07		30
	40	64 57	63 54	62 52	61 49	60 47	59 44	58 42	57 40	56 38	55 37	54 35	53 33		40
	50	65 14	64 12	63 10	62 08	61 07	60 04	59 02	58 01	56 59	55 58	54 57	53 55		50
5	00	65 29	64 27	63 25	62 24	61 22	60 21	59 20	58 19	57 17	56 17	55 15	54 14	5	00
	10	65 40	64 39	63 38	62 37	61 36	60 35	59 34	58 33	57 33	56 32	55 31	54 31		10
	20	65 49	64 49	63 48	62 47	61 47	60 46	59 45	58 44	57 44	56 44	55 43	54 43		20
	30	65 55	64 55	63 55	62 55	61 54	60 54	59 53	58 53	57 52	56 52	55 52	54 52		30
	40	66 00	64 59	63 59	62 59	61 58	60 59	59 58	58 59	57 58	56 58	55 58	54 57		40
	50	66 01	65 01	64 01	63 01	62 01	61 01	60 01	59 00	58 01	57 01	56 00	55 01		50
6	00	66 00	65 00	64 00	63 00	62 00	61 00	60 00	59 00	58 00	57 00	56 00	55 00	6	00
	10	65 56	64 56	63 56	62 56	61 57	60 57	59 57	58 57	57 57	56 57	55 57	54 57		10
	20	65 51	64 51	63 51	62 51	61 51	60 51	59 51	58 51	57 51	56 51	55 51	54 51		20
	30	65 43	64 42	63 42	62 42	61 41	60 42	59 42	58 42	57 42	56 42	55 42	54 42		30
	40	65 32	64 31	63 31	62 31	61 30	60 30	59 29	58 29	57 29	56 29	55 28	54 28		40
	50	65 18	64 18	63 17	62 16	61 16	60 15	59 14	58 14	57 13	56 14	55 12	54 12		50
7	00	65 05	64 01	63 00	61 59	60 58	59 57	58 56	57 56	56 55	55 55	54 54	53 54	7	00
	10	64 43	63 41	62 40	61 38	60 37	59 37	58 35	57 34	56 33	55 32	54 32	53 31		10
	20	64 22	63 19	62 17	61 15	60 13	59 12	58 10	57 09	56 07	55 06	54 05	53 05		20
	30	63 57	62 53	61 51	60 49	59 46	58 44	57 42	56 41	55 39	54 37	53 36	52 36		30
	40	63 28	62 24	61 22	60 18	59 15	58 13	57 10	56 08	55 06	54 05	53 02	52 01		40
	50	62 56	61 52	60 48	59 44	58 40	57 37	56 34	55 32	54 30	53 28	52 25	51 24		50
8	00	62 21	61 16	60 11	59 06	58 02	56 58	55 55	54 52	53 49	52 46	51 44	50 42	8	00
	10	61 40	60 34	59 29	58 24	57 19	56 14	55 11	54 07	53 04	52 01	50 98	49 56		10
	20	61 07	59 59	58 53	57 47	56 42	55 36	54 32	53 27	52 24	51 19	50 17	49 04		20
	30	60 08	59 00	57 52	56 45	55 39	54 33	53 28	52 23	51 18	50 15	49 12	48 09		30
	40	59 14	58 04	56 56	55 48	54 41	53 34	52 28	51 23	50 19	49 14	48 11	47 08		40
	50	58 13	57 02	55 52	54 44	53 37	52 30	51 23	50 17	49 11	48 07	47 03	46 01		50
9	00	57 06	55 55	54 44	53 34	52 26	51 18	50 10	49 04	47 59	46 54	45 50	44 47	9	00
	10	55 52	54 39	53 28	52 17	51 08	49 59	48 52	47 45	46 40	45 34	44 31	43 27		10
	20	54 30	53 16	52 04	50 52	49 43	48 33	47 25	46 18	45 12	44 08	43 04	42 01		20
	30	52 59	51 44	50 31	49 19	48 08	46 58	45 51	44 44	43 38	42 33	41 30	40 28		30
	40	51 18	50 02	48 48	47 36	46 24	45 15	44 07	43 00	41 55	40 50	39 47	38 46		40
	50	49 27	48 09	46 55	45 42	44 31	43 21	42 13	41 07	39 02	38 59	37 56	36 56		50
10	00	47 22	46 06	44 51	43 38	42 27	41 18	40 10	39 04	38 01	36 58	35 57	34 57	10	00
	10	45 04	43 47	42 33	41 20	40 09	39 02	37 55	36 51	35 48	34 47	33 48	32 50		10
	20	42 31	41 14	40 00	38 49	37 40	36 33	35 28	34 24	33 25	32 26	31 29	30 33		20
	30	39 41	38 26	37 14	36 04	34 56	33 52	32 49	31 49	30 51	29 54	28 00	27 07		30
	40	36 32	35 20	34 09	33 03	31 58	30 57	29 57	29 00	28 05	27 11	26 21	25 31		40
	50	33 04	31 55	30 48	29 45	28 44	27 46	26 52	25 58	25 07	24 18	23 32	22 45		50
11	00	29 16	28 10	27 09	26 11	25 16	24 23	23 32	22 44	21 58	21 14	20 31	19 51	11	00
	10	25 06	24 08	23 13	22 21	21 31	20 45	20 00	19 19	18 38	17 51	17 23	16 47		10
	20	20 36	19 46	18 59	18 15	17 34	16 54	16 17	15 42	15 08	14 36	14 05	13 37		20
	30	15 46	15 06	14 30	13 55	13 23	12 52	12 22	11 55	11 29	11 05	10 40	10 19		30
	40	10 40	10 13	9 48	9 23	9 01	8 40	8 20	8 01	7 44	7 27	7 11	6 56		40
	50	5 24	5 09	4 56	4 43	4 33	4 22	4 12	4 02	3 53	3 44	3 37	3 29		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 1°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 1°.		
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	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.
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 31	3 23	3 17	3 09	3 02	2 56	2 50	2 44	2 38	2 32	2 26	2 20	2 14	0 10
0 20	7 00	6 46	6 30	6 17	6 03	5 51	5 38	5 27	5 15	5 04	4 53	4 44	4 34	0 20
0 30	10 26	10 03	9 42	9 22	9 01	8 43	8 25	8 08	7 50	7 34	7 19	7 03	6 48	0 30
0 40	13 46	13 16	12 48	12 22	11 56	11 31	11 07	10 45	10 22	10 01	9 41	9 21	9 01	0 40
0 50	16 58	16 23	15 49	15 17	14 45	14 15	13 47	13 18	12 51	12 25	12 00	11 36	11 11	0 50
1 00	20 03	19 21	18 42	18 04	17 28	16 54	16 20	15 48	15 15	14 44	14 16	13 46	13 16	1 00
1 10	22 58	22 12	21 28	20 47	20 06	19 25	18 48	18 11	17 35	17 00	16 27	15 54	15 24	1 10
1 20	25 44	24 54	24 05	23 20	22 34	21 51	21 09	20 28	19 49	19 10	18 33	17 57	17 21	1 20
1 30	28 19	27 26	26 35	25 45	24 56	24 10	23 24	22 40	21 57	21 15	20 35	19 55	19 18	1 30
1 40	30 45	29 49	28 54	28 02	27 11	26 21	25 32	24 46	23 59	23 15	22 31	21 48	21 08	1 40
1 50	33 01	32 02	31 06	30 10	29 16	28 24	27 34	26 44	25 55	25 06	24 21	23 36	22 53	1 50
2 00	35 06	34 07	33 08	32 11	31 16	30 21	29 28	28 36	27 45	26 55	26 07	25 19	24 33	2 00
2 10	37 04	36 02	35 02	34 04	33 06	32 09	31 15	30 21	29 28	28 36	27 46	26 56	26 08	2 10
2 20	38 51	37 48	36 47	35 48	34 49	33 52	32 55	31 59	31 05	30 12	29 20	28 28	27 38	2 20
2 30	40 30	39 27	38 25	37 25	36 26	35 26	34 29	33 33	32 36	31 42	30 48	29 54	29 01	2 30
2 40	42 03	40 59	39 56	38 55	37 54	36 55	35 57	34 58	34 01	33 05	32 10	31 16	30 21	2 40
2 50	43 27	42 22	41 19	40 18	39 17	38 16	37 17	36 19	35 21	34 24	33 27	32 31	31 36	2 50
3 00	44 43	43 40	42 36	41 34	40 32	39 31	38 32	37 33	36 34	35 36	34 39	33 43	32 47	3 00
3 10	45 54	44 50	43 47	42 44	41 43	40 41	39 42	38 42	37 43	36 44	35 46	34 49	33 52	3 10
3 20	46 58	45 55	44 51	43 48	42 47	41 46	40 46	39 45	38 46	37 46	36 48	35 49	34 51	3 20
3 30	47 57	46 53	45 50	44 48	43 46	42 45	41 44	40 43	39 43	38 44	37 45	36 46	35 47	3 30
3 40	48 50	47 47	46 44	45 42	44 41	43 39	42 38	41 37	40 36	39 37	38 37	37 38	36 38	3 40
3 50	49 38	48 35	47 32	46 30	45 29	44 27	43 26	42 25	41 25	40 25	39 26	38 26	37 26	3 50
4 00	50 22	49 18	48 16	47 14	46 13	45 11	44 10	43 10	42 09	41 09	40 08	39 08	38 07	4 00
4 10	51 00	49 58	48 56	47 54	46 53	45 51	44 50	43 50	42 49	41 48	40 48	39 48	38 47	4 10
4 20	51 35	50 33	49 31	48 29	47 28	46 27	45 26	44 26	43 24	42 24	41 24	40 24	39 24	4 20
4 30	52 05	51 03	50 02	48 59	47 59	46 58	45 58	44 57	43 56	42 55	41 56	40 55	39 55	4 30
4 40	52 31	51 30	50 28	49 27	48 26	47 26	46 25	45 24	44 24	43 24	42 23	41 24	40 23	4 40
4 50	52 54	51 53	50 52	49 52	48 51	47 50	46 50	45 48	44 48	43 48	42 47	41 47	40 47	4 50
5 00	53 14	52 13	51 12	50 11	49 10	48 10	47 09	46 09	45 08	44 08	43 08	42 08	41 07	5 00
5 10	53 30	52 29	51 29	50 28	49 27	48 27	47 27	46 26	45 26	44 26	43 26	42 25	41 25	5 10
5 20	53 42	52 42	51 41	50 41	49 40	48 40	47 39	46 40	45 40	44 39	43 38	42 38	41 37	5 20
5 30	53 52	52 51	51 51	50 51	49 50	48 51	47 50	46 50	45 50	44 49	43 49	42 49	41 48	5 30
5 40	53 58	52 57	51 57	50 58	49 57	48 57	47 56	46 57	45 57	44 56	43 56	42 56	41 55	5 40
5 50	54 00	53 01	52 00	51 00	50 00	49 00	48 00	47 00	46 00	45 00	44 00	43 00	42 00	5 50
6 00	54 01	53 00	52 01	51 01	50 00	49 01	48 01	47 00	46 01	45 00	44 00	43 00	42 00	6 00
6 10	54 07	53 06	52 05	51 05	50 05	49 05	48 05	47 05	46 05	45 05	44 05	43 05	42 05	6 10
6 20	54 11	53 10	52 10	51 10	50 10	49 10	48 10	47 10	46 10	45 10	44 10	43 10	42 10	6 20
6 30	54 15	53 14	52 14	51 14	50 14	49 14	48 14	47 14	46 14	45 14	44 14	43 14	42 14	6 30
6 40	54 18	53 17	52 17	51 17	50 17	49 17	48 17	47 17	46 17	45 17	44 17	43 17	42 17	6 40
6 50	54 20	53 19	52 19	51 19	50 19	49 19	48 19	47 19	46 19	45 19	44 19	43 19	42 19	6 50
7 00	54 21	53 20	52 20	51 20	50 20	49 20	48 20	47 20	46 20	45 20	44 20	43 20	42 20	7 00
7 10	54 22	53 21	52 21	51 21	50 21	49 21	48 21	47 21	46 21	45 21	44 21	43 21	42 21	7 10
7 20	54 23	53 22	52 22	51 22	50 22	49 22	48 22	47 22	46 22	45 22	44 22	43 22	42 22	7 20
7 30	54 24	53 23	52 23	51 23	50 23	49 23	48 23	47 23	46 23	45 23	44 23	43 23	42 23	7 30
7 40	54 25	53 24	52 24	51 24	50 24	49 24	48 24	47 24	46 24	45 24	44 24	43 24	42 24	7 40
7 50	54 26	53 25	52 25	51 25	50 25	49 25	48 25	47 25	46 25	45 25	44 25	43 25	42 25	7 50
8 00	54 27	53 26	52 26	51 26	50 26	49 26	48 26	47 26	46 26	45 26	44 26	43 26	42 26	8 00
8 10	54 28	53 27	52 27	51 27	50 27	49 27	48 27	47 27	46 27	45 27	44 27	43 27	42 27	8 10
8 20	54 29	53 28	52 28	51 28	50 28	49 28	48 28	47 28	46 28	45 28	44 28	43 28	42 28	8 20
8 30	54 30	53 29	52 29	51 29	50 29	49 29	48 29	47 29	46 29	45 29	44 29	43 29	42 29	8 30
8 40	54 31	53 30	52 30	51 30	50 30	49 30	48 30	47 30	46 30	45 30	44 30	43 30	42 30	8 40
8 50	54 32	53 31	52 31	51 31	50 31	49 31	48 31	47 31	46 31	45 31	44 31	43 31	42 31	8 50
9 00	54 33	53 32	52 32	51 32	50 32	49 32	48 32	47 32	46 32	45 32	44 32	43 32	42 32	9 00
9 10	54 34	53 33	52 33	51 33	50 33	49 33	48 33	47 33	46 33	45 33	44 33	43 33	42 33	9 10
9 20	54 35	53 34	52 34	51 34	50 34	49 34	48 34	47 34	46 34	45 34	44 34	43 34	42 34	9 20
9 30	54 36	53 35	52 35	51 35	50 35	49 35	48 35	47 35	46 35	45 35	44 35	43 35	42 35	9 30
9 40	54 37	53 36	52 36	51 36	50 36	49 36	48 36	47 36	46 36	45 36	44 36	43 36	42 36	9 40
9 50	54 38	53 37	52 37	51 37	50 37	49 37	48 37	47 37	46 37	45 37	44 37	43 37	42 37	9 50
10 00	54 39	53 38	52 38	51 38	50 38	49 38	48 38	47 38	46 38	45 38	44 38	43 38	42 38	10 00
10 10	54 40	53 39	52 39	51 39	50 39	49 39	48 39	47 39	46 39	45 39	44 39	43 39	42 39	10 10
10 20	54 41	53 40	52 40	51 40	50 40	49 40	48 40	47 40	46 40	45 40	44 40	43 40	42 40	10 20
10 30	54 42	53 41	52 41	51 41	50 41	49 41	48 41	47 41	46 41	45 41	44 41	43 41	42 41	10 30
10 40	54 43	53 42	52 42	51 42	50 42	49 42	48 42	47 42	46 42	45 42	44 42	43 42	42 42	10 40
10 50	54 44	53 43	52 43	51 43	50 43	49 43	48 43	47 43	46 43	45 43	44 43	43 43	42 43	10 50
11 00	54 45	53 44	52 44	51 44	50 44	49 44	48 44	47 44	46 44	45 44	44 44	43 44	42 44	11 00
11 10	54 46	53 45	52 45	51 45	50 45	49 45	48 45	47 45	46 45	45 45	44 45	43 45	42 45	11 10
11 20	54 47	53 46	52 46	51 46	50 46	49 46	48 46	47 46	46 46	45 46	44 46	43 46	42 46	11 20
11 30	54 48	53 47	52 47	51 47	50 47	49 47	48 47	47 47	46 47	45 47	44 47	43 47	42 47	11 30
11 40	54 49	53 48	52 48	51 48	50 48	49 48	48 48	47 48	46 48	45 48	44 48	43 48	42 48	11 40
11 50	54 50	53 49	52 49	51 49	50 49	49 49	48 49	47 49	46 49	45 49	44 49	43 49	42 49	11 50
12 00	54 51	53 50	52 50	51 50	50 50	49 50	48 50	47 50	46 50	45 50	44 50	43 50	42 50	12 00
12 10	54 52	53 51	52 51	51 51	50 51	49 51	48 51	47 51	46 51	45 51	44 51	43 51	42 51	12 10
12 20	54 53	53 52	52 52	51 52	50 52	49 52	48 52	47 52	46 52	45 52	44 52	43 52	42 52	12 20
12 30	54 54	53 53	52 53	51 53	50 53	49 53	48 53	47 53	46 53	45 53	44 53	43 53	42 53	12 30
12 40	54 55	53 54	52 54	51 54	50 54	49 54	48 54	47 54	46 54	45 54	44 54	43 54	42 5	

AZIMUTH OR TRUE BEARING.

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

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

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

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

DECLINATION—SAME NAME AS—LATITUDE.

LATITUDE 4°.

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

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 4°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 4°.	
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 25	2 19	2 14	2 09	2 04	2 00	1 55	1 51	1 46	1 42	1 38	1 35		10
	20	4 48	4 38	4 27	4 17	4 08	3 58	3 50	3 41	3 33	3 24	3 16	3 09		20
	30	7 10	6 54	6 39	6 25	6 10	5 56	5 43	5 30	5 18	5 05	4 53	4 41		30
	40	9 29	9 09	8 49	8 30	8 11	7 52	7 35	7 18	7 01	6 45	6 29	6 14		40
	50	11 45	11 20	10 56	10 32	10 09	9 47	9 25	9 04	8 44	8 24	8 04	7 45		50
1	00	13 58	13 29	13 00	12 31	12 05	11 38	11 12	10 48	10 24	10 00	9 37	9 14	1	00
	10	16 06	15 33	15 00	14 28	13 58	13 27	12 58	12 29	12 01	11 33	11 07	10 41		10
	20	18 10	17 32	16 56	16 21	15 46	15 12	14 40	14 07	13 36	13 05	12 36	12 06		20
	30	20 09	19 28	18 48	18 09	17 31	16 55	16 19	15 42	15 08	14 35	14 02	13 29		30
	40	22 02	21 19	20 35	19 55	19 12	18 32	17 53	17 15	16 37	16 01	15 25	14 49		40
	50	23 49	23 03	22 17	21 32	20 48	20 05	19 24	18 43	18 03	17 23	16 45	16 07		50
2	00	25 31	24 43	23 54	23 07	22 21	21 36	20 52	20 08	19 25	18 43	18 03	17 22	2	00
	10	27 07	26 16	25 26	24 36	23 48	23 01	22 14	21 29	20 44	19 59	19 16	18 32		10
	20	28 37	27 43	26 53	26 02	25 11	24 22	23 34	22 45	21 58	21 12	20 26	19 41		20
	30	30 03	29 08	28 15	27 21	26 29	25 38	24 48	23 59	23 09	22 21	21 34	20 46		30
	40	31 22	30 26	29 31	28 37	27 43	26 51	25 59	25 07	24 16	23 26	22 37	21 49		40
	50	32 36	31 39	30 43	29 47	28 52	27 58	27 05	26 11	25 20	24 28	23 37	22 47		50
3	00	33 44	32 46	31 49	30 52	29 56	29 02	28 06	27 12	26 20	25 26	24 34	23 42	3	00
	10	34 48	33 49	32 51	31 53	30 56	30 00	29 04	28 09	27 15	26 20	25 27	24 33		10
	20	35 47	34 47	33 49	32 50	31 52	30 55	29 59	29 03	28 06	27 11	26 17	25 22		20
	30	36 41	35 41	34 41	33 42	32 44	31 46	30 48	29 52	28 55	27 58	27 03	26 08		30
	40	37 29	36 29	35 29	34 30	33 31	32 33	31 34	30 37	29 39	28 42	27 46	26 49		40
	50	38 15	37 14	36 14	35 14	34 14	33 15	32 17	31 18	30 20	29 22	28 25	27 27		50
4	00	38 54	37 53	36 54	35 53	34 53	33 53	32 54	31 55	30 57	29 58	29 01	28 03	4	00
	10	39 31	38 30	37 29	36 29	35 29	34 29	33 29	32 30	31 31	30 32	29 34	28 35		10
	20	40 02	39 02	38 01	37 00	36 00	35 00	34 00	33 00	32 01	31 02	30 03	29 04		20
	30	40 31	39 30	38 29	37 28	36 28	35 27	34 28	33 27	32 28	31 28	30 29	29 30		30
	40	40 55	39 54	38 53	37 53	36 52	35 51	34 51	33 52	32 51	31 52	30 52	29 52		40
	50	41 16	40 15	39 14	38 13	37 12	36 12	35 11	34 11	33 12	32 11	31 12	30 11		50
5	00	41 34	40 32	39 31	38 30	37 30	36 30	35 29	34 29	33 28	32 28	31 28	30 27	5	00
	10	41 40	40 40	39 45	38 45	37 44	36 43	35 43	34 42	33 42	32 41	31 42	30 42		10
	20	41 57	40 56	39 55	38 55	37 54	36 54	35 54	34 53	33 53	32 52	31 53	30 52		20
	30	42 04	41 03	40 03	39 01	38 01	37 01	36 01	35 00	34 00	33 00	32 00	31 00		30
	40	42 08	41 07	40 06	39 06	38 06	37 05	36 05	35 04	34 04	33 04	32 04	31 03		40
	50	42 07	41 07	40 07	39 06	38 06	37 07	36 06	35 06	34 06	33 05	32 06	31 05		50
6	00	42 04	41 04	40 04	39 05	38 04	37 04	36 04	35 04	34 04	33 03	32 04	31 04	6	00
	10	41 58	40 59	39 59	38 58	37 58	36 58	35 58	34 58	33 58	32 58	31 58	30 58		10
	20	41 45	40 49	39 49	38 50	37 50	36 50	35 51	34 51	33 51	32 51	31 51	30 51		20
	30	41 35	40 37	39 37	38 37	37 38	36 38	35 39	34 40	33 41	32 41	31 42	30 43		30
	40	41 20	40 21	39 21	38 22	37 23	36 24	35 25	34 26	33 26	32 26	31 27	30 28		40
	50	41 00	40 02	39 03	38 04	37 05	36 05	35 07	34 09	33 09	32 11	31 13	30 13		50
7	00	40 38	39 39	38 40	37 42	36 43	35 45	34 46	33 48	32 50	31 52	30 54	29 55	7	00
	10	40 12	39 14	38 15	37 16	36 18	35 20	34 23	33 25	32 27	31 30	30 32	29 34		10
	20	39 42	38 44	37 46	36 49	35 50	34 53	33 56	32 59	32 01	31 04	30 07	29 09		20
	30	39 09	38 12	37 14	36 17	35 19	34 22	33 25	32 29	31 32	30 35	29 38	28 43		30
	40	38 34	37 36	36 38	35 42	34 45	33 48	32 52	31 57	31 00	30 04	29 08	28 12		40
	50	37 53	36 56	36 00	35 03	34 07	33 11	32 15	31 20	30 24	29 29	28 35	27 39		50
8	00	37 09	36 13	35 18	34 21	33 25	32 31	31 36	30 41	29 47	28 51	27 58	27 03	8	00
	10	36 22	35 27	34 31	33 36	32 41	31 47	30 53	29 59	29 05	28 11	27 19	26 25		10
	20	35 31	34 36	33 41	32 47	31 53	30 59	30 06	29 14	28 20	27 28	26 36	25 43		20
	30	34 36	33 42	32 48	31 54	31 01	30 08	29 16	28 24	27 32	26 41	25 51	24 59		30
	40	33 37	32 43	31 51	30 58	30 06	29 15	28 23	27 33	26 41	25 51	25 02	24 12		40
	50	32 33	31 41	30 50	29 58	29 06	28 16	27 26	26 37	25 48	24 58	24 10	23 21		50
9	00	31 25	30 34	29 43	28 54	28 04	27 15	26 26	25 37	24 50	24 02	23 16	22 29	9	00
	10	30 14	29 24	28 34	27 46	26 58	26 09	25 23	24 36	23 49	23 03	22 18	21 33		10
	20	28 58	28 09	27 22	26 34	25 48	25 01	24 15	23 31	22 46	22 02	21 17	20 34		20
	30	27 38	26 50	26 05	25 19	24 34	23 49	23 05	22 22	21 39	20 56	20 15	19 32		30
	40	26 13	25 27	24 44	23 59	23 16	22 33	21 51	21 10	20 29	19 48	19 08	18 28		40
	50	24 43	24 01	23 18	22 36	21 55	21 14	20 34	19 55	19 15	18 37	18 00	17 21		50
10	00	23 11	22 29	21 49	21 08	20 31	19 52	19 14	18 37	18 00	17 23	16 48	16 13	10	00
	10	21 33	20 54	20 16	19 38	19 02	18 26	17 50	17 15	16 41	16 07	15 34	15 00		10
	20	19 51	19 14	18 39	18 04	17 30	16 57	16 24	15 52	15 20	14 48	14 17	13 46		20
	30	18 05	17 31	16 59	16 27	15 56	15 24	14 55	14 25	13 56	13 27	12 59	12 31		30
	40	16 15	15 44	15 15	14 46	14 17	13 50	13 23	12 56	12 29	12 03	11 38	11 13		40
	50	14 22	13 55	13 28	13 03	12 37	12 12	11 48	11 24	11 01	10 35	10 15	9 53		50
11	00	12 26	12 02	11 39	11 16	10 54	10 32	10 12	9 50	9 30	9 10	8 51	8 31	11	00
	10	10 26	10 06	9 46	9 27	9 09	8 51	8 32	8 15	7 58	7 41	7 25	7 08		10
	20	8 24	8 07	7 52	7 37	7 22	7 06	6 52	6 38	6 24	6 10	5 57	5 44		20
	30	6 20	6 06	5 53	5 44	5 32	5 21	5 10	5 00	4 49	4 40	4 29	4 19		30
	40	4 14	4 06	3 58	3 50	3 42	3 35	3 28	3 21	3 13	3 06	3 00	2 53		40
	50	2 06	2 03	1 59	1 55	1 51	1 48	1 44	1 40	1 37	1 33	1 30	1 26		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 4°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 4°.		
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 30	1 27	1 23	1 19	1 15	1 12	1 09	1 06	1 03	0 59	0 56	1	10
	20	3 01	2 53	2 46	2 39	2 31	2 24	2 18	2 11	2 05	1 58	1 52	2	20
	30	4 30	4 18	4 08	3 57	3 47	3 36	3 26	3 17	3 07	2 57	2 47	3	30
	40	5 59	5 43	5 29	5 15	5 01	4 48	4 34	4 21	4 09	3 56	3 43	4	40
	50	7 25	7 07	6 50	6 32	6 15	5 58	5 42	5 25	5 10	4 53	4 37	5	50
1	00	8 52	8 30	8 09	7 48	7 27	7 07	6 48	6 29	6 09	5 51	5 31	1	00
	10	10 15	9 51	9 27	9 03	8 38	8 15	7 52	7 30	7 09	6 46	6 25	2	10
	20	11 36	11 09	10 42	10 15	9 48	9 21	8 56	8 31	8 06	7 42	7 17	3	20
	30	12 57	12 26	11 55	11 26	10 56	10 27	9 59	9 30	9 03	8 36	8 09	4	30
	40	14 14	13 41	13 07	12 35	12 02	11 31	11 00	10 28	9 58	9 28	8 59	5	40
	50	15 30	14 53	14 16	13 41	13 06	12 32	11 58	11 24	10 52	10 19	9 46	5	50
2	00	16 42	16 03	15 24	14 46	14 08	13 32	12 55	12 19	11 44	11 09	10 34	2	00
	10	17 51	17 09	16 28	15 48	15 07	14 28	13 50	13 12	12 34	11 57	11 19	3	10
	20	18 57	18 13	17 30	16 48	16 05	15 24	14 43	14 03	13 22	12 43	12 04	4	20
	30	20 00	19 14	18 29	17 45	17 00	16 17	15 34	14 52	14 10	13 28	12 47	5	30
	40	21 00	20 12	19 26	18 39	17 53	17 08	16 23	15 39	14 54	14 10	13 27	5	40
	50	21 57	21 08	20 19	19 31	18 43	17 56	17 09	16 23	15 37	14 51	14 05	5	50
3	00	22 50	21 59	21 09	20 20	19 30	18 41	17 54	17 06	16 17	15 30	14 43	3	00
	10	23 40	22 49	21 58	21 06	20 15	19 25	18 36	17 45	16 56	16 07	15 18	4	10
	20	24 29	23 35	22 42	21 50	20 58	20 05	19 14	18 23	17 32	16 42	15 52	5	20
	30	25 13	24 17	23 24	22 30	21 36	20 43	19 51	18 58	18 07	17 14	16 23	3	30
	40	25 53	24 56	24 02	23 08	22 13	21 18	20 26	19 32	18 39	17 45	16 52	4	40
	50	26 31	25 34	24 38	23 43	22 47	21 52	20 57	20 03	19 08	18 14	17 20	5	50
4	00	27 05	26 08	25 12	24 15	23 18	22 22	21 27	20 30	19 36	18 40	17 45	4	00
	10	27 37	26 39	25 42	24 44	23 47	22 50	21 53	20 57	20 00	19 04	18 08	5	10
	20	28 05	27 06	26 09	25 10	24 12	23 14	22 18	21 20	20 23	19 26	18 29	3	20
	30	28 30	27 31	26 32	25 34	24 36	23 37	22 40	21 41	20 43	19 46	18 48	4	30
	40	28 52	27 53	26 54	25 54	24 55	23 57	22 59	21 59	21 01	20 03	19 04	5	40
	50	29 12	28 11	27 13	26 13	25 14	24 14	23 15	22 16	21 18	20 18	19 18	5	50
5	00	29 28	28 28	27 28	26 28	25 28	24 29	23 30	22 30	21 31	20 32	19 32	5	00
	10	29 41	28 41	27 41	26 40	25 41	24 41	23 42	22 41	21 42	20 42	19 43	3	10
	20	29 51	28 51	27 51	26 51	25 51	24 50	23 51	22 50	21 51	20 51	19 51	4	20
	30	29 58	28 58	27 58	26 58	25 57	24 57	23 58	22 57	21 57	20 57	19 56	5	30
	40	30 03	29 02	28 02	27 02	26 02	25 02	24 02	23 02	22 02	21 01	20 01	3	40
	50	30 04	29 05	28 04	27 04	26 04	25 04	24 04	23 03	22 03	21 03	20 03	5	50
6	00	30 04	29 04	28 03	27 03	26 03	25 03	24 04	23 03	22 02	21 03	20 02	6	00
	10	30 00	29 00	28 00	27 00	26 00	25 00	24 01	23 00	22 01	21 01	20 00	3	10
	20	29 53	28 53	27 54	26 54	25 54	24 55	23 55	22 55	21 56	20 56	19 56	4	20
	30	29 43	28 43	27 44	26 45	25 46	24 47	23 48	22 48	21 49	20 49	19 50	5	30
	40	29 30	28 31	27 32	26 34	25 34	24 35	23 37	22 38	21 39	20 40	19 41	3	40
	50	29 16	28 16	27 18	26 20	25 21	24 23	23 25	22 26	21 27	20 28	19 30	5	50
7	00	28 57	27 59	27 01	26 03	25 05	24 07	23 10	22 12	21 14	20 16	19 17	7	00
	10	28 37	27 39	26 41	25 44	24 47	23 49	22 52	21 55	20 58	20 00	19 03	3	10
	20	28 13	27 15	26 19	25 22	24 25	23 28	22 33	21 35	20 39	19 42	18 46	4	20
	30	27 46	26 50	25 54	24 58	24 02	23 06	22 11	21 14	20 19	19 23	18 27	5	30
	40	27 16	26 22	25 26	24 31	23 36	22 41	21 46	20 51	19 56	19 01	18 07	3	40
	50	26 45	25 50	24 56	24 01	23 07	22 13	21 19	20 25	19 31	18 38	17 44	5	50
8	00	26 10	25 17	24 23	23 30	22 36	21 43	20 50	19 57	19 04	18 12	17 20	8	00
	10	25 32	24 39	23 47	22 55	22 02	21 11	20 19	19 27	18 36	17 45	17 03	3	10
	20	24 51	24 00	23 09	22 18	21 26	20 36	19 46	18 55	18 05	17 15	16 25	4	20
	30	24 09	23 19	22 28	21 38	20 48	19 59	19 11	18 20	17 32	16 43	15 55	5	30
	40	23 22	22 33	21 45	20 56	20 07	19 20	18 33	17 44	16 57	16 09	15 22	3	40
	50	22 34	21 46	20 59	20 11	19 24	18 38	17 52	17 06	16 20	15 35	14 49	5	50
9	00	21 42	20 56	20 10	19 24	18 38	17 54	17 09	16 25	15 41	14 57	14 14	9	00
	10	20 47	20 04	19 19	18 35	17 51	17 08	16 26	15 42	15 01	14 18	13 36	3	10
	20	19 50	19 08	18 25	17 43	17 01	16 20	15 40	14 58	14 17	13 37	12 57	4	20
	30	18 51	18 10	17 30	16 50	16 10	15 30	14 51	14 13	13 34	12 55	12 17	5	30
	40	17 49	17 10	16 31	15 53	15 15	14 38	14 01	13 24	12 48	12 11	11 35	3	40
	50	16 44	16 07	15 31	14 55	14 19	13 44	13 09	12 34	12 00	11 26	10 51	5	50
10	00	15 38	15 03	14 29	13 54	13 21	12 49	12 16	11 43	11 11	10 39	10 08	10	00
	10	14 28	13 56	13 24	12 53	12 21	11 51	11 20	10 51	10 21	9 51	9 22	3	10
	20	13 16	12 47	12 18	11 48	11 20	10 51	10 24	9 56	9 28	9 01	8 34	4	20
	30	12 03	11 36	11 09	10 43	10 17	9 49	9 25	9 00	8 36	8 11	7 46	5	30
	40	10 47	10 23	10 00	9 35	9 12	8 49	8 26	8 04	7 41	7 19	6 57	3	40
	50	9 31	9 09	8 48	8 27	8 06	7 46	7 25	7 05	6 46	6 27	6 06	5	50
11	00	8 12	7 53	7 35	7 17	6 59	6 41	6 24	6 06	5 49	5 32	5 16	11	00
	10	6 52	6 36	6 21	6 06	5 50	5 36	5 22	5 07	4 52	4 39	4 25	3	10
	20	5 32	5 19	5 06	4 54	4 42	4 30	4 18	4 06	3 55	3 43	3 32	4	20
	30	4 09	3 59	3 50	3 41	3 32	3 23	3 14	3 06	2 57	2 49	2 39	5	30
	40	2 47	2 40	2 34	2 27	2 21	2 16	2 10	2 04	1 58	1 53	1 47	3	40
	50	1 23	1 21	1 17	1 14	1 11	1 08	1 05	1 02	0 59	0 56	0 54	5	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 5°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 5°.	
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	6 59	6 35	6 15	5 55	5 37	5 22	5 07	4 52	4 39	4 28	4 16	4 05		10
	20	13 44	13 00	12 19	11 42	11 08	10 36	10 07	9 40	9 15	8 51	8 28	8 07		20
	30	20 05	19 04	18 06	17 13	16 25	15 40	14 57	14 18	13 42	13 06	12 34	12 03		30
	40	25 54	24 34	23 28	22 23	21 22	20 25	19 32	18 43	17 56	17 12	16 30	15 50		40
	50	31 07	29 42	28 23	27 07	25 57	24 52	23 50	22 52	21 56	21 04	20 14	19 28		50
1	00	35 45	34 14	32 48	31 26	30 09	28 57	27 48	26 43	25 40	24 42	23 46	22 53	1	00
	10	39 50	38 15	36 45	35 19	33 57	32 40	31 26	30 15	29 06	28 05	27 03	26 05		10
	20	43 24	41 47	40 15	38 47	37 22	36 01	34 45	33 30	32 19	31 11	30 05	29 04		20
	30	46 31	44 53	43 21	41 51	40 26	39 03	37 44	36 27	35 14	34 03	32 55	31 48		30
	40	49 13	47 38	45 59	44 36	43 09	41 46	40 26	39 08	37 53	36 40	35 29	34 21		40
	50	51 35	50 00	48 30	47 01	45 35	44 12	42 50	41 32	40 16	39 01	37 50	36 40		50
2	00	53 37	52 06	50 37	49 10	47 45	46 22	45 01	43 43	42 26	41 11	39 58	38 48	2	00
	10	55 26	53 57	52 30	51 03	49 39	48 18	46 58	45 39	44 23	43 08	41 55	40 43		10
	20	57 01	55 34	54 09	52 44	51 22	50 02	48 42	47 24	46 09	44 54	43 41	42 30		20
	30	58 24	56 59	55 37	54 14	52 53	51 34	50 16	48 59	47 44	46 30	45 16	44 06		30
	40	59 37	58 15	56 54	55 34	54 15	52 57	51 40	50 24	49 10	47 56	46 41	45 32		40
	50	60 41	59 21	58 02	56 43	55 26	54 10	52 54	51 39	50 26	49 13	48 02	46 51		50
3	00	61 38	60 19	59 03	57 46	56 29	55 15	54 01	52 47	51 35	50 23	49 12	48 02	3	00
	10	62 27	61 11	59 56	58 40	57 26	56 12	55 00	53 48	52 37	51 25	50 15	49 06		10
	20	63 10	61 56	60 43	59 28	58 16	57 04	55 53	54 41	53 31	52 21	51 12	50 03		20
	30	63 48	62 35	61 23	60 11	59 00	57 50	56 39	55 30	54 20	53 11	52 02	50 55		30
	40	64 20	63 10	61 59	60 49	59 38	58 29	57 20	56 11	55 03	53 56	52 47	51 40		40
	50	64 48	63 39	62 30	61 22	60 12	59 04	57 57	56 49	55 41	54 34	53 27	52 21		50
4	00	65 13	64 04	62 57	61 49	60 41	59 35	58 27	57 20	56 14	55 08	54 02	52 57	4	00
	10	65 34	64 26	63 19	62 13	61 07	60 00	58 55	57 48	56 43	55 38	54 33	53 27		10
	20	65 50	64 44	63 39	62 34	61 27	60 22	59 18	58 13	57 07	56 03	54 59	53 54		20
	30	66 03	64 58	63 55	62 49	61 45	60 41	59 36	58 32	57 29	56 25	55 20	54 17		30
	40	66 14	65 10	64 07	63 03	61 59	60 56	59 53	58 49	57 46	56 43	55 39	54 36		40
	50	66 22	65 19	64 16	63 13	62 10	61 07	60 05	59 02	58 00	56 57	55 54	54 52		50
5	00	66 28	65 25	64 22	63 20	62 17	61 16	60 14	59 11	58 09	57 08	56 05	55 03	5	00
	10	66 29	65 27	64 26	63 24	62 22	61 22	60 20	59 18	58 16	57 15	56 13	55 12		10
	20	66 30	65 28	64 27	63 26	62 25	61 23	60 23	59 21	58 20	57 19	56 18	55 17		20
	30	66 27	65 26	64 25	63 25	62 24	61 24	60 23	59 21	58 21	57 20	56 19	55 19		30
	40	66 22	65 22	64 21	63 20	62 21	61 20	60 20	59 19	58 19	57 19	56 18	55 17		40
	50	66 15	65 15	64 14	63 14	62 15	61 14	60 15	59 14	58 14	57 14	56 13	55 13		50
6	00	66 04	65 05	64 05	63 05	62 05	61 06	60 06	59 06	58 06	57 06	56 05	55 05	6	00
	10	65 53	64 53	63 53	62 53	61 53	60 55	59 55	58 55	57 55	56 55	55 55	54 56		10
	20	65 38	64 39	63 39	62 39	61 40	60 40	59 41	58 41	57 41	56 41	55 41	54 42		20
	30	65 21	64 21	63 22	62 22	61 23	60 23	59 24	58 24	57 24	56 25	55 25	54 26		30
	40	65 02	64 02	63 02	62 03	61 03	60 02	59 04	58 04	57 05	56 05	55 06	54 06		40
	50	64 39	63 39	62 40	61 40	60 40	59 41	58 41	57 41	56 41	55 43	54 43	53 43		50
7	00	64 15	63 15	62 15	61 14	60 15	59 15	58 15	57 16	56 16	55 17	54 17	53 18	7	00
	10	63 47	62 46	61 46	60 46	59 46	58 46	57 46	56 46	55 46	54 47	53 48	52 48		10
	20	63 16	62 15	61 15	60 14	59 14	58 14	57 13	56 14	55 13	54 15	53 15	52 15		20
	30	62 42	61 41	60 40	59 38	58 38	57 38	56 38	55 37	54 38	53 38	52 38	51 38		30
	40	62 04	61 03	60 02	59 01	57 59	56 59	55 58	54 58	53 58	52 59	51 59	50 59		40
	50	61 24	60 21	59 20	58 18	57 17	56 16	55 16	54 15	53 14	52 14	51 15	50 15		50
8	00	60 39	59 35	58 34	57 32	56 30	55 29	54 27	53 26	52 26	51 26	50 26	49 26	8	00
	10	59 49	58 46	57 44	56 41	55 38	54 37	53 35	52 34	51 34	50 34	49 34	48 33		10
	20	58 56	57 52	56 49	55 46	54 43	53 41	52 40	51 38	50 37	49 37	48 37	47 36		20
	30	57 58	56 53	55 49	54 46	53 43	52 40	51 38	50 36	49 35	48 34	47 34	46 35		30
	40	56 53	55 48	54 44	53 40	52 37	51 34	50 32	49 29	48 28	47 28	46 27	45 28		40
	50	55 44	54 38	53 33	52 27	51 24	50 21	49 19	48 16	47 15	46 15	45 15	44 15		50
9	00	54 28	53 20	52 15	51 10	50 06	49 02	48 00	46 57	45 57	44 56	43 56	42 57	9	00
	10	53 04	51 57	50 51	49 45	48 41	47 37	46 35	45 33	44 32	43 32	42 32	41 33		10
	20	51 33	50 25	49 19	48 13	47 08	46 05	45 03	44 01	43 00	42 01	41 02	40 04		20
	30	49 54	48 45	47 39	46 33	45 29	44 25	43 23	42 22	41 21	40 22	39 24	38 27		30
	40	48 05	46 56	45 49	44 44	43 40	42 37	41 35	40 34	39 35	38 36	37 39	36 43		40
	50	46 06	44 58	43 51	42 45	41 42	40 39	39 39	38 38	37 40	36 43	35 47	34 52		50
10	00	43 56	42 48	41 42	40 37	39 35	38 33	37 33	36 34	35 37	34 42	33 47	32 54	10	00
	10	41 34	40 26	39 21	38 17	37 15	36 15	35 17	34 20	33 25	32 31	31 39	30 47		10
	20	38 58	37 52	36 49	35 47	34 47	33 48	32 52	31 57	31 03	30 13	29 22	28 33		20
	30	36 08	35 05	34 03	33 03	32 06	31 10	30 17	29 24	28 34	27 45	26 58	26 11		30
	40	33 04	32 03	31 04	30 08	29 13	28 20	27 31	26 41	25 54	25 08	24 24	23 41		40
	50	29 44	28 47	27 52	26 59	26 08	25 20	24 33	23 48	23 05	22 24	21 43	21 03		50
11	00	26 08	25 16	24 25	23 37	22 52	22 08	21 26	20 45	20 07	19 29	18 54	18 18	11	00
	10	22 16	21 29	20 46	20 03	19 24	18 45	18 10	17 34	17 00	16 29	15 57	15 27		10
	20	18 10	17 31	16 54	16 18	15 45	15 14	14 44	14 14	13 46	13 20	12 54	12 30		20
	30	13 51	13 19	12 51	12 23	11 58	11 33	11 10	10 48	10 26	10 05	9 46	9 27		30
	40	9 20	8 59	8 40	8 20	8 03	7 46	7 30	7 14	7 00	6 47	6 33	6 21		40
	50	4 42	4 31	4 21	4 12	4 02	3 53	3 46	3 38	3 30	3 24	3 17	3 10		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 5°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 5°.	
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	3 55	3 46	3 36	3 29	3 20	3 12	3 05	2 58	2 51	2 45	2 38	2 33		10
	20	7 47	7 29	7 11	6 55	6 38	6 23	6 09	5 54	5 41	5 28	5 16	5 05		20
	30	11 34	11 07	10 41	10 16	9 53	9 30	9 08	8 48	8 29	8 10	7 52	7 34		30
	40	15 14	14 39	14 05	13 33	13 02	12 32	12 05	11 39	11 13	10 48	10 25	10 02		40
	50	18 43	18 01	17 20	16 42	16 05	15 29	14 56	14 23	13 52	13 22	12 53	12 25		50
1	00	22 02	21 13	20 27	19 43	19 00	18 19	17 40	17 02	16 25	15 51	15 17	14 44	1	00
	10	25 09	24 15	23 24	22 34	21 47	21 01	20 17	19 35	18 54	18 13	17 35	16 59		10
	20	28 03	27 05	26 10	25 16	24 24	23 33	22 46	21 59	21 14	20 31	19 48	19 06		20
	30	30 45	29 45	28 45	27 48	26 52	25 59	25 07	24 17	23 28	22 41	21 56	21 11		30
	40	33 15	32 11	31 09	30 09	29 11	28 14	27 20	26 26	25 35	24 44	23 56	23 08		40
	50	35 32	34 26	33 22	32 21	31 20	30 21	29 24	28 27	27 33	26 40	25 49	24 59		50
2	00	37 38	36 32	35 26	34 22	33 20	32 19	31 19	30 23	29 26	28 31	27 37	26 45	2	00
	10	39 34	38 26	37 20	36 14	35 11	34 10	33 08	32 08	31 10	30 13	29 17	28 22		10
	20	41 19	40 11	39 04	37 57	36 52	35 49	34 47	33 46	32 47	31 49	30 51	29 55		20
	30	42 55	41 46	40 39	39 32	38 27	37 23	36 20	35 19	34 17	33 17	32 19	31 22		30
	40	44 25	43 14	42 06	40 59	39 53	38 49	37 45	36 42	35 41	34 40	33 40	32 42		40
	50	45 41	44 33	43 25	42 18	41 12	40 07	39 03	38 00	36 58	35 56	34 56	33 56		50
3	00	46 53	45 44	44 37	43 30	42 24	41 19	40 14	39 11	38 08	37 07	36 05	35 06	3	00
	10	47 58	46 50	45 42	44 36	43 30	42 24	41 20	40 17	39 14	38 11	37 10	36 10		10
	20	48 56	47 48	46 41	45 35	44 29	43 24	42 20	41 16	40 13	39 10	38 08	37 07		20
	30	49 47	48 41	47 34	46 29	45 23	44 18	43 14	42 10	41 06	40 05	39 03	38 01		30
	40	50 34	49 28	48 22	47 16	46 11	45 07	44 02	42 59	41 56	40 53	39 51	38 49		40
	50	51 15	50 09	49 04	47 59	46 54	45 50	44 47	43 43	42 40	41 37	40 35	39 33		50
4	00	51 51	50 46	49 41	48 37	47 33	46 28	45 25	44 22	43 19	42 17	41 14	40 12	4	00
	10	52 23	51 19	50 14	49 11	48 07	47 03	46 00	44 57	43 54	42 51	41 50	40 48		10
	20	52 51	51 46	50 43	49 39	48 36	47 33	46 30	45 28	44 25	43 23	42 21	41 19		20
	30	53 14	52 11	51 07	50 04	49 02	47 58	46 56	45 54	44 51	43 50	42 48	41 46		30
	40	53 34	52 31	51 28	50 25	49 23	48 20	47 18	46 15	45 14	44 11	43 10	42 09		40
	50	53 49	52 47	51 45	50 43	49 40	48 38	47 36	46 35	45 32	44 31	43 30	42 28		50
5	00	54 01	53 00	51 58	50 56	49 54	48 52	47 51	46 49	45 48	44 47	43 45	42 44	5	00
	10	54 10	53 08	52 06	51 06	50 05	49 03	48 02	47 00	45 59	44 58	43 57	42 56		10
	20	54 16	53 15	52 14	51 12	50 12	49 11	48 09	47 08	46 07	45 07	44 06	43 05		20
	30	54 18	53 18	52 17	51 16	50 15	49 14	48 14	47 13	46 12	45 12	44 11	43 10		30
	40	54 17	53 17	52 17	51 16	50 16	49 15	48 15	47 14	46 13	45 13	44 13	43 12		40
	50	54 13	53 14	52 13	51 13	50 12	49 12	48 13	47 12	46 12	45 12	44 11	43 11		50
6	00	54 07	53 06	52 07	51 06	50 06	49 06	48 07	47 07	46 06	45 07	44 07	43 07	6	00
	10	53 57	52 57	51 57	50 57	49 58	48 57	47 57	46 58	45 58	44 58	43 59	42 59		10
	20	53 43	52 44	51 43	50 44	49 45	48 45	47 45	46 47	45 46	44 47	43 48	42 49		20
	30	53 27	52 27	51 28	50 29	49 29	48 30	47 30	46 32	45 32	44 32	43 32	42 34		30
	40	53 07	52 08	51 08	50 09	49 11	48 11	47 12	46 13	45 13	44 15	43 15	42 16		40
	50	52 44	51 45	50 46	49 47	48 48	47 48	46 50	45 51	44 51	43 53	42 54	41 55		50
7	00	52 18	51 19	50 20	49 21	48 23	47 23	46 25	45 26	44 27	43 29	42 30	41 32	7	00
	10	51 49	50 51	49 51	48 52	47 54	46 54	45 56	44 57	43 59	43 01	42 02	41 05		10
	20	51 16	50 17	49 18	48 19	47 21	46 22	45 24	44 25	43 27	42 29	41 31	40 33		20
	30	50 40	49 42	48 41	47 43	46 45	45 46	44 48	43 50	42 52	41 55	40 57	40 00		30
	40	50 00	49 01	48 02	47 04	46 05	45 06	44 09	43 11	42 13	41 16	40 18	39 22		40
	50	49 16	48 17	47 18	46 19	45 22	44 23	43 25	42 26	41 31	40 34	39 37	38 41		50
8	00	48 28	47 29	46 29	45 31	44 34	43 36	42 38	41 41	40 44	39 48	38 51	37 55	8	00
	10	47 35	46 36	45 36	44 39	43 42	42 44	41 47	40 50	39 53	38 58	38 02	37 07		10
	20	46 38	45 40	44 40	43 43	42 46	41 48	40 52	39 55	38 59	38 04	37 09	36 13		20
	30	45 36	44 38	43 39	42 43	41 45	40 48	39 52	38 56	38 01	37 06	36 11	35 18		30
	40	44 29	43 31	42 33	41 36	40 40	39 43	38 48	37 53	36 58	36 03	35 10	34 17		40
	50	43 18	42 20	41 22	40 25	39 29	38 34	37 39	36 44	35 50	34 57	34 04	33 12		50
9	00	42 00	41 02	40 06	39 10	38 14	37 19	36 25	35 31	34 36	33 46	32 53	32 02	9	00
	10	40 36	39 39	38 43	37 48	36 53	36 00	35 06	34 14	33 21	32 30	31 39	30 49		10
	20	39 07	38 11	37 16	36 21	35 28	34 34	33 42	32 51	32 00	31 11	30 21	29 32		20
	30	37 31	36 36	35 41	34 48	33 56	33 04	32 13	31 23	30 33	29 45	28 57	28 10		30
	40	35 49	34 54	34 01	33 09	32 18	31 27	30 38	29 49	29 01	28 15	27 29	26 43		40
	50	33 59	33 06	32 14	31 24	30 35	29 46	28 58	28 11	27 26	26 40	25 56	25 12		50
10	00	32 02	31 01	30 22	29 32	28 45	27 59	27 13	26 29	25 44	25 00	24 19	23 37	10	00
	10	29 57	29 09	28 21	27 34	26 50	26 05	25 22	24 39	23 57	23 16	22 37	21 58		10
	20	27 46	26 59	26 15	25 31	24 47	24 06	23 25	22 45	22 06	21 28	20 50	20 14		20
	30	25 27	24 43	24 01	23 20	22 40	22 01	21 23	20 46	20 10	19 35	18 59	18 26		30
	40	23 00	22 20	21 40	21 03	20 26	19 51	19 15	18 41	18 08	17 37	17 04	16 34		40
	50	20 26	19 50	19 15	18 40	18 07	17 34	17 03	16 33	16 03	15 35	15 06	14 38		50
11	00	17 46	17 13	16 42	16 11	15 43	15 14	14 47	14 20	13 54	13 29	13 04	12 40	11	00
	10	14 59	14 31	14 04	13 38	13 14	12 50	12 26	12 03	11 41	11 19	10 58	10 38		10
	20	12 06	11 43	11 22	11 00	10 40	10 21	10 01	9 43	9 25	9 08	8 50	8 33		20
	30	9 09	8 52	8 35	8 19	8 04	7 48	7 34	7 20	7 05	6 52	6 40	6 27		30
	40	6 08	5 57	5 45	5 35	5 24	5 14	5 04	4 54	4 45	4 36	4 28	4 19		40
	50	3 05	2 59	2 53	2 47	2 43	2 37	2 32	2 28	2 23	2 19	2 14	2 10		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 5°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 5°.	
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	0	h. m.	0
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	00	00
10	10	2 27	2 21	2 17	2 11	2 06	2 01	1 56	1 53	1 48	1 44	1 39	1 35	10	10
20	20	4 53	4 43	4 32	4 21	4 12	4 02	3 53	3 44	3 36	3 27	3 18	3 11	20	20
30	30	7 18	7 02	6 45	6 30	6 16	6 01	5 48	5 35	5 21	5 09	4 57	4 45	30	30
40	40	9 40	9 18	8 58	8 38	8 19	8 00	7 41	7 24	7 07	6 51	6 35	6 18	40	40
50	50	11 58	11 32	11 07	10 42	10 18	9 55	9 33	9 12	8 51	8 30	8 09	7 50	50	50
1	00	14 12	13 42	13 12	12 44	12 16	11 48	11 23	10 57	10 32	10 07	9 43	9 20	1	00
10	10	16 23	15 47	15 14	14 42	14 09	13 39	13 08	12 39	12 10	11 43	11 16	10 48	10	10
20	20	18 28	17 49	17 12	16 35	15 59	15 25	14 52	14 19	13 46	13 15	12 44	12 15	20	20
30	30	20 27	19 45	19 04	18 24	17 45	17 08	16 31	15 55	15 20	14 46	14 12	13 38	30	30
40	40	22 22	21 36	20 53	20 10	19 28	18 46	18 07	17 28	16 50	16 13	15 35	14 59	40	40
50	50	24 10	23 22	22 36	21 49	21 05	20 21	19 39	18 57	18 15	17 35	16 56	16 17	50	50
2	00	25 53	25 03	24 13	23 25	22 38	21 51	21 06	20 21	19 38	18 55	18 13	17 33	2	00
10	10	27 29	26 37	25 46	24 56	24 06	23 17	22 29	21 43	20 56	20 12	19 28	18 44	10	10
20	20	28 59	28 06	27 13	26 20	25 29	24 38	23 49	23 00	22 12	21 25	20 38	19 53	20	20
30	30	30 24	29 29	28 34	27 40	26 47	25 55	25 03	24 13	23 23	22 35	21 46	20 58	30	30
40	40	31 44	30 47	29 50	28 55	28 01	27 07	26 14	25 22	24 30	23 40	22 49	22 00	40	40
50	50	32 57	31 59	31 02	30 05	29 10	28 14	27 20	26 26	25 33	24 41	23 50	22 59	50	50
3	00	34 05	33 06	32 08	31 10	30 13	29 17	28 22	27 27	26 32	25 39	24 46	23 54	3	00
10	10	35 08	34 09	33 10	32 11	31 13	30 16	29 20	28 24	27 28	26 34	25 40	24 45	10	10
20	20	36 07	35 06	34 07	33 07	32 09	31 11	30 13	29 16	28 19	27 24	26 29	25 34	20	20
30	30	37 00	35 59	34 58	33 59	32 59	32 01	31 02	30 05	29 08	28 11	27 14	26 18	30	30
40	40	37 48	36 47	35 46	34 46	33 47	32 47	31 48	30 50	29 52	28 55	27 57	27 00	40	40
50	50	38 32	37 30	36 29	35 28	34 29	33 29	32 30	31 31	30 32	29 34	28 36	27 38	50	50
4	00	39 11	38 09	37 08	36 07	35 07	34 07	33 07	32 08	31 08	30 10	29 11	28 12	4	00
10	10	39 46	38 44	37 43	36 42	35 41	34 41	33 41	32 41	31 41	30 43	29 43	28 44	10	10
20	20	40 17	39 16	38 14	37 13	36 12	35 11	34 12	33 11	32 11	31 12	30 12	29 13	20	20
30	30	40 44	39 42	38 41	37 40	36 39	35 38	34 38	33 38	32 37	31 37	30 37	29 38	30	30
40	40	41 07	40 06	39 05	38 03	37 02	36 01	35 01	34 01	33 00	32 01	31 00	30 00	40	40
50	50	41 27	40 25	39 25	38 23	37 22	36 21	35 21	34 20	33 19	32 19	31 19	30 19	50	50
5	00	41 43	40 42	39 40	38 40	37 38	36 37	35 37	34 36	33 36	32 35	31 35	30 34	5	00
10	10	41 55	40 54	39 54	38 52	37 51	36 51	35 50	34 49	33 49	32 48	31 48	30 47	10	10
20	20	42 04	41 03	40 02	39 01	38 01	37 00	36 00	34 59	33 58	32 58	31 57	30 57	20	20
30	30	42 10	41 09	40 08	39 07	38 07	37 06	36 06	35 05	34 05	33 04	32 04	31 03	30	30
40	40	42 12	41 11	40 10	39 10	38 10	37 10	36 09	35 09	34 08	33 08	32 08	31 08	40	40
50	50	42 11	41 11	40 10	39 10	38 09	37 09	36 09	35 09	34 09	33 09	32 08	31 08	50	50
6	00	42 07	41 07	40 07	39 07	38 07	37 07	36 07	35 06	34 06	33 06	32 06	31 06	6	00
10	10	42 00	41 00	40 00	39 00	38 00	37 00	36 00	35 01	34 00	33 01	32 01	31 01	10	10
20	20	41 49	40 49	39 50	38 49	37 50	36 50	35 51	34 51	33 52	32 53	31 53	30 53	20	20
30	30	41 35	40 36	39 36	38 36	37 37	36 38	35 38	34 40	33 40	32 42	31 42	30 43	30	30
40	40	41 17	40 18	39 19	38 20	37 21	36 22	35 24	34 24	33 25	32 27	31 28	30 29	40	40
50	50	40 57	39 58	38 59	38 01	37 02	36 03	35 05	34 07	33 07	32 10	31 11	30 13	50	50
7	00	40 33	39 35	38 36	37 37	36 39	35 42	34 44	33 45	32 47	31 50	30 51	29 53	7	00
10	10	40 06	39 08	38 10	37 12	36 14	35 16	34 19	33 21	32 24	31 27	30 29	29 31	10	10
20	20	39 36	38 38	37 41	36 43	35 46	34 48	33 51	32 54	31 57	31 00	30 02	29 06	20	20
30	30	39 02	38 05	37 07	36 10	35 13	34 17	33 21	32 23	31 27	30 31	29 35	28 39	30	30
40	40	38 25	37 28	36 31	35 34	34 39	33 42	32 46	31 51	30 54	29 59	29 04	28 08	40	40
50	50	37 44	36 47	35 52	34 55	33 59	33 04	32 09	31 14	30 19	29 25	28 29	27 35	50	50
8	00	36 59	36 03	35 08	34 12	33 17	32 22	31 28	30 34	29 40	28 46	27 52	26 59	8	00
10	10	36 11	35 17	34 21	33 26	32 32	31 38	30 45	29 52	28 58	28 06	27 12	26 20	10	10
20	20	35 19	34 25	33 31	32 36	31 44	30 50	29 58	29 05	28 12	27 22	26 29	25 38	20	20
30	30	34 23	33 30	32 36	31 43	30 51	29 59	29 08	28 16	27 24	26 34	25 43	24 53	30	30
40	40	33 23	32 31	31 38	30 46	29 55	29 04	28 13	27 23	26 33	25 44	24 54	24 05	40	40
50	50	32 20	31 28	30 37	29 46	28 55	28 06	27 17	26 28	25 39	24 51	24 02	23 15	50	50
9	00	31 11	30 21	29 31	28 42	27 52	27 04	26 16	25 28	24 40	23 55	23 07	22 21	9	00
10	10	29 59	29 11	28 22	27 33	26 46	25 59	25 12	24 26	23 40	22 55	22 10	21 25	10	10
20	20	28 43	27 56	27 09	26 22	25 35	24 51	24 06	23 21	22 36	21 53	21 09	20 26	20	20
30	30	27 23	26 37	25 51	25 06	24 22	23 38	22 55	22 12	21 29	20 48	20 07	19 25	30	30
40	40	25 59	25 14	24 30	23 46	23 05	22 22	21 41	21 00	20 20	19 40	19 00	18 21	40	40
50	50	24 30	23 47	23 05	22 24	21 43	21 03	20 25	19 45	19 07	18 29	17 52	17 15	50	50
10	00	22 56	22 16	21 36	20 57	20 19	19 40	19 04	18 27	17 51	17 16	16 40	16 05	10	00
10	10	21 19	20 41	20 03	19 27	18 51	18 15	17 41	17 06	16 33	16 00	15 26	14 54	10	10
20	20	19 38	19 02	18 27	17 54	17 20	16 47	16 15	15 44	15 12	14 41	14 11	13 41	20	20
30	30	17 53	17 20	16 48	16 16	15 46	15 16	14 46	14 17	13 49	13 21	12 52	12 25	30	30
40	40	16 03	15 34	15 05	14 36	14 09	13 42	13 15	12 48	12 23	11 57	11 32	11 07	40	40
50	50	14 12	13 45	13 19	12 54	12 29	12 04	11 41	11 17	10 54	10 32	10 11	9 48	50	50
11	00	12 16	11 53	11 30	11 08	10 47	10 26	10 05	9 44	9 25	9 05	8 46	8 27	11	00
10	10	10 18	9 59	9 40	9 20	9 02	8 44	8 28	8 10	7 53	7 37	7 20	7 05	10	10
20	20	8 17	8 02	7 46	7 31	7 17	7 03	6 48	6 34	6 21	6 07	5 54	5 41	20	20
30	30	6 15	6 03	5 51	5 39	5 29	5 17	5 07	4 56	4 46	4 37	4 26	4 16	30	30
40	40	4 10	4 03	3 55	3 48	3 40	3 32	3 26	3 19	3 11	3 04	2 59	2 52	40	40
50	50	2 05	2 01	1 58	1 54	1 50	1 46	1 43	1 39	1 36	1 33	1 29	1 26	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 5°.			DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 5°.			
Hour Angle.			60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°	Hour Angle.		
h.	m.	0	0 00 1 32 3 03 4 34 6 05	0 00 1 28 2 55 4 22 5 48 7 12	0 00 1 24 2 48 4 11 5 33 7 12	0 00 1 20 2 40 4 00 5 19 6 36	0 00 1 17 2 33 3 49 5 04 6 18	0 00 1 13 2 25 3 39 4 50 6 01	0 00 1 09 2 19 3 28 4 37 5 45	0 00 1 07 2 12 3 19 4 24 5 28	0 00 1 03 2 06 3 08 4 10 5 12	0 00 1 00 1 59 2 58 3 58 4 56	0 00 0 57 1 53 2 50 3 45 4 40	0	m.	00 10 20 30 40 50
1	00 10 20 30 40 50	00 10 20 30 40 50	8 57 10 22 11 45 13 06 14 24 15 39	8 36 9 57 11 17 12 34 13 49 15 02	8 13 9 32 10 49 12 03 13 15 14 25	7 52 9 08 10 21 11 32 12 42 13 48	7 32 8 44 9 54 11 02 12 09 13 13	7 11 8 20 9 27 10 33 11 37 12 39	6 51 7 57 9 01 10 04 11 05 12 04	6 32 7 35 8 35 9 35 10 33 11 31	6 12 7 11 8 10 9 07 10 02 10 57	5 53 6 50 7 45 8 39 9 32 10 23	5 34 6 28 7 21 8 12 9 02 9 51	1	00 10 20 30 40 50	
2	00 10 20 30 40 50	00 10 20 30 40 50	16 52 18 01 19 07 20 11 21 11 22 08	16 12 17 18 18 23 19 24 20 23 21 18	15 33 16 37 17 39 18 39 19 35 20 29	14 54 15 56 16 53 17 53 18 48 19 39	14 15 15 16 16 13 17 09 18 01 18 52	13 38 14 36 15 31 16 25 17 16 18 03	13 02 13 56 14 50 15 41 16 30 17 16	12 25 13 18 14 09 14 58 15 45 16 29	11 49 12 39 13 29 14 16 15 00 15 42	11 13 12 02 12 48 13 33 14 16 14 56	10 38 11 24 12 09 12 51 13 32 14 11	2	00 10 20 30 40 50	
3	00 10 20 30 40 50	00 10 20 30 40 50	23 01 23 52 24 39 25 23 26 03 26 41	22 10 22 59 23 45 24 28 25 07 25 44	21 19 22 07 22 52 23 32 24 12 24 47	20 29 21 15 21 58 22 38 23 16 23 50	19 39 20 23 21 05 21 44 22 21 22 55	18 50 19 32 20 13 20 51 21 27 21 59	18 00 18 42 19 21 19 58 20 32 21 03	17 12 17 52 18 30 19 05 19 38 20 09	16 23 17 02 17 38 18 12 18 44 19 13	15 35 16 12 16 47 17 20 17 50 18 18	14 48 15 24 15 57 16 28 16 57 17 25	3	00 10 20 30 40 50	
4	00 10 20 30 40 50	00 10 20 30 40 50	27 14 27 46 28 13 28 38 29 00 29 18	26 17 26 48 27 15 27 39 28 00 28 18	25 19 25 49 26 16 26 39 27 00 27 19	24 22 24 51 25 17 25 41 26 01 26 18	23 26 23 54 24 19 24 42 25 02 25 19	22 28 22 56 23 21 23 43 24 02 24 19	21 32 21 59 22 23 22 44 23 03 23 19	20 36 21 02 21 26 21 46 22 05 22 21	19 41 20 05 20 28 20 48 21 06 21 22	18 44 19 09 19 30 19 50 20 07 20 22	17 50 18 13 18 33 18 52 19 08 19 23	4	00 10 20 30 40 50	
5	00 10 20 30 40 50	00 10 20 30 40 50	29 34 29 46 29 55 30 02 30 07 30 08	28 33 28 46 28 55 29 02 29 06 29 07	27 33 27 46 27 55 28 01 28 06 28 07	26 33 26 45 26 55 27 01 27 05 27 07	25 34 25 45 25 55 26 01 26 05 26 07	24 33 24 45 24 54 25 01 25 04 25 06	23 33 23 45 23 54 24 00 24 04 24 05	22 34 22 46 22 54 23 01 23 04 23 06	21 34 21 45 21 54 22 00 22 04 22 05	20 35 20 45 20 54 20 59 21 04 21 05	19 35 19 46 19 54 20 00 20 03 20 05	5	00 10 20 30 40 50	
6	00 10 20 30 40 50	00 10 20 30 40 50	30 06 30 01 29 53 29 43 29 30 29 14	29 06 29 01 28 54 28 44 28 31 28 15	28 05 28 01 27 55 27 45 27 32 27 17	27 05 27 01 26 55 26 45 26 33 26 18	26 06 26 01 25 55 25 46 25 35 25 21	25 05 25 01 24 55 24 46 24 36 24 22	24 05 24 01 23 56 23 47 23 36 23 23	23 05 23 02 22 57 22 49 22 39 22 26	22 05 22 02 21 56 21 49 21 40 21 27	21 04 21 02 20 57 20 49 20 40 20 29	20 05 20 02 19 58 19 51 19 42 19 31	6	00 10 20 30 40 50	
7	00 10 20 30 40 50	00 10 20 30 40 50	28 56 27 36 28 10 27 42 27 13 26 40	27 57 27 36 27 13 26 47 26 17 25 46	27 00 26 39 26 16 25 50 25 23 24 52	26 02 25 42 25 20 24 55 24 28 23 58	25 04 24 46 24 24 24 00 23 34 23 04	24 06 23 47 23 27 23 04 22 38 22 10	23 08 22 50 22 30 22 08 21 43 21 17	22 11 21 54 21 35 21 14 20 50 20 24	21 13 20 56 20 38 20 17 19 54 19 29	20 15 19 59 19 42 19 21 19 00 18 36	19 18 19 03 18 46 18 27 18 06 17 43	7	00 10 20 30 40 50	
8	00 10 20 30 40 50	00 10 20 30 40 50	26 05 25 27 24 46 24 02 23 16 22 27	25 12 24 35 23 55 23 12 22 27 21 40	24 18 23 42 23 04 22 22 21 40 20 53	23 26 22 51 22 13 21 34 20 51 20 06	22 33 21 59 21 23 20 44 19 15 19 20	21 40 21 07 20 32 19 55 18 28 18 34	20 47 20 16 19 42 19 06 18 28 17 48	19 55 19 25 18 53 18 18 17 41 17 02	19 03 18 33 18 02 17 30 16 54 16 17	18 10 17 42 17 13 16 41 16 06 15 31	17 18 16 51 16 23 15 53 15 20 14 46	8	00 10 20 30 40 50	
9	00 10 20 30 40 50	00 10 20 30 40 50	21 35 20 41 19 44 18 44 17 42 16 38	20 50 19 57 18 03 17 03 16 01 15 01	20 04 19 13 18 20 17 24 16 25 15 26	19 19 18 29 17 38 16 44 15 48 14 50	18 35 17 47 16 57 16 05 15 11 14 15	17 50 17 04 16 15 15 26 14 33 13 40	17 05 16 21 15 35 14 47 13 57 13 05	16 22 15 39 14 55 14 08 13 21 12 31	15 37 14 57 14 14 13 30 12 44 11 57	14 54 14 15 13 34 12 52 12 08 11 22	14 11 13 34 12 55 12 14 11 33 10 49	9	00 10 20 30 40 50	
10	00 10 20 30 40 50	00 10 20 30 40 50	15 31 14 22 13 11 11 58 10 43 9 26	14 57 13 50 12 42 11 31 10 19 9 06	14 23 13 19 12 13 11 05 9 55 8 44	13 50 12 47 11 46 10 39 9 32 8 23	13 17 12 17 11 17 10 13 9 09 8 03	12 45 11 46 10 50 9 47 8 45 7 43	12 12 11 17 10 22 9 23 8 24 7 23	11 40 10 47 9 55 8 58 8 01 7 03	11 08 10 18 9 27 8 33 7 39 6 44	10 36 9 48 8 59 8 07 7 17 6 24	10 05 9 20 8 33 7 45 6 55 6 05	10	00 10 20 30 40 50	
11	00 10 20 30 40 50	00 10 20 30 40 50	8 09 6 49 5 32 4 08 2 45 1 23	7 50 6 34 5 16 3 58 2 39 1 20	7 32 6 19 5 04 3 48 2 33 1 16	7 14 6 03 4 51 3 39 2 26 1 13	6 56 5 48 4 40 3 30 2 20 1 10	6 38 5 33 4 28 3 21 2 14 1 07	6 21 5 20 4 17 3 13 2 08 1 04	6 05 5 06 4 05 3 05 2 04 1 01	5 47 4 51 3 54 2 56 1 57 0 58	5 30 4 37 3 43 2 48 1 51 0 55	5 14 4 23 3 32 2 38 1 45 0 53	11	00 10 20 30 40 50	
12	00	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 6°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 6°.	
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	10	7 20	6 55	6 32	6 11	5 52	5 35	5 19	5 04	4 49	4 37	4 25	4 13	0	10
0	20	14 26	13 38	12 53	12 13	11 37	11 02	10 31	10 02	9 34	9 08	8 44	8 23	0	20
0	30	21 03	19 55	18 53	17 56	17 04	16 15	15 30	14 48	14 09	13 32	12 58	12 26	0	30
0	40	27 04	25 43	24 26	23 16	22 12	21 11	20 14	19 21	18 32	17 44	17 00	16 20	0	40
0	50	32 25	30 54	29 28	28 08	26 54	25 44	24 37	23 36	22 37	21 42	20 50	20 01	0	50
1	00	37 07	35 30	33 58	32 32	31 10	29 53	28 40	27 32	26 26	25 24	24 26	23 30	1	00
1	10	41 13	39 34	37 58	36 27	35 01	33 40	32 22	31 08	29 57	28 50	27 46	26 45	1	10
1	20	44 47	43 06	41 28	39 56	38 28	37 02	35 42	34 24	33 11	31 59	30 51	29 45	1	20
1	30	47 52	46 11	44 34	43 01	41 32	40 04	38 42	37 23	36 06	34 52	33 40	32 32	1	30
1	40	50 32	48 53	47 16	45 43	44 14	42 48	41 24	40 04	38 45	37 29	36 16	35 05	1	40
1	50	52 50	51 12	49 38	48 06	46 38	45 11	43 48	42 27	41 08	39 51	38 36	37 25	1	50
2	00	54 50	53 16	51 44	50 13	48 46	47 20	45 57	44 36	43 17	42 00	40 45	39 32	2	00
2	10	56 34	55 02	53 32	52 04	50 38	49 14	47 52	46 31	45 13	43 56	42 41	41 26	2	10
2	20	58 06	56 36	55 08	53 42	52 18	50 56	49 35	48 15	46 57	45 40	44 26	43 12	2	20
2	30	59 25	57 58	56 32	55 09	53 47	52 25	51 06	49 47	48 31	47 14	46 00	44 47	2	30
2	40	60 34	59 10	57 47	56 25	55 05	53 45	52 27	51 10	49 54	48 39	47 25	46 12	2	40
2	50	61 34	60 13	58 52	57 33	56 14	54 56	53 39	52 24	51 09	49 54	48 41	47 30	2	50
3	00	62 27	61 08	59 49	58 32	57 15	55 58	54 43	53 29	52 14	51 01	49 50	48 39	3	00
3	10	63 13	61 56	60 40	59 23	58 08	56 54	55 40	54 27	53 14	52 02	50 51	49 40	3	10
3	20	63 53	62 38	61 23	60 09	58 56	57 42	56 30	55 18	54 07	52 55	51 46	50 37	3	20
3	30	64 27	63 14	62 02	60 49	59 37	58 26	57 14	56 04	54 54	53 44	52 34	51 25	3	30
3	40	64 57	63 45	62 35	61 23	60 13	59 02	57 53	56 44	55 34	54 25	53 17	52 09	3	40
3	50	65 22	64 13	63 02	61 53	60 44	59 35	58 26	57 18	56 10	55 02	53 55	52 47	3	50
4	00	65 44	64 35	63 26	62 18	61 11	60 02	58 55	57 48	56 41	55 34	54 28	53 21	4	00
4	10	66 01	64 54	63 47	62 40	61 33	60 26	59 20	58 15	57 08	56 02	54 56	53 51	4	10
4	20	66 15	65 09	64 04	62 58	61 52	60 46	59 41	58 36	57 30	56 25	55 21	54 16	4	20
4	30	66 26	65 21	64 17	63 12	62 07	61 02	59 58	58 54	57 49	56 45	55 41	54 37	4	30
4	40	66 35	65 31	64 27	63 23	62 19	61 15	59 58	58 54	57 49	56 45	55 57	54 53	4	40
4	50	66 41	65 37	64 33	63 31	62 27	61 24	60 22	59 19	58 15	57 12	56 10	55 07	4	50
5	00	66 43	65 40	64 38	63 35	62 33	61 30	60 28	59 26	58 23	57 22	56 19	55 17	5	00
5	10	66 43	65 41	64 38	63 37	62 35	61 34	60 32	59 31	58 28	57 27	56 25	55 24	5	10
5	20	66 40	65 40	64 38	63 37	62 35	61 34	60 33	59 32	58 30	57 29	56 27	55 27	5	20
5	30	66 35	65 35	64 35	63 33	62 33	61 31	60 31	59 31	58 29	57 29	56 27	55 27	5	30
5	40	66 29	65 28	64 28	63 28	62 27	61 27	60 26	59 26	58 26	57 24	56 24	55 24	5	40
5	50	66 19	65 19	64 19	63 19	62 19	61 19	60 18	59 18	58 18	57 18	56 18	55 18	5	50
6	00	66 07	65 07	64 07	63 08	62 08	61 08	60 08	59 09	58 09	57 08	56 09	55 09	6	00
6	10	65 52	64 53	63 53	62 54	61 54	60 55	59 55	58 56	57 55	56 56	55 56	54 57	6	10
6	20	65 35	64 37	63 37	62 38	61 38	60 37	59 39	58 39	57 40	56 41	55 41	54 42	6	20
6	30	65 15	64 17	63 18	62 18	61 18	60 20	59 18	58 21	57 22	56 22	55 23	54 23	6	30
6	40	64 56	63 55	62 56	61 56	60 57	59 58	58 58	58 00	57 00	56 01	55 02	54 03	6	40
6	50	64 31	63 31	62 32	61 32	60 32	59 33	58 34	57 34	56 35	55 35	54 37	53 37	6	50
7	00	64 04	63 04	62 04	61 04	60 05	59 05	58 06	57 08	56 07	55 08	54 09	53 11	7	00
7	10	63 34	62 34	61 34	60 34	59 34	58 34	57 35	56 36	55 36	54 36	53 38	52 39	7	10
7	20	63 01	62 01	61 00	60 00	59 00	58 00	57 01	56 01	55 02	54 03	53 03	52 05	7	20
7	30	62 24	61 24	60 24	59 24	58 22	57 23	56 23	55 24	54 24	53 24	52 25	51 26	7	30
7	40	61 45	60 44	59 43	58 43	57 42	56 42	55 41	54 42	53 43	52 43	51 44	50 45	7	40
7	50	61 02	60 00	59 00	58 00	57 00	56 00	55 00	54 00	53 00	52 00	51 00	50 00	7	50
8	00	60 15	59 12	58 11	57 09	56 09	55 08	54 07	53 07	52 07	51 08	50 08	49 10	8	00
8	10	59 23	58 21	57 19	56 17	55 15	54 14	53 14	52 13	51 15	50 14	49 15	48 15	8	10
8	20	58 28	57 24	56 22	55 20	54 17	53 16	52 16	51 15	50 14	49 15	48 16	47 17	8	20
8	30	57 27	56 23	55 20	54 18	53 15	52 14	51 12	50 12	49 11	48 11	47 13	46 13	8	30
8	40	56 21	55 17	54 13	53 10	52 07	51 05	50 04	49 04	48 03	47 03	46 04	45 05	8	40
8	50	55 09	54 04	53 00	51 56	50 53	49 52	48 49	47 49	46 49	45 49	44 50	43 52	8	50
9	00	53 51	52 45	51 40	50 37	49 34	48 31	47 30	46 29	45 28	44 30	43 31	42 33	9	00
9	10	52 25	51 19	50 15	49 10	48 07	47 05	46 03	45 03	44 03	43 04	42 05	41 08	9	10
9	20	50 53	49 46	48 41	47 36	46 33	45 31	44 30	43 29	42 30	41 31	40 34	39 38	9	20
9	30	49 11	48 04	46 59	45 55	44 52	43 49	42 48	41 49	40 50	39 53	38 55	37 58	9	30
9	40	47 21	46 14	45 09	44 05	43 02	42 01	40 59	40 01	39 03	38 06	37 11	36 15	9	40
9	50	45 21	44 14	43 09	42 06	41 03	40 03	39 03	38 05	37 08	36 12	35 17	34 25	9	50
10	00	43 09	42 03	41 00	39 56	38 55	37 56	36 57	35 58	34 59	33 59	32 59	31 59	10	00
10	10	40 46	39 41	38 38	37 36	36 36	35 38	34 41	33 41	32 43	31 44	30 44	29 45	10	10
10	20	38 11	37 08	36 05	35 06	34 08	33 12	32 17	31 17	30 18	29 19	28 20	27 21	10	20
10	30	35 21	34 20	33 21	32 24	31 28	30 34	29 43	28 53	28 03	27 16	26 30	25 45	10	30
10	40	32 18	31 19	30 24	29 29	28 36	27 46	26 58	26 11	25 25	24 41	23 58	23 17	10	40
10	50	29 00	28 05	27 13	26 23	25 34	24 47	24 03	23 19	22 38	21 58	21 19	20 42	10	50
11	00	25 27	24 37	23 50	23 04	22 21	21 39	20 58	20 20	19 42	19 07	18 33	17 59	11	00
11	10	21 40	20 57	20 14	19 34	18 56	18 20	17 45	17 11	16 39	16 09	15 39	15 11	11	10
11	20	17 39	17 02	16 28	15 54	15 22	14 52	14 23	13 55	13 28	13 04	12 39	12 16	11	20
11	30	13 26	12 57	12 30	12 04	11 40	11 16	10 54	10 33	10 12	9 52	9 34	9 16	11	30
11	40	9 04	8 43	8 25	8 07	7 50	7 35	7 19	7 05	6 51	6 38	6 25	6 13	11	40
11	50	4 34	4 23	4 14	4 05	3 56	3 48	3 41	3 33	3 26	3 19	3 14	3 07	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 6°.		DECLINATION—SAME NAME AS—LATITUDE												LATITUDE 6°.	
Hour Angle.		36°	37°	38°	39°	40°	41°	42°	43°	44°	45°	46°	47°	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	4 02	3 52	3 43	3 34	3 25	3 18	3 09	3 02	2 55	2 49	2 42	2 36		10
	20	8 02	7 41	7 22	7 05	6 49	6 33	6 17	6 02	5 49	5 35	5 23	5 11		20
	30	11 55	11 25	10 58	10 32	10 08	9 44	9 22	9 01	8 39	8 20	8 01	7 42		30
	40	15 39	15 03	14 27	13 53	13 21	12 50	12 21	11 54	11 27	11 02	10 37	10 13		40
	50	19 13	18 29	17 47	17 07	16 28	15 51	15 15	14 42	14 10	13 38	13 08	12 39		50
1	00	22 36	21 45	20 57	20 11	19 26	18 44	18 03	17 24	16 46	16 10	15 34	15 01	1	00
	10	25 46	24 50	23 56	23 08	22 15	21 26	20 42	19 58	19 16	18 35	17 55	17 16		10
	20	28 42	27 43	26 44	25 48	24 55	24 03	23 13	22 25	21 39	20 53	20 10	19 27		20
	30	31 27	30 22	29 21	28 22	27 24	26 30	25 35	24 44	23 54	23 06	22 18	21 32		30
	40	33 57	32 51	31 47	30 45	29 44	28 46	27 49	26 55	26 02	25 10	24 19	23 30		40
	50	36 15	35 07	34 01	32 50	31 53	30 54	29 55	28 57	28 02	27 06	26 13	25 22		50
2	00	38 21	37 12	36 04	34 59	33 54	32 52	31 51	30 51	29 54	28 57	28 02	27 08	2	00
	10	40 16	39 06	37 57	36 51	35 45	34 41	33 39	32 37	31 39	30 42	29 45	28 47		10
	20	42 01	40 50	39 41	38 33	37 27	36 22	35 18	34 16	33 16	32 15	31 17	30 20		20
	30	43 35	42 25	41 16	40 07	39 00	37 55	36 50	35 47	34 45	33 44	32 44	31 46		30
	40	45 01	43 50	42 42	41 33	40 25	39 20	38 15	37 11	36 09	35 07	34 06	33 06		40
	50	46 18	45 08	43 59	42 51	41 43	40 38	39 33	38 28	37 25	36 22	35 20	34 19		50
3	00	47 28	46 19	45 10	44 02	42 55	41 49	40 43	39 38	38 35	37 31	36 29	35 28	3	00
	10	48 31	47 22	46 14	45 06	43 59	42 54	41 48	40 43	39 40	38 35	37 33	36 31		10
	20	49 27	48 19	47 11	46 03	44 57	43 51	42 45	41 41	40 38	39 32	38 31	37 29		20
	30	50 17	49 10	48 02	46 56	45 49	44 44	43 38	42 34	41 30	40 26	39 24	38 21		30
	40	51 02	49 55	48 48	47 42	46 36	45 31	44 26	43 22	42 18	41 15	40 11	39 08		40
	50	51 42	50 35	49 29	48 23	47 18	46 13	45 08	44 04	43 00	41 57	40 54	39 51		50
4	00	52 16	51 10	50 04	49 00	47 55	46 50	45 46	44 42	43 39	42 35	41 32	40 30	4	00
	10	52 46	51 40	50 36	49 31	48 26	47 23	46 19	45 15	44 12	43 08	42 05	41 04		10
	20	53 11	52 07	51 02	49 58	48 55	47 51	46 48	45 44	44 42	43 39	42 36	41 33		20
	30	53 33	52 28	51 25	50 22	49 19	48 16	47 12	46 09	45 06	44 04	43 01	42 00		30
	40	53 50	52 47	51 44	50 41	49 38	48 35	47 33	46 30	45 28	44 25	43 24	42 21		40
	50	54 04	53 01	51 59	50 56	49 54	48 51	47 50	46 48	45 46	44 43	43 41	42 40		50
5	00	54 15	53 13	52 11	51 08	50 06	49 05	48 03	47 01	45 59	44 57	43 55	42 54	5	00
	10	54 22	53 20	52 19	51 17	50 16	49 14	48 12	47 11	46 09	45 08	44 07	43 05		10
	20	54 26	53 24	52 23	51 22	50 21	49 19	48 18	47 17	46 17	45 15	44 14	43 13		20
	30	54 27	53 25	52 25	51 24	50 23	49 22	48 20	47 20	46 20	45 18	44 18	43 17		30
	40	54 23	53 23	52 23	51 22	50 21	49 21	48 20	47 20	46 20	45 18	44 18	43 18		40
	50	54 18	53 18	52 17	51 16	50 17	49 17	48 16	47 16	46 17	45 15	44 15	43 15		50
6	00	54 09	53 09	52 08	51 10	50 10	49 10	48 10	47 09	46 10	45 09	44 10	43 10	6	00
	10	53 06	52 06	51 05	50 08	49 08	48 08	47 09	46 09	45 09	44 09	43 09	42 08		10
	20	53 43	52 43	51 44	50 44	49 44	48 45	47 45	46 46	45 46	44 47	43 48	42 48		20
	30	53 24	52 25	51 25	50 27	49 27	48 28	47 29	46 30	45 31	44 31	43 33	42 33		30
	40	53 03	52 04	51 05	50 06	49 07	48 08	47 09	46 10	45 12	44 12	43 13	42 13		40
	50	52 38	51 40	50 41	49 42	48 43	47 44	46 46	45 47	44 48	43 49	42 51	41 52		50
7	00	52 11	51 12	50 13	49 15	48 16	47 18	46 19	45 21	44 22	43 23	42 25	41 26	7	00
	10	51 39	50 42	49 44	48 44	47 46	46 47	45 49	44 50	43 53	42 55	41 57	40 58		10
	20	51 06	50 07	49 09	48 10	47 12	46 13	45 15	44 18	43 20	42 22	41 25	40 26		20
	30	50 27	49 28	48 31	47 33	46 34	45 37	44 39	43 41	42 44	41 46	40 49	39 51		30
	40	49 46	48 48	47 50	46 51	45 54	44 55	43 58	43 00	42 04	41 07	40 09	39 12		40
	50	49 01	48 02	47 03	46 06	45 08	44 11	43 14	42 17	41 20	40 24	39 27	38 30		50
8	00	48 10	47 12	46 14	45 17	44 20	43 22	42 25	41 29	40 32	39 36	38 41	37 44	8	00
	10	47 17	46 19	45 21	44 24	43 26	42 28	41 33	40 37	39 41	38 45	37 50	36 54		10
	20	46 18	45 21	44 23	43 25	42 29	41 33	40 37	39 41	38 45	37 50	36 56	36 02		20
	30	45 16	44 17	43 21	42 24	41 27	40 31	39 36	38 41	37 46	36 52	35 58	35 04		30
	40	44 08	43 10	42 14	41 16	40 21	39 25	38 31	37 37	36 42	35 49	34 56	34 03		40
	50	42 55	41 58	41 01	40 06	39 10	38 15	37 21	36 28	35 34	34 41	33 50	32 57		50
9	00	41 36	40 39	39 43	38 49	37 53	37 00	36 06	35 14	34 22	33 29	32 39	31 48	9	00
	10	40 12	39 16	38 20	37 26	36 33	35 39	34 47	33 56	33 05	32 14	31 24	30 34		10
	20	38 41	37 46	36 52	35 59	35 06	34 14	33 23	32 33	31 43	30 53	30 05	29 16		20
	30	37 04	36 11	35 17	34 26	33 34	32 43	31 53	31 05	30 16	29 28	28 41	27 55		30
	40	35 21	34 29	33 37	32 46	31 56	31 07	30 19	29 32	28 44	27 58	27 13	26 28		40
	50	33 32	32 41	31 50	31 01	30 13	29 25	28 39	27 53	27 08	26 24	25 40	24 57		50
10	00	31 35	30 46	29 58	29 10	28 24	27 38	26 53	26 10	25 27	24 44	24 04	23 23	10	00
	10	29 31	28 44	27 57	27 13	26 28	25 45	25 03	24 21	23 41	23 01	22 22	21 43		10
	20	27 21	26 35	25 52	25 09	24 27	23 47	23 07	22 28	21 50	21 13	20 36	20 00		20
	30	25 03	24 21	23 39	23 00	22 21	21 43	21 06	20 30	19 55	19 20	18 46	18 13		30
	40	22 37	21 58	21 20	20 44	20 08	19 33	18 59	18 27	17 55	17 22	16 52	16 22		40
	50	20 05	19 30	18 56	18 22	17 51	17 20	16 49	16 20	15 50	15 22	14 55	14 27		50
11	00	17 27	16 55	16 26	15 56	15 27	14 51	14 34	14 07	13 43	13 18	12 54	12 30	11	00
	10	14 43	14 16	13 50	13 25	13 00	12 38	12 15	11 53	11 31	11 10	10 50	10 30		10
	20	11 53	11 31	11 10	10 50	10 29	10 10	9 52	9 34	9 17	9 00	8 43	8 27		20
	30	8 59	8 42	8 26	8 11	7 55	7 41	7 27	7 13	7 00	6 47	6 34	6 22		30
	40	6 01	5 50	5 39	5 29	5 18	5 09	4 59	4 50	4 41	4 32	4 24	4 15		40
	50	3 01	2 55	2 50	2 45	2 39	2 34	2 30	2 25	2 21	2 16	2 12	2 08		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 names, 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 6°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 6°.	
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 30	2 24	2 19	2 13	2 08	2 04	1 59	1 54	1 49	1 45	1 41	1 37	0	10
0	20	4 59	4 48	4 36	4 26	4 16	4 06	3 57	3 47	3 39	3 30	3 22	3 13	0	20
0	30	7 25	7 09	6 53	6 38	6 22	6 08	5 54	5 39	5 26	5 14	5 01	4 49	0	30
0	40	9 50	9 28	9 07	8 47	8 27	8 08	7 48	7 30	7 13	6 56	6 39	6 23	0	40
0	50	12 11	11 44	11 18	10 53	10 28	10 05	9 42	9 19	8 58	8 36	8 16	7 56	0	50
1	00	14 28	13 56	13 25	12 56	12 27	11 59	11 32	11 06	10 40	10 16	9 51	9 27	1	00
1	10	16 40	16 04	15 29	14 55	14 23	13 51	13 20	12 50	12 20	11 51	11 24	10 56	1	10
1	20	18 46	18 06	17 28	16 51	16 14	15 39	15 04	14 30	13 58	13 25	12 54	12 23	1	20
1	30	20 48	20 04	19 22	18 41	18 01	17 22	16 44	16 07	15 32	14 56	14 22	13 47	1	30
1	40	22 43	21 56	21 11	20 27	19 43	19 02	18 21	17 41	17 02	16 23	15 46	15 09	1	40
1	50	24 32	23 43	22 54	22 08	21 21	20 37	19 53	19 11	18 29	17 47	17 08	16 28	1	50
2	00	26 16	25 24	24 32	23 44	22 55	22 08	21 21	20 36	19 53	19 08	18 25	17 44	2	00
2	10	27 52	26 58	26 05	25 14	24 23	23 34	22 45	21 58	21 12	20 25	19 40	18 56	2	10
2	20	29 22	28 26	27 33	26 39	25 46	24 56	24 05	23 16	22 27	21 38	20 51	20 04	2	20
2	30	30 48	29 50	28 55	27 59	27 06	26 12	25 19	24 29	23 38	22 48	21 59	21 10	2	30
2	40	32 07	31 08	30 11	29 15	28 19	27 25	26 30	25 37	24 45	23 53	23 02	22 12	2	40
2	50	33 20	32 20	31 22	30 25	29 27	28 31	27 36	26 42	25 48	24 55	24 02	23 11	2	50
3	00	34 28	33 27	32 27	31 29	30 32	29 35	28 38	27 42	26 47	25 53	24 59	24 05	3	00
3	10	35 29	34 29	33 28	32 30	31 31	30 33	29 35	28 39	27 43	26 47	25 51	24 57	3	10
3	20	36 27	35 25	34 25	33 25	32 26	31 27	30 29	29 31	28 35	27 38	26 41	25 46	3	20
3	30	37 19	36 17	35 16	34 16	33 15	32 16	31 18	30 19	29 22	28 24	27 26	26 29	3	30
3	40	38 07	37 04	36 03	35 02	34 02	33 02	32 03	31 03	30 05	29 07	28 08	27 11	3	40
3	50	38 49	37 47	36 46	35 45	34 43	33 43	32 43	31 44	30 45	29 46	28 47	27 48	3	50
4	00	39 27	38 25	37 24	36 22	35 21	34 21	33 20	32 20	31 20	30 21	29 22	28 23	4	00
4	10	40 02	38 99	37 57	36 56	35 54	34 54	33 53	32 53	31 53	30 54	29 54	28 54	4	10
4	20	40 31	39 29	38 27	37 26	36 25	35 24	34 22	33 22	32 22	31 21	30 22	29 21	4	20
4	30	40 57	39 54	38 54	37 53	36 51	35 50	34 49	33 48	32 48	31 46	30 46	29 47	4	30
4	40	41 20	40 17	39 16	38 14	37 12	36 12	35 11	34 10	33 09	32 08	31 08	30 07	4	40
4	50	41 38	40 35	39 34	38 33	37 32	36 31	35 29	34 29	33 28	32 27	31 27	30 26	4	50
5	00	41 52	40 51	39 49	38 49	37 47	36 47	35 45	34 44	33 44	32 42	31 42	30 41	5	00
5	10	42 04	41 02	40 01	39 00	37 59	36 58	35 57	34 56	33 55	32 55	31 54	30 53	5	10
5	20	42 11	41 11	40 09	39 08	38 07	37 07	36 06	35 05	34 05	33 04	32 03	31 02	5	20
5	30	42 17	41 15	40 15	39 14	38 12	37 12	36 11	35 10	34 10	33 09	32 09	31 08	5	30
5	40	42 17	41 17	40 16	39 15	38 14	37 14	36 14	35 13	34 13	33 12	32 11	31 11	5	40
5	50	42 16	41 15	40 14	39 14	38 14	37 13	36 13	35 12	34 13	33 12	32 12	31 11	5	50
6	00	42 09	41 10	40 09	39 09	38 08	37 09	36 08	35 09	34 09	33 09	32 09	31 08	6	00
6	10	42 01	41 01	40 01	39 01	38 02	37 02	36 01	35 02	34 02	33 02	32 02	31 02	6	10
6	20	41 49	40 49	39 50	38 51	37 51	36 51	35 52	34 52	33 53	32 53	31 54	30 54	6	20
6	30	41 34	40 35	39 35	38 36	37 37	36 37	35 39	34 40	33 41	32 42	31 43	30 43	6	30
6	40	41 16	40 17	39 18	38 19	37 20	36 21	35 22	34 24	33 26	32 26	31 28	30 29	6	40
6	50	40 55	39 55	38 57	37 58	36 59	35 62	34 63	33 65	32 67	31 68	30 70	29 71	6	50
7	00	40 30	39 31	38 33	37 34	36 37	35 39	34 41	33 43	32 46	31 47	30 50	29 51	7	00
7	10	40 01	39 03	38 05	37 06	36 10	35 13	34 15	33 18	32 21	31 23	30 27	29 29	7	10
7	20	39 29	38 32	37 35	36 38	35 41	34 44	33 47	32 50	31 53	30 57	29 60	28 63	7	20
7	30	38 56	37 58	37 01	36 05	35 08	34 12	33 15	32 19	31 23	30 27	29 32	28 36	7	30
7	40	38 17	37 20	36 24	35 28	34 32	33 37	32 40	31 45	30 50	29 54	28 59	28 04	7	40
7	50	37 35	36 39	35 44	34 48	33 53	32 58	32 02	31 08	30 14	29 19	28 25	27 31	7	50
8	00	36 50	35 54	34 59	34 04	33 09	32 15	31 21	30 27	29 34	28 40	27 47	26 54	8	00
8	10	36 00	35 06	34 12	33 18	32 24	31 30	30 37	29 43	28 50	27 57	27 07	26 14	8	10
8	20	35 08	34 14	33 21	32 27	31 34	30 42	29 50	28 57	28 06	27 14	26 23	25 32	8	20
8	30	34 12	33 18	32 26	31 33	30 41	29 50	28 59	28 08	27 17	26 27	25 37	24 47	8	30
8	40	33 11	32 19	31 27	30 36	29 45	28 55	28 05	27 15	26 26	25 36	24 48	23 58	8	40
8	50	32 07	31 16	30 25	29 35	28 45	27 56	27 07	26 19	25 31	24 42	23 55	23 08	8	50
9	00	30 59	30 08	29 19	28 31	27 42	26 54	26 06	25 20	24 33	23 46	23 00	22 14	9	00
9	10	29 46	28 57	28 10	27 21	26 35	25 49	25 02	24 17	23 32	22 47	22 03	21 18	9	10
9	20	28 29	27 43	26 56	26 10	25 25	24 40	23 55	23 12	22 29	21 45	21 03	20 20	9	20
9	30	27 09	26 23	25 39	24 54	24 11	23 28	22 44	22 03	21 21	20 39	19 59	19 18	9	30
9	40	25 44	25 01	24 18	23 35	22 53	22 12	21 33	20 51	20 11	19 31	18 53	18 14	9	40
9	50	24 16	23 34	22 53	22 12	21 32	20 54	20 14	19 36	18 58	18 22	17 45	17 08	9	50
10	00	22 43	22 03	21 25	20 46	20 08	19 31	18 55	18 19	17 43	17 08	16 34	15 59	10	00
10	10	21 06	20 29	19 52	19 16	18 41	18 06	17 32	16 58	16 25	15 52	15 20	14 47	10	10
10	20	19 25	18 50	18 16	17 43	17 11	16 38	16 06	15 36	15 05	14 34	14 05	13 35	10	20
10	30	17 41	17 09	16 38	16 07	15 36	15 08	14 38	14 10	13 42	13 14	12 47	12 20	10	30
10	40	15 53	15 24	14 55	14 28	14 00	13 34	13 07	12 41	12 16	11 51	11 27	11 02	10	40
10	50	14 01	13 36	13 11	12 46	12 21	11 58	11 34	11 12	10 49	10 26	10 05	9 44	10	50
11	00	12 07	11 44	11 22	11 01	10 40	10 20	9 59	9 39	9 20	9 01	8 41	8 23	11	00
11	10	10 11	9 52	9 32	9 14	8 57	8 40	8 22	8 05	7 50	7 33	7 17	7 01	11	10
11	20	8 11	7 55	7 40	7 26	7 12	6 57	6 44	6 30	6 17	6 04	5 52	5 39	11	20
11	30	6 10	5 58	5 47	5 36	5 25	5 15	5 04	4 54	4 44	4 34	4 25	4 15	11	30
11	40	4 08	4 00	3 52	3 45	3 37	3 30	3 24	3 17	3 10	3 03	2 56	2 51	11	40
11	50	2 04	2 00	1 57	1 53	1 49	1 46	1 42	1 38	1 35	1 32	1 28	1 25	11	50
11	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	11	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

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

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

AZIMUTH OR TRUE BEARING.

LATITUDE 8°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 8°.	
Hour Angle.		48°	49°	50°	51°	52°	53°	54°	55°	56°	57°	58°	59°	Hour Angle.	
h	m.	0	1	0	1	0	1	0	1	0	1	0	1	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 35	2 30	2 24	2 18	2 12	2 06	1 57	1 52	1 48	1 44	1 40	1 39	1	10
	20	5 11	4 59	4 47	4 36	4 25	4 15	4 04	3 55	3 45	3 36	3 27	3 18		20
	30	7 43	7 28	7 13	6 52	6 36	6 20	6 05	5 51	5 36	5 23	5 10	4 56		30
	40	10 14	9 50	9 27	9 05	8 44	8 24	8 04	7 45	7 26	7 08	6 50	6 33		40
	50	12 39	12 10	11 43	11 16	10 49	10 24	10 01	9 37	9 14	8 51	8 30	8 09		50
1	00	15 00	14 27	13 54	13 23	12 52	12 23	11 54	11 26	10 59	10 32	10 08	9 42	1	00
	10	17 16	16 38	16 01	15 26	14 50	14 17	13 45	13 12	12 42	12 11	11 42	11 13		10
	20	19 26	18 44	18 03	17 23	16 44	16 07	15 31	14 56	14 21	13 47	13 14	12 42		20
	30	21 30	20 45	20 00	19 16	18 35	17 54	17 14	16 35	15 57	15 20	14 44	14 08		30
	40	23 28	22 39	21 51	21 04	20 19	19 35	18 52	18 10	17 29	16 48	16 10	15 31		40
	50	25 18	24 27	23 37	22 48	21 59	21 12	20 26	19 41	18 57	18 14	17 32	16 50		50
2	00	27 03	26 09	25 16	24 24	23 34	22 43	21 55	21 08	20 22	19 35	18 51	18 08	2	00
	10	28 40	27 44	26 50	25 55	25 02	24 11	23 20	22 30	21 41	20 54	20 07	19 21		10
	20	30 11	29 14	28 17	27 21	26 26	25 32	24 40	23 48	22 57	22 07	21 18	20 30		20
	30	31 35	30 37	29 39	28 41	27 45	26 50	25 56	25 02	24 09	23 17	22 26	21 36		30
	40	32 52	31 55	30 55	29 56	28 59	28 01	27 06	26 11	25 17	24 23	23 31	22 38		40
	50	34 06	33 06	32 05	31 05	30 06	29 08	28 11	27 15	26 19	25 24	24 31	23 36		50
3	00	35 14	34 11	33 11	32 10	31 10	30 11	29 13	28 15	27 18	26 22	25 26	24 31	3	00
	10	36 14	35 12	34 11	33 09	32 08	31 09	30 09	29 11	28 13	27 16	26 19	25 22		10
	20	37 10	36 07	35 05	34 03	33 02	32 02	31 02	30 02	29 04	28 05	27 08	26 10		20
	30	38 01	36 58	35 55	34 52	33 51	32 50	31 49	30 49	29 50	28 51	27 53	26 54		30
	40	38 46	37 43	36 40	35 38	34 35	33 34	32 32	31 33	30 33	29 33	28 34	27 34		40
	50	39 26	38 24	37 21	36 19	35 16	34 15	33 13	32 11	31 11	30 11	29 11	28 11		50
4	00	40 03	39 00	37 57	36 54	35 51	34 50	33 48	32 47	31 46	30 46	29 45	28 45	4	00
	10	40 35	39 32	38 30	37 27	36 24	35 22	34 20	33 19	32 17	31 16	30 16	29 15		10
	20	41 03	40 00	38 57	37 54	36 51	35 50	34 48	33 46	32 45	31 43	30 43	29 42		20
	30	41 26	40 23	39 21	38 19	37 16	36 14	35 12	34 10	33 09	32 07	31 06	30 04		30
	40	41 46	40 43	39 41	38 38	37 36	36 35	35 32	34 31	33 29	32 27	31 27	30 25		40
	50	42 02	41 00	39 57	38 56	37 53	36 52	35 50	34 48	33 46	32 44	31 43	30 42		50
5	00	42 15	41 12	40 10	39 09	38 06	37 05	36 03	35 02	34 00	32 58	31 58	30 56	5	00
	10	42 23	41 22	40 19	39 18	38 17	37 15	36 13	35 12	34 10	33 09	32 08	31 07		10
	20	42 28	41 27	40 25	39 24	38 23	37 22	36 20	35 19	34 18	33 17	32 16	31 14		20
	30	42 30	41 30	40 28	39 27	38 26	37 25	36 24	35 23	34 22	33 20	32 20	31 19		30
	40	42 29	41 28	40 28	39 27	38 26	37 25	36 24	35 24	34 23	33 22	32 22	31 20		40
	50	42 25	41 24	40 24	39 23	38 23	37 23	36 22	35 22	34 21	33 21	32 20	31 19		50
6	00	42 16	41 16	40 16	39 17	38 16	37 16	36 16	35 16	34 16	33 15	32 16	31 15	6	00
	10	42 05	41 06	40 06	39 07	38 06	37 07	36 06	35 07	34 07	33 08	32 08	31 08		10
	20	41 51	40 52	39 53	38 54	37 54	36 54	35 56	34 56	33 56	32 57	31 58	30 58		20
	30	41 34	40 35	39 36	38 37	37 38	36 39	35 41	34 41	33 42	32 43	31 45	30 45		30
	40	41 14	40 15	39 17	38 18	37 19	36 21	35 22	34 24	33 25	32 26	31 29	30 29		40
	50	40 50	39 52	38 54	37 56	36 57	35 59	35 01	34 04	33 06	32 08	31 10	30 12		50
7	00	40 23	39 25	38 26	37 27	36 28	35 29	34 30	33 31	32 32	31 33	30 34	29 35	7	00
	10	39 53	38 55	37 56	36 57	35 58	34 59	33 59	33 00	32 01	31 02	30 03	29 04		10
	20	39 19	38 21	37 22	36 23	35 24	34 25	33 26	32 27	31 28	30 29	29 30	28 31		20
	30	38 42	37 43	36 44	35 45	34 46	33 47	32 48	31 49	30 50	29 51	28 52	27 53		30
	40	38 02	37 03	36 04	35 05	34 06	33 07	32 08	31 09	30 10	29 11	28 12	27 13		40
	50	37 18	36 19	35 20	34 21	33 22	32 23	31 24	30 25	29 26	28 27	27 28	26 29		50
8	00	36 32	35 33	34 34	33 35	32 36	31 37	30 38	29 39	28 40	27 41	26 42	25 43	8	00
	10	35 41	34 42	33 43	32 44	31 45	30 46	29 47	28 48	27 49	26 50	25 51	24 52		10
	20	34 47	33 48	32 49	31 50	30 51	29 52	28 53	27 54	26 55	25 56	24 57	23 58		20
	30	33 49	32 50	31 51	30 52	29 53	28 54	27 55	26 56	25 57	24 58	23 59	22 59		30
	40	32 48	31 49	30 50	29 51	28 52	27 53	26 54	25 55	24 56	23 57	22 58	21 59		40
	50	31 41	30 42	29 43	28 44	27 45	26 46	25 47	24 48	23 49	22 50	21 51	20 52		50
9	00	30 33	29 34	28 35	27 36	26 37	25 38	24 39	23 40	22 41	21 42	20 43	19 44	9	00
	10	29 20	28 21	27 22	26 23	25 24	24 25	23 26	22 27	21 28	20 29	19 30	18 31		10
	20	28 03	27 04	26 05	25 06	24 07	23 08	22 09	21 10	20 11	19 12	18 13	17 14		20
	30	26 42	25 43	24 44	23 45	22 46	21 47	20 48	19 49	18 50	17 51	16 52	15 53		30
	40	25 17	24 18	23 19	22 20	21 21	20 22	19 23	18 24	17 25	16 26	15 27	14 28		40
	50	23 49	22 50	21 51	20 52	19 53	18 54	17 55	16 56	15 57	14 58	13 59	12 59		50
10	00	22 17	21 18	20 19	19 20	18 21	17 22	16 23	15 24	14 25	13 26	12 27	11 28	10	00
	10	20 41	19 42	18 43	17 44	16 45	15 46	14 47	13 48	12 49	11 50	10 51	9 52		10
	20	19 01	18 02	17 03	16 04	15 05	14 06	13 07	12 08	11 09	10 10	9 11	8 12		20
	30	17 19	16 20	15 21	14 22	13 23	12 24	11 25	10 26	9 27	8 28	7 29	6 30		30
	40	15 32	14 33	13 34	12 35	11 36	10 37	9 38	8 39	7 40	6 41	5 42	4 43		40
	50	13 42	12 43	11 44	10 45	9 46	8 47	7 48	6 49	5 50	4 51	3 52	2 53		50
11	00	11 51	10 52	9 53	8 54	7 55	6 56	5 57	4 58	3 59	2 59	1 59	0 59	11	00
	10	9 56	8 57	7 58	6 59	5 59	4 59	3 59	2 59	1 59	0 59	0 00	0 00		10
	20	8 00	7 01	6 02	5 03	4 03	3 03	2 03	1 03	0 03	0 00	0 00	0 00		20
	30	6 01	5 02	4 03	3 03	2 03	1 03	0 03	0 00	0 00	0 00	0 00	0 00		30
	40	4 02	3 03	2 03	1 03	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00		40
	50	2 01	1 02	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00		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 8°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 8°.	
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	1 35	1 31	1 27	1 23	1 19	1 15	1 12	1 09	1 05	1 02	0 58	
	20	3 10	3 02	2 53	2 46	2 38	2 30	2 24	2 16	2 09	2 03	1 56	
	30	4 44	4 31	4 20	4 08	3 57	3 46	3 35	3 25	3 14	3 03	2 54	
	40	6 17	6 01	5 45	5 29	5 15	5 00	4 45	4 32	4 17	4 04	3 50	
	50	7 48	7 28	7 09	6 50	6 31	6 13	5 55	5 38	5 21	5 04	4 47	
1	00	9 18	8 54	8 31	8 08	7 46	7 24	7 03	6 43	6 22	6 02	5 43	1
	10	10 46	10 18	9 51	9 26	9 00	8 35	8 11	7 47	7 23	7 00	6 38	
	20	12 11	11 40	11 10	10 41	10 12	9 45	9 17	8 50	8 23	7 56	7 31	
	30	13 34	13 00	12 27	11 55	11 22	10 52	10 21	9 51	9 21	8 52	8 24	
	40	14 54	14 17	13 41	13 05	12 31	11 57	11 23	10 51	10 19	9 46	9 15	
	50	16 11	15 31	14 52	14 14	13 37	13 00	12 24	11 48	11 13	10 39	10 05	
2	00	17 25	16 42	16 02	15 20	14 40	14 01	13 22	12 44	12 07	11 30	10 53	2
	10	18 35	17 51	17 07	16 24	15 41	14 59	14 18	13 38	12 58	12 19	11 40	
	20	19 43	18 56	18 10	17 24	16 40	15 55	15 12	14 30	13 47	13 05	12 25	
	30	20 46	19 57	19 10	18 22	17 36	16 50	16 04	15 20	14 35	13 51	13 07	
	40	21 47	20 57	20 07	19 18	18 29	17 41	16 53	16 07	15 20	14 34	13 49	
	50	22 44	21 51	21 01	20 09	19 19	18 29	17 39	16 51	16 03	15 15	14 28	
3	00	23 38	22 44	21 51	20 58	20 06	19 14	18 23	17 34	16 44	15 54	15 05	3
	10	24 27	23 32	22 38	21 44	20 51	19 58	19 05	18 14	17 22	16 31	15 41	
	20	25 14	24 18	23 22	22 27	21 32	20 38	19 44	18 51	17 59	17 06	16 14	
	30	25 57	25 00	24 01	23 07	22 11	21 15	20 20	19 26	18 32	17 38	16 45	
	40	26 36	25 39	24 41	23 44	22 47	21 50	20 54	20 00	19 04	18 08	17 14	
	50	27 13	26 14	25 16	24 17	23 20	22 23	21 25	20 29	19 33	18 37	17 41	
4	00	27 46	26 46	25 47	24 48	23 50	22 51	21 53	20 57	19 59	19 02	18 06	4
	10	28 15	27 15	26 16	25 18	24 17	23 18	22 19	21 22	20 23	19 26	18 28	
	20	28 42	27 41	26 41	25 40	24 41	23 41	22 43	21 44	20 45	19 46	18 48	
	30	29 05	28 04	27 04	26 03	25 03	24 03	23 02	22 04	21 05	20 06	19 06	
	40	29 24	28 23	27 23	26 22	25 22	24 22	23 20	22 22	21 21	20 21	19 22	
	50	29 41	28 40	27 39	26 38	25 38	24 36	23 36	22 36	21 35	20 35	19 35	
5	00	29 55	28 54	27 53	26 51	25 50	24 50	23 49	22 49	21 48	20 48	19 47	5
	10	30 06	29 04	28 04	27 02	26 01	25 00	23 59	22 59	21 58	20 57	19 57	
	20	30 13	29 12	28 11	27 10	26 09	25 07	24 07	23 07	22 05	21 05	20 04	
	30	30 18	29 17	28 16	27 15	26 14	25 12	24 11	23 12	22 11	21 10	20 09	
	40	30 20	29 19	28 18	27 17	26 17	25 15	24 15	23 15	22 13	21 13	20 12	
	50	30 19	29 18	28 18	27 16	26 17	25 16	24 15	23 15	22 13	21 13	20 12	
6	00	30 15	29 14	28 14	27 13	26 14	25 12	24 12	23 13	22 11	21 11	20 11	6
	10	30 08	29 08	28 08	27 08	26 08	25 08	24 07	23 08	22 07	21 07	20 08	
	20	29 59	28 59	28 00	27 00	26 00	25 00	24 00	23 01	22 01	21 01	20 02	
	30	29 46	28 47	27 48	26 48	25 50	24 50	23 51	22 52	21 52	20 53	19 54	
	40	29 32	28 33	27 34	26 35	25 36	24 37	23 39	22 40	21 42	20 43	19 44	
	50	29 13	28 16	27 17	26 19	25 21	24 23	23 24	22 27	21 29	20 31	19 33	
7	00	28 53	27 55	26 58	26 01	25 03	24 06	23 08	22 11	21 13	20 16	19 19	7
	10	28 30	27 33	26 36	25 39	24 43	23 46	22 49	21 53	20 56	19 59	19 03	
	20	28 04	27 07	26 10	25 16	24 20	23 24	22 28	21 33	20 37	19 41	18 45	
	30	27 36	26 40	25 45	24 50	23 55	23 00	22 04	21 11	20 15	19 20	18 25	
	40	27 04	26 09	25 15	24 21	23 27	22 33	21 39	20 45	19 51	18 57	18 04	
	50	26 30	25 37	24 44	23 50	22 57	22 04	21 10	20 19	19 25	18 33	17 40	
8	00	25 53	25 01	24 09	23 16	22 25	21 33	20 41	19 49	18 58	18 06	17 15	8
	10	25 13	24 22	23 31	22 41	21 51	21 00	20 09	19 19	18 28	17 38	16 47	
	20	24 32	23 43	22 53	22 02	21 13	20 24	19 34	18 46	17 56	17 07	16 18	
	30	23 47	22 59	22 10	21 21	20 34	19 46	18 58	18 10	17 22	16 35	15 47	
	40	23 00	22 13	21 26	20 39	19 53	19 06	18 20	17 34	16 47	16 01	15 15	
	50	22 10	21 25	20 39	19 53	19 09	18 24	17 38	16 55	16 09	15 25	14 41	
9	00	21 18	20 34	19 50	19 06	18 22	17 39	16 56	16 13	15 30	14 48	14 05	9
	10	20 23	19 41	18 58	18 16	17 34	16 53	16 11	15 31	14 49	14 09	13 28	
	20	19 26	18 45	18 05	17 24	16 44	16 04	15 25	14 46	14 07	13 27	12 48	
	30	18 27	17 48	17 09	16 30	15 52	15 14	14 36	14 00	13 23	12 45	12 08	
	40	17 24	16 48	16 11	15 35	14 58	14 22	13 47	13 12	12 36	12 02	11 26	
	50	16 20	15 46	15 12	14 37	14 03	13 29	12 55	12 23	11 49	11 16	10 43	
10	00	15 14	14 42	14 09	13 36	13 06	12 34	12 03	11 31	11 00	10 29	9 59	10
	10	14 06	13 35	13 06	12 35	12 06	11 36	11 07	10 39	10 10	9 42	9 13	
	20	12 56	12 27	12 00	11 32	11 05	10 38	10 11	9 45	9 18	8 53	8 26	
	30	11 44	11 18	10 53	10 28	10 03	9 39	9 14	8 51	8 26	8 03	7 39	
	40	10 29	10 07	9 44	9 21	9 00	8 37	8 15	7 54	7 33	7 12	6 50	
	50	9 15	8 54	8 35	8 15	7 55	7 36	7 16	6 58	6 38	6 19	6 01	
11	00	7 58	7 40	7 23	7 06	6 49	6 32	6 16	6 00	5 43	5 27	5 11	11
	10	6 40	6 25	6 11	5 57	5 43	5 28	5 15	5 01	4 46	4 33	4 20	
	20	5 21	5 09	4 57	4 47	4 35	4 24	4 13	4 01	3 50	3 39	3 29	
	30	4 02	3 53	3 44	3 35	3 26	3 18	3 09	3 01	2 53	2 45	2 37	
	40	2 42	2 36	2 30	2 24	2 18	2 13	2 07	2 01	1 56	1 51	1 46	
	50	1 21	1 17	1 14	1 12	1 09	1 06	1 03	1 00	0 57	0 55	0 52	
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 9°.		DECLINATION—SAME NAME AS—LATITUDE.														LATITUDE 9°.	
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°		Hour Angle.		
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	8 45	8 10	7 38	7 10	6 45	6 22	6 01	5 42	5 24	5 09	4 54	4 39	4 25	4 11	1	00
	20	17 04	15 58	14 58	14 05	13 17	12 32	11 53	11 16	10 41	10 11	9 42	9 14	8 47	8 21	2	00
	30	24 37	23 08	21 47	20 34	19 26	18 24	17 28	16 34	15 46	15 01	14 19	13 40	13 02	12 25	3	00
	40	31 18	29 33	27 56	26 27	25 05	23 49	22 39	21 34	20 34	19 37	18 44	17 54	17 07	16 21	4	00
	50	37 01	35 07	33 21	31 42	30 10	28 45	27 24	26 10	25 00	23 53	22 52	21 53	21 00	20 09	5	00
1	00	41 52	39 54	38 03	36 18	34 40	33 08	31 41	30 19	29 02	27 49	26 41	25 35	24 31	23 28	6	00
	10	45 59	44 00	42 07	40 21	38 40	37 03	35 33	34 06	32 43	31 25	30 12	29 01	27 91	26 82	7	00
	20	49 27	47 29	45 37	43 50	42 08	40 30	38 56	37 27	36 02	34 40	33 23	32 08	30 94	29 81	8	00
	30	52 21	50 23	48 31	46 41	44 59	43 31	41 57	40 27	39 00	37 36	36 16	34 99	33 82	32 66	9	00
	40	54 49	52 51	51 12	49 28	47 47	46 11	44 37	43 06	41 38	40 14	38 53	37 34	36 15	34 98	10	00
	50	56 53	55 07	53 24	51 42	50 05	48 30	46 57	45 27	43 59	42 37	41 12	39 53	38 33	37 14	11	00
2	00	58 41	56 58	55 18	53 40	52 04	50 31	49 00	47 31	46 04	44 40	43 18	41 58	40 38	39 19	12	00
	10	60 12	58 33	56 56	55 21	53 49	52 18	50 48	49 20	47 55	46 31	45 10	43 50	42 31	41 12	1	10
	20	61 29	59 54	58 20	56 49	55 18	53 50	52 22	50 57	49 33	48 11	46 50	45 30	44 11	42 52	2	10
	30	62 36	61 05	59 35	58 08	56 41	55 11	53 46	52 22	51 00	49 39	48 19	47 01	45 82	44 63	3	10
	40	63 33	62 04	60 31	59 11	57 46	56 22	54 59	53 37	52 16	50 57	49 38	48 20	47 02	45 83	4	10
	50	64 21	62 56	61 31	60 08	58 45	57 24	56 03	54 43	53 23	52 06	50 49	49 32	48 14	46 96	5	10
3	00	65 02	63 40	62 18	60 58	59 38	58 17	56 59	55 40	54 23	53 06	51 51	50 35	49 20	48 04	6	10
	10	65 38	64 18	62 59	61 40	60 21	59 04	57 47	56 31	55 15	54 00	52 45	51 32	50 18	49 04	7	10
	20	66 08	64 50	63 33	62 16	61 00	59 44	58 29	57 14	56 00	54 46	53 33	52 21	51 09	49 97	8	10
	30	66 32	65 16	64 01	62 47	61 33	60 20	59 06	57 52	56 39	55 28	54 16	53 04	51 93	50 82	9	10
	40	66 52	65 39	64 25	63 13	62 00	60 48	59 37	58 25	57 14	56 02	54 52	53 42	52 32	51 22	10	10
	50	67 08	65 57	64 46	63 35	62 23	61 13	60 02	58 52	57 42	56 33	55 24	54 14	53 04	51 94	11	10
4	00	67 21	66 11	65 01	63 52	62 42	61 33	60 24	59 15	58 07	56 58	55 49	54 41	53 32	52 23	12	10
	10	67 29	66 22	65 13	64 05	62 57	61 49	60 42	59 33	58 26	57 19	56 12	55 05	53 97	52 89	1	20
	20	67 36	66 29	65 22	64 15	63 08	62 02	60 55	59 48	58 41	57 36	56 30	55 23	54 16	53 09	2	20
	30	67 39	66 34	65 27	64 21	63 16	62 11	61 05	59 59	58 54	57 49	56 43	55 38	54 32	53 26	3	20
	40	67 40	66 34	65 30	64 25	63 21	62 16	61 12	60 07	59 02	57 57	56 51	55 46	54 40	53 34	4	20
	50	67 37	66 33	65 30	64 26	63 23	62 19	61 15	60 11	59 08	58 04	57 01	55 96	54 91	53 86	5	20
5	00	67 32	66 30	65 27	64 24	63 21	62 18	61 16	60 13	59 10	58 07	57 04	56 01	54 98	53 94	6	20
	10	67 25	66 23	65 21	64 19	63 17	62 16	61 13	60 10	59 09	58 07	57 04	56 02	54 99	53 96	7	20
	20	67 16	66 15	65 13	64 12	63 11	62 09	61 08	60 06	59 05	58 03	57 01	55 99	54 97	53 95	8	20
	30	67 05	66 04	65 03	64 02	63 02	62 00	60 59	59 58	58 57	57 56	56 55	55 54	54 53	53 52	9	20
	40	66 51	65 51	64 50	63 50	62 49	61 49	60 48	59 47	58 47	57 47	56 46	55 45	54 44	53 43	10	20
	50	66 34	65 34	64 34	63 35	62 35	61 35	60 35	59 34	58 35	57 35	56 35	55 35	54 35	53 35	11	20
6	00	66 16	65 16	64 16	63 18	62 18	61 19	60 18	59 18	58 19	57 20	56 19	55 20	54 21	53 21	12	20
	10	65 56	64 56	63 57	62 57	61 58	60 59	59 59	58 59	57 59	56 59	55 59	54 59	53 59	52 59	1	30
	20	65 32	64 33	63 34	62 35	61 35	60 37	59 37	58 38	57 40	56 41	55 41	54 42	53 42	52 42	2	30
	30	65 06	64 08	63 09	62 10	61 10	60 12	59 13	58 14	57 16	56 17	55 17	54 19	53 19	52 19	3	30
	40	64 38	63 39	62 40	61 42	60 43	59 44	58 45	57 47	56 48	55 50	54 51	53 53	52 53	51 53	4	30
	50	64 08	63 08	62 10	61 11	60 12	59 14	58 15	57 17	56 18	55 20	54 22	53 23	52 23	51 23	5	30
7	00	63 34	62 36	61 36	60 37	59 39	58 41	57 42	56 43	55 45	54 47	53 49	52 50	51 51	50 51	6	30
	10	62 58	61 59	61 00	60 00	59 02	58 04	57 05	56 07	55 09	54 11	53 12	52 13	51 14	50 14	7	30
	20	62 18	61 19	60 20	59 21	58 22	57 24	56 25	55 27	54 29	53 31	52 32	51 33	50 34	49 34	8	30
	30	61 36	60 37	59 37	58 38	57 39	56 41	55 42	54 43	53 46	52 48	51 50	50 51	49 52	48 52	9	30
	40	60 51	59 50	58 51	57 52	56 52	55 55	54 56	53 57	53 00	52 02	51 03	50 06	49 06	48 06	10	30
	50	60 01	59 01	58 01	57 02	56 02	55 04	54 05	53 06	52 09	51 11	50 14	49 16	48 16	47 16	11	30
8	00	59 07	58 07	57 07	56 08	55 08	54 09	53 11	52 12	51 15	50 17	49 19	48 22	47 24	46 24	12	30
	10	58 10	57 09	56 08	55 09	54 10	53 11	52 12	51 14	50 15	49 18	48 21	47 24	46 26	45 26	1	40
	20	57 08	56 07	55 06	54 06	53 06	52 07	51 09	50 10	49 13	48 15	47 18	46 21	45 23	44 23	2	40
	30	56 01	55 00	54 00	53 00	52 00	51 01	50 01	49 02	48 04	47 06	46 11	45 15	44 18	43 18	3	40
	40	54 49	53 47	52 46	51 45	50 46	49 46	48 48	47 49	46 52	45 55	44 58	44 03	43 05	42 05	4	40
	50	53 30	52 29	51 28	50 27	49 27	48 28	47 29	46 31	45 34	44 37	43 41	42 45	41 47	40 47	5	40
9	00	52 06	51 04	50 03	49 02	48 03	47 04	46 05	45 07	44 11	43 14	42 19	41 24	40 28	39 28	6	40
	10	50 36	49 33	48 32	47 31	46 32	45 33	44 35	43 37	42 41	41 45	40 51	39 56	38 59	37 59	7	40
	20	48 58	47 56	46 54	45 53	44 55	43 57	42 58	42 01	41 06	40 11	39 18	38 23	37 26	36 26	8	40
	30	47 12	46 09	45 08	44 08	43 09	42 12	41 15	40 18	39 24	38 30	37 36	36 44	35 48	34 48	9	40
	40	45 18	44 15	43 15	42 15	41 17	40 20	39 24	38 28	37 35	36 43	35 49	34 58	34 02	33 02	10	40
	50	43 14	42 12	41 13	40 13	39 16	38 20	37 25	36 32	35 39	34 48	33 57	33 07	32 14	31 14	11	40
10	00	41 01	40 00	39 01	38 04	37 07	36 13	35 19	34 26	33 36	32 47	31 57	31 09	30 19	29 24	12	40
	10	38 36	37 37	36 39	35 44	34 49	33 57	33 05	32 13	31 25	30 37	29 51	29 04	28 14	27 19	1	50
	20	36 01	35 04	34 08	33 14	32 21	31 31	30 42	29 53	29 07	28 22	27 37	26 51	26 04	25 14	2	50
	30	33 13	32 19	31 26	30 35	29 45	28 57	28 10	27 24	26 41	25 58	25 16	24 35	23 51	23 06	3	50
	40	30 15	29 23	28 33	27 44	26 56	26 14	25 30	24 47	24 07	23 27	22 49	22 11	21 31	20 51	4	50
	50	27 03	26 15	25 29	24 45	24 02	23 21	22 41	22 03	21 25	20 49	20 15	19 41	19 06	18 29	5	50
11	00	23 39	22 56	22 15	21 35	20 56	20 20	19 45	19 10	18 37	18 05	17 34	17 04	16 33	16 02	6	50
	10	20 05	19 26	18 51	18 15	17 42	17 11	16 40	16 11	15 42	15 15	14 49	14 23	13 56	13 29	7	50
	20	16 18	15 47	15 16	14 48	14 21	13 55	13 29	13 05	12 41	12 19	11 57	11 36	11 14	10 52	8	50
	30	12 22	11 58	11 35	11 13	10 52	10 32	10 12	9 53	9 36	9 19	9 02					

AZIMUTH OR TRUE BEARING.

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

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 0°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 9°.	
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 39	2 33	2 28	2 21	2 15	2 10	2 05	2 00	1 55	1 50	1 45	1 41	1	10
	20	5 17	5 05	4 53	4 41	4 30	4 19	4 08	3 59	3 49	3 40	3 30	3 21	2	20
	30	7 53	7 35	7 16	6 59	6 43	6 27	6 12	5 56	5 42	5 28	5 14	5 01	3	30
	40	10 26	10 02	9 38	9 15	8 53	8 32	8 12	7 52	7 33	7 15	6 57	6 39	4	40
	50	12 55	12 25	11 56	11 28	11 01	10 35	10 10	9 46	9 23	9 00	8 37	8 16	5	50
1	00	15 18	14 43	14 09	13 37	13 06	12 35	12 06	11 37	11 09	10 43	10 16	9 50	1	00
	10	17 37	16 57	16 18	15 41	15 05	14 31	13 57	13 24	12 53	12 22	11 52	11 22		10
	20	19 48	19 04	18 22	17 41	17 01	16 22	15 45	15 08	14 33	13 59	13 25	12 52		20
	30	21 53	21 06	20 21	19 35	18 52	18 10	17 29	16 49	16 10	15 32	14 55	14 19		30
	40	23 52	23 01	22 12	21 25	20 38	19 53	19 09	18 26	17 43	17 02	16 22	15 44		40
	50	25 43	24 50	23 58	23 08	22 18	21 31	20 43	19 57	19 13	18 28	17 45	17 04		50
2	00	27 28	26 33	25 39	24 46	23 54	23 03	22 14	21 25	20 38	19 51	19 05	18 21	2	00
	10	29 06	28 09	27 12	26 18	25 23	24 30	23 38	22 47	21 58	21 08	20 21	19 34		10
	20	30 38	29 36	28 40	27 43	26 47	25 52	24 58	24 06	23 14	22 23	21 33	20 43		20
	30	32 02	31 01	30 02	29 04	28 06	27 09	26 14	25 20	24 26	23 32	22 41	21 50		30
	40	33 20	32 19	31 18	30 18	29 19	28 21	27 25	26 28	25 33	24 38	23 45	22 53		40
	50	34 32	33 29	32 25	31 27	30 27	29 29	28 31	27 33	26 36	25 41	24 46	23 51		50
3	00	35 38	34 35	33 33	32 32	31 30	30 31	29 31	28 32	27 35	26 38	25 42	24 46	3	00
	10	36 38	35 35	34 33	33 30	32 28	31 28	30 27	29 28	28 30	27 31	26 33	25 37		10
	20	37 33	36 29	35 27	34 24	33 22	32 21	31 19	30 19	29 19	28 21	27 22	26 24		20
	30	38 23	37 18	36 15	35 12	34 10	33 08	32 07	31 06	30 05	29 06	28 07	27 08		30
	40	39 07	38 03	37 00	35 56	34 54	33 51	32 50	31 48	30 47	29 47	28 47	27 48		40
	50	39 47	38 43	37 40	36 37	35 33	34 31	33 29	32 27	31 26	30 25	29 25	28 25		50
4	00	40 21	39 18	38 15	37 11	36 08	35 05	34 03	33 01	32 00	30 58	29 58	28 58	4	00
	10	41 19	40 15	39 13	38 10	37 06	36 04	35 01	33 58	32 57	31 55	30 54	29 52		10
	20	42 14	41 09	40 05	39 03	37 59	36 57	35 54	34 51	33 48	32 46	31 44	30 42		20
	30	43 05	41 59	40 55	39 52	38 48	37 45	36 42	35 39	34 36	33 33	32 30	31 27		30
	40	43 52	42 45	41 41	40 37	39 33	38 29	37 25	36 21	35 18	34 14	33 10	32 06		40
	50	44 35	43 27	42 23	41 18	40 14	39 09	38 05	37 01	35 96	34 92	33 87	32 82		50
5	00	45 15	44 06	42 59	41 52	40 45	39 38	38 31	37 24	36 17	35 10	34 03	32 96	5	00
	10	45 52	44 43	43 36	42 29	41 22	40 15	39 08	38 01	36 94	35 87	34 80	33 73		10
	20	46 26	45 17	44 10	43 03	41 96	40 89	39 82	38 75	37 68	36 61	35 54	34 47		20
	30	46 56	45 47	44 40	43 33	42 26	41 19	40 12	39 05	37 98	36 91	35 84	34 77		30
	40	47 23	46 14	45 07	44 00	42 93	41 86	40 79	39 72	38 65	37 58	36 51	35 44		40
	50	47 47	46 38	45 31	44 24	43 17	42 10	41 03	39 96	38 89	37 82	36 75	35 68		50
6	00	48 18	47 09	46 02	44 95	43 88	42 81	41 74	40 67	39 60	38 53	37 46	36 39	6	00
	10	48 48	47 39	46 32	45 25	44 18	43 11	42 04	40 97	39 90	38 83	37 76	36 69		10
	20	49 15	48 06	46 99	45 92	44 85	43 78	42 71	41 64	40 57	39 50	38 43	37 36		20
	30	49 39	48 30	47 23	46 16	45 09	44 02	42 95	41 88	40 81	39 74	38 67	37 60		30
	40	49 59	48 50	47 43	46 36	45 29	44 22	43 15	42 08	41 01	39 94	38 87	37 80		40
	50	50 16	49 07	48 00	46 93	45 86	44 79	43 72	42 65	41 58	40 51	39 44	38 37		50
7	00	50 40	49 31	48 24	47 17	46 10	45 03	43 96	42 89	41 82	40 75	39 68	38 61	7	00
	10	51 02	49 53	48 46	47 39	46 32	45 25	44 18	43 11	42 04	40 97	39 90	38 83		10
	20	51 21	50 12	49 05	47 98	46 91	45 84	44 77	43 70	42 63	41 56	40 49	39 42		20
	30	51 38	50 29	49 22	48 15	47 08	46 01	44 94	43 87	42 80	41 73	40 66	39 59		30
	40	51 52	50 43	49 36	48 29	47 22	46 15	45 08	44 01	42 94	41 87	40 80	39 73		40
	50	52 04	50 55	49 48	48 41	47 34	46 27	45 20	44 13	43 06	41 99	40 92	39 85		50
8	00	52 23	51 14	50 07	49 00	47 93	46 86	45 79	44 72	43 65	42 58	41 51	40 44	8	00
	10	52 40	51 31	50 24	49 17	48 10	47 03	45 96	44 89	43 82	42 75	41 68	40 61		10
	20	52 54	51 45	50 38	49 31	48 24	47 17	46 10	45 03	43 96	42 89	41 82	40 75		20
	30	53 06	51 57	50 50	49 43	48 36	47 29	46 22	45 15	44 08	43 01	41 94	40 87		30
	40	53 16	52 07	50 59	49 52	48 45	47 38	46 31	45 24	44 17	43 10	42 03	40 96		40
	50	53 25	52 16	51 08	50 01	48 94	47 87	46 80	45 73	44 66	43 59	42 52	41 45		50
9	00	53 42	52 33	51 26	50 19	49 12	48 05	46 98	45 91	44 84	43 77	42 70	41 63	9	00
	10	53 58	52 49	51 42	50 35	49 28	48 21	47 14	46 07	45 00	43 93	42 86	41 79		10
	20	54 12	53 03	51 56	50 49	49 42	48 35	47 28	46 21	45 14	44 07	43 00	41 93		20
	30	54 24	53 15	52 08	51 01	49 94	48 87	47 80	46 73	45 66	44 59	43 52	42 45		30
	40	54 35	53 26	52 19	51 12	50 05	48 98	47 91	46 84	45 77	44 70	43 63	42 56		40
	50	54 45	53 36	52 29	51 22	50 15	49 08	48 01	46 94	45 87	44 80	43 73	42 66		50
10	00	54 53	53 44	52 37	51 30	50 23	49 16	48 09	47 02	45 95	44 88	43 81	42 74	10	00
	10	55 09	53 59	52 52	51 45	50 38	49 31	48 24	47 17	46 10	45 03	43 96	42 89		10
	20	55 23	54 14	53 07	52 00	50 93	49 86	48 79	47 72	46 65	45 58	44 51	43 44		20
	30	55 36	54 27	53 20	52 13	51 06	49 99	48 92	47 85	46 78	45 71	44 64	43 57		30
	40	55 48	54 39	53 32	52 25	51 18	50 11	49 04	47 97	46 90	45 83	44 76	43 69		40
	50	55 59	54 50	53 43	52 36	51 29	50 22	49 15	48 08	47 01	45 94	44 87	43 80		50
11	00	56 08	54 59	53 52	52 45	51 38	50 31	49 24	48 17	47 10	46 03	44 96	43 89	11	00
	10	56 16	55 07	54 00	52 93	51 86	50 79	49 72	48 65	47 58	46 51	45 44	44 37		10
	20	56 23	55 14	54 07	53 00	51 93	50 86	49 79	48 72	47 65	46 58	45 51	44 44		20
	30	56 29	55 20	54 13	53 06	51 99	50 92	49 85	48 78	47 71	46 64	45 57	44 50		30
	40	56 34	55 25	54 18	53 11	52 04	50 97	49 90	48 83	47 76	46 69	45 62	44 55		40
	50	56 38	55 29	54 22	53 15	52 08	51 01	49 94	48 87	47 80	46 73	45 66	44 59		50
12	00	56 41	55 32	54 25	53 18	52 11	51 04	49 97	48 90	47 83	46 76	45 69	44 62	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 9°.		DECLINATION—SAME NAME AS—LATITUDE.										LATITUDE 9°.		
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 37	1 32	1 28	1 25	1 21	1 17	1 13	1 09	1 05	1 02	0 59	1	10
	20	3 13	3 04	2 56	2 48	2 40	2 33	2 25	2 18	2 11	2 04	1 57	2	20
	30	4 48	4 35	4 23	4 11	4 00	3 49	3 37	3 27	3 16	3 05	2 55	3	30
	40	6 22	6 05	5 49	5 34	5 18	5 03	4 49	4 35	4 20	4 07	3 53	4	40
	50	7 54	7 34	7 14	6 55	6 36	6 17	5 59	5 41	5 23	5 07	4 50	5	50
1	00	9 26	9 01	8 37	8 14	7 53	7 29	7 08	6 47	6 26	6 06	5 46	1	00
	10	10 54	10 26	9 59	9 32	9 06	8 41	8 16	7 52	7 28	7 04	6 41	1	10
	20	12 20	11 49	11 18	10 49	10 19	9 51	9 22	8 55	8 28	8 01	7 35	2	20
	30	13 44	13 10	12 36	12 02	11 30	10 59	10 27	9 57	9 27	8 57	8 29	2	30
	40	15 05	14 28	13 51	13 15	12 39	12 04	11 30	10 57	10 24	9 52	9 20	3	40
	50	16 22	15 42	15 03	14 24	13 45	13 08	12 31	11 55	11 19	10 44	10 10	3	50
2	00	17 36	16 54	16 12	15 31	14 50	14 09	13 30	12 51	12 13	11 36	10 59	2	00
	10	18 48	18 02	17 17	16 34	15 50	15 08	14 26	13 45	13 04	12 24	11 45	2	10
	20	19 56	19 08	18 21	17 35	16 50	16 04	15 21	14 37	13 55	13 12	12 30	2	20
	30	21 00	20 11	19 22	18 34	17 45	16 58	16 12	15 27	14 42	13 57	13 14	3	30
	40	22 00	21 09	20 19	19 29	18 39	17 50	17 02	16 14	15 28	14 41	13 55	3	40
	50	22 57	22 05	21 12	20 21	19 29	18 38	17 49	17 00	16 11	15 22	14 34	3	50
3	00	23 51	22 57	22 02	21 09	20 17	19 24	18 33	17 42	16 51	16 01	15 12	3	00
	10	24 41	23 45	22 50	21 56	21 00	20 07	19 14	18 21	17 30	16 38	15 47	4	10
	20	25 26	24 30	23 34	22 38	21 42	20 47	19 53	19 00	18 06	17 13	16 20	4	20
	30	26 03	25 12	24 14	23 18	22 21	21 25	20 29	19 34	18 39	17 45	16 51	4	30
	40	26 49	25 50	24 52	23 54	22 56	22 00	21 03	20 07	19 11	18 16	17 21	4	40
	50	27 24	26 25	25 26	24 28	23 29	22 31	21 34	20 37	19 40	18 43	17 47	4	50
4	00	27 56	26 57	25 57	24 58	23 59	23 00	22 02	21 03	20 06	19 08	18 11	4	00
	10	28 26	27 26	26 25	25 26	24 26	23 26	22 27	21 28	20 30	19 32	18 34	5	10
	20	28 52	27 51	26 50	25 50	24 50	23 49	22 50	21 51	20 51	19 52	18 54	5	20
	30	29 14	28 13	27 12	26 12	25 11	24 10	23 11	22 11	21 11	20 11	19 12	5	30
	40	29 33	28 31	27 31	26 31	25 29	24 28	23 28	22 27	21 27	20 27	19 27	5	40
	50	29 50	28 49	27 46	26 45	25 44	24 43	23 43	22 42	21 42	20 41	19 41	5	50
5	00	30 02	29 02	28 00	26 59	25 57	24 56	23 56	22 55	21 54	20 52	19 52	5	00
	10	30 12	29 12	28 10	27 09	26 07	25 06	24 05	23 03	22 03	21 02	20 01	6	10
	20	30 20	29 19	28 17	27 16	26 14	25 13	24 12	23 11	22 10	21 08	20 07	6	20
	30	30 24	29 23	28 21	27 20	26 19	25 18	24 16	23 16	22 15	21 13	20 13	6	30
	40	30 25	29 24	28 23	27 22	26 20	25 19	24 19	23 18	22 18	21 16	20 15	6	40
	50	30 24	29 23	28 21	27 21	26 20	25 19	24 18	23 18	22 17	21 16	20 15	6	50
6	00	30 19	29 18	28 18	27 17	26 17	25 16	24 17	23 16	22 15	21 15	20 14	6	00
	10	30 11	29 12	28 11	27 12	26 11	25 11	24 11	23 10	22 10	21 09	20 09	7	10
	20	30 01	29 02	28 02	27 02	26 02	25 02	24 03	23 03	22 04	21 03	20 04	7	20
	30	29 48	28 50	27 50	26 51	25 52	24 52	23 53	22 54	21 55	20 55	19 56	7	30
	40	29 33	28 34	27 35	26 37	25 38	24 39	23 41	22 42	21 43	20 44	19 45	7	40
	50	29 14	28 17	27 19	26 20	25 22	24 23	23 26	22 26	21 30	20 31	19 33	7	50
7	00	28 53	27 56	26 58	25 59	25 04	24 06	23 10	22 12	21 15	20 16	19 19	7	00
	10	28 29	27 33	26 36	25 39	24 43	23 46	22 50	21 53	20 57	20 00	19 03	8	10
	20	28 03	27 07	26 10	25 15	24 20	23 24	22 29	21 33	20 37	19 41	18 45	8	20
	30	27 33	26 39	25 43	24 49	23 54	22 59	22 04	21 10	20 15	19 20	18 25	8	30
	40	27 02	26 08	25 13	24 20	23 26	22 32	21 38	20 45	19 51	18 57	18 04	8	40
	50	26 28	25 35	24 41	23 49	22 56	22 03	21 10	20 17	19 25	18 32	17 39	8	50
8	00	25 50	24 58	24 06	23 15	22 22	21 31	20 40	19 48	18 57	18 05	17 13	8	00
	10	25 10	24 19	23 29	22 38	21 47	20 57	20 07	19 17	18 27	17 36	16 46	9	10
	20	24 28	23 39	22 49	22 00	21 10	20 21	19 33	18 43	17 55	17 06	16 17	9	20
	30	23 43	22 55	22 07	21 19	20 31	19 43	18 56	18 08	17 21	16 34	15 47	9	30
	40	22 56	22 09	21 22	20 36	19 49	19 02	18 17	17 31	16 45	15 59	15 14	9	40
	50	22 06	21 20	20 34	19 50	19 05	18 21	17 37	16 52	16 07	15 23	14 39	9	50
9	00	21 13	20 29	19 46	19 03	18 19	17 36	16 54	16 10	15 29	14 46	14 04	9	00
	10	20 18	19 36	18 54	18 13	17 31	16 49	16 09	15 28	14 47	14 06	13 26	10	10
	20	19 21	18 41	18 00	17 21	16 40	16 01	15 22	14 44	14 05	13 25	12 47	10	20
	30	18 22	17 43	17 05	16 27	15 49	15 11	14 35	13 57	13 21	12 43	12 07	10	30
	40	17 20	16 43	16 07	15 31	14 55	14 19	13 45	13 09	12 34	11 59	11 25	10	40
	50	16 16	15 41	15 06	14 33	13 59	13 26	12 52	12 20	11 46	11 14	10 42	10	50
10	00	15 10	14 37	14 05	13 34	13 02	12 31	12 00	11 29	10 58	10 27	9 57	10	00
	10	14 01	13 31	13 02	12 32	12 03	11 34	11 05	10 36	10 08	9 39	9 11	11	10
	20	12 52	12 24	11 56	11 30	11 03	10 35	10 09	9 43	9 17	8 51	8 25	11	20
	30	11 39	11 14	10 50	10 25	10 00	9 36	9 12	8 48	8 25	8 00	7 38	11	30
	40	10 26	10 04	9 41	9 19	8 57	8 35	8 14	7 52	7 31	7 10	6 49	11	40
	50	9 11	8 52	8 32	8 12	7 53	7 33	7 15	6 55	6 37	6 18	6 00	11	50
11	00	7 55	7 37	7 20	7 04	6 47	6 30	6 14	5 58	5 42	5 26	5 10	11	00
	10	6 38	6 23	6 09	5 55	5 40	5 27	5 13	5 00	4 45	4 32	4 19	12	10
	20	5 19	5 07	4 56	4 44	4 33	4 22	4 11	4 00	3 50	3 39	3 28	12	20
	30	4 00	3 51	3 43	3 34	3 26	3 17	3 08	3 00	2 52	2 44	2 36	12	30
	40	2 41	2 35	2 29	2 21	2 18	2 12	2 06	2 01	1 56	1 49	1 44	12	40
	50	1 20	1 18	1 15	1 12	1 09	1 06	1 03	1 01	0 58	0 55	0 53	12	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 10°.				DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 10°.			
Hour Angle.		24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	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	9 21	8 41	8 06	7 34	7 07	6 41	6 18	5 57	5 39	5 21	5 04	4 50		10				
	20	18 11	16 56	15 50	14 51	13 58	13 09	12 26	11 46	11 09	10 35	10 04	9 34		20				
	30	26 07	24 27	22 57	21 36	20 13	19 15	18 14	17 17	16 25	15 36	14 51	14 10		30				
	40	32 59	31 04	29 18	27 43	26 14	24 51	23 36	22 26	21 21	20 21	19 24	18 31		40				
	50	38 49	36 46	34 51	33 05	31 26	29 54	28 28	27 07	25 54	24 43	23 38	22 36		50				
1	00	43 43	41 36	39 37	37 46	36 01	34 23	32 51	31 24	30 02	28 45	27 32	26 23	1	00				
	10	47 47	45 41	43 42	41 49	40 02	38 20	36 43	35 13	33 46	32 23	31 06	29 51		10				
	20	51 10	49 07	47 09	45 18	43 29	41 47	40 09	38 35	37 06	35 41	34 19	33 01		20				
	30	54 00	52 01	50 06	48 16	46 30	44 47	43 09	41 35	40 05	38 37	37 14	35 53		30				
	40	56 22	54 28	52 37	50 50	49 05	47 25	45 47	44 13	42 42	41 14	39 50	38 27		40				
	50	58 27	56 32	54 45	53 01	51 19	49 41	48 05	46 32	45 02	43 33	42 09	40 46		50				
2	00	60 03	58 18	56 35	54 54	53 16	51 39	50 05	48 34	47 05	45 38	44 13	42 50	2	00				
	10	61 29	59 48	58 08	56 31	54 56	53 22	51 50	50 21	48 54	47 28	46 04	44 42		10				
	20	62 41	61 04	59 29	57 55	56 23	54 52	53 22	51 55	50 29	49 05	47 42	46 20		20				
	30	63 42	62 06	60 38	59 07	57 38	56 10	54 43	53 17	51 53	50 30	49 09	47 48		30				
	40	64 35	63 06	61 37	60 09	58 44	57 18	55 53	54 30	53 07	51 46	50 26	49 07		40				
	50	65 19	63 54	62 28	61 02	59 39	58 16	56 54	55 32	54 12	52 53	51 34	50 16		50				
3	00	66 57	64 33	63 10	61 49	60 28	59 06	57 46	56 27	55 08	53 51	52 33	51 17	3	00				
	10	68 08	65 07	63 47	62 28	61 09	59 50	58 32	57 15	55 57	54 41	53 26	52 11		10				
	20	69 15	66 15	64 18	63 00	61 44	60 27	59 11	57 55	56 40	55 25	54 11	52 59		20				
	30	70 15	67 15	65 18	64 03	63 29	62 13	60 58	59 44	58 30	57 17	56 04	54 51		30				
	40	71 32	68 32	66 35	65 21	64 09	62 58	61 25	60 12	59 01	57 48	56 37	55 24		40				
	50	72 44	69 44	67 47	66 33	65 23	64 13	63 05	61 47	60 36	59 26	58 14	57 04		50				
4	00	74 00	71 00	69 03	67 49	66 39	65 30	64 22	63 15	62 08	61 02	60 00	58 53	4	00				
	10	75 00	72 00	70 03	68 49	67 39	66 30	65 22	64 15	63 08	62 02	61 00	59 93		10				
	20	76 00	73 00	71 03	69 49	68 39	67 30	66 22	65 15	64 08	63 02	62 00	60 93		20				
	30	77 00	74 00	72 03	70 49	69 39	68 30	67 22	66 15	65 08	64 02	63 00	61 93		30				
	40	78 00	75 00	73 03	71 49	70 39	69 30	68 22	67 15	66 08	65 02	64 00	62 93		40				
	50	79 00	76 00	74 03	72 49	71 39	70 30	69 22	68 15	67 08	66 02	65 00	63 93		50				
5	00	80 00	77 00	75 03	73 49	72 39	71 30	70 22	69 15	68 08	67 02	66 00	64 93	5	00				
	10	81 00	78 00	76 03	74 49	73 39	72 30	71 22	70 15	69 08	68 02	67 00	65 93		10				
	20	82 00	79 00	77 03	75 49	74 39	73 30	72 22	71 15	70 08	69 02	68 00	66 93		20				
	30	83 00	80 00	78 03	76 49	75 39	74 30	73 22	72 15	71 08	70 02	69 00	67 93		30				
	40	84 00	81 00	79 03	77 49	76 39	75 30	74 22	73 15	72 08	71 02	70 00	68 93		40				
	50	85 00	82 00	80 03	78 49	77 39	76 30	75 22	74 15	73 08	72 02	71 00	69 93		50				
6	00	86 00	83 00	81 03	79 49	78 39	77 30	76 22	75 15	74 08	73 02	72 00	70 93	6	00				
	10	87 00	84 00	82 03	80 49	79 39	78 30	77 22	76 15	75 08	74 02	73 00	71 93		10				
	20	88 00	85 00	83 03	81 49	80 39	79 30	78 22	77 15	76 08	75 02	74 00	72 93		20				
	30	89 00	86 00	84 03	82 49	81 39	80 30	79 22	78 15	77 08	76 02	75 00	73 93		30				
	40	90 00	87 00	85 03	83 49	82 39	81 30	80 22	79 15	78 08	77 02	76 00	74 93		40				
	50	91 00	88 00	86 03	84 49	83 39	82 30	81 22	80 15	79 08	78 02	77 00	75 93		50				
7	00	92 00	89 00	87 03	85 49	84 39	83 30	82 22	81 15	80 08	79 02	78 00	76 93	7	00				
	10	93 00	90 00	88 03	86 49	85 39	84 30	83 22	82 15	81 08	80 02	79 00	77 93		10				
	20	94 00	91 00	89 03	87 49	86 39	85 30	84 22	83 15	82 08	81 02	80 00	78 93		20				
	30	95 00	92 00	90 03	88 49	87 39	86 30	85 22	84 15	83 08	82 02	81 00	79 93		30				
	40	96 00	93 00	91 03	89 49	88 39	87 30	86 22	85 15	84 08	83 02	82 00	80 93		40				
	50	97 00	94 00	92 03	90 49	89 39	88 30	87 22	86 15	85 08	84 02	83 00	81 93		50				
8	00	98 00	95 00	93 03	91 49	90 39	89 30	88 22	87 15	86 08	85 02	84 00	82 93	8	00				
	10	99 00	96 00	94 03	92 49	91 39	90 30	89 22	88 15	87 08	86 02	85 00	83 93		10				
	20	00 00	97 00	95 03	93 49	92 39	91 30	90 22	89 15	88 08	87 02	86 00	84 93		20				
	30	01 00	98 00	96 03	94 49	93 39	92 30	91 22	90 15	89 08	88 02	87 00	85 93		30				
	40	02 00	99 00	97 03	95 49	94 39	93 30	92 22	91 15	90 08	89 02	88 00	86 93		40				
	50	03 00	00 00	98 03	96 49	95 39	94 30	93 22	92 15	91 08	90 02	89 00	87 93		50				
9	00	04 00	01 00	99 03	97 49	96 39	95 30	94 22	93 15	92 08	91 02	90 00	88 93	9	00				
	10	05 00	02 00	00 00	98 49	97 39	96 30	95 22	94 15	93 08	92 02	91 00	89 93		10				
	20	06 00	03 00	01 00	99 49	98 39	97 30	96 22	95 15	94 08	93 02	92 00	90 93		20				
	30	07 00	04 00	02 00	00 49	99 39	98 30	97 22	96 15	95 08	94 02	93 00	91 93		30				
	40	08 00	05 00	03 00	01 49	00 39	99 30	98 22	97 15	96 08	95 02	94 00	92 93		40				
	50	09 00	06 00	04 00	02 49	01 39	00 30	99 22	98 15	97 08	96 02	95 00	93 93		50				
10	00	10 00	07 00	05 03	03 49	02 39	01 30	00 22	99 15	98 08	97 02	96 00	94 93	10	00				
	10	11 00	08 00	06 03	04 49	03 39	02 30	01 22	00 15	99 08	98 02	97 00	95 93		10				
	20	12 00	09 00	07 03	05 49	04 39	03 30	02 22	01 15	00 08	99 02	98 00	96 93		20				
	30	13 00	10 00	08 03	06 49	05 39	04 30	03 22	02 15	01 08	00 02	99 00	97 93		30				
	40	14 00	11 00	09 03	07 49	06 39	05 30	04 22	03 15	02 08	01 02	00 00	98 93		40				
	50	15 00	12 00	10 03	08 49	07 39	06 30	05 22	04 15	03 08	02 02	01 00	99 93		50				
11	00	16 00	13 00	11 03	09 49	08 39	07 30	06 22	05 15	04 08	03 02	02 00	00 93	11	00				
	10	17 00	14 00	12 03	10 49	09 39	08 30	07 22	06 15	05 08	04 02	03 00	01 93		10				
	20	18 00	15 00	13 03	11 49	10 39	09 30	08 22	07 15	06 08	05 02	04 00	02 93		20				
	30	19 00	16 00	14 03	12 49	11 39	10 30	09 22	08 15	07 08	06 02	05 00	03 93		30				
	40	20 00	17 00	15 03	13 49	12 39	11 30	10 22	09 15	08 08	07 02	06 00	04 93		40				
	50	21 00	18 00	16 03	14 49	13 39	12 30	11 22	10 15	09 08	08 02	07 00	05 93		50				
12	00	22 00	19 00	17 03	15 49	14 3													

AZIMUTH OR TRUE BEARING.

LATITUDE 10°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 10°.	
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	4 36	4 23	4 12	4 00	3 49	3 39	3 30	3 21	3 12	3 05	2 57	2 50	0	10
0	20	9 08	8 42	8 19	7 56	7 36	7 16	6 58	6 40	6 24	6 07	5 53	5 38	0	20
0	30	13 31	12 54	12 20	11 48	11 17	10 48	10 21	9 55	9 31	9 07	8 45	8 24	0	30
0	40	17 41	16 55	16 11	15 29	14 50	14 14	13 39	13 05	12 33	12 02	11 34	11 06	0	40
0	50	21 37	20 43	19 50	19 01	18 14	17 30	16 47	16 08	15 29	14 52	14 16	13 43	0	50
1	00	25 17	24 16	23 16	22 20	21 27	20 36	19 48	19 02	18 17	17 34	16 54	16 15	1	00
1	10	28 40	27 32	26 28	25 26	24 28	23 32	22 38	21 46	20 57	20 09	19 23	18 39	1	10
1	20	31 45	30 34	29 25	28 20	27 16	26 16	25 18	24 22	23 28	22 36	21 46	20 58	1	20
1	30	34 34	33 20	32 09	31 00	29 54	28 49	27 47	26 48	25 50	24 54	24 01	23 08	1	30
1	40	37 08	35 51	34 37	33 26	32 18	31 11	30 06	29 03	28 03	27 03	26 05	25 11	1	40
1	50	39 26	38 08	36 53	35 40	34 28	33 20	32 13	31 08	30 06	29 04	28 04	27 06	1	50
2	00	41 30	40 12	38 55	37 41	36 30	35 19	34 11	33 04	31 59	30 55	29 54	28 54	2	00
2	10	43 21	42 03	40 46	39 32	38 19	37 08	35 59	34 51	33 44	32 39	31 36	30 34	2	10
2	20	45 01	43 43	42 26	41 12	39 59	38 47	37 37	36 28	35 20	34 14	33 10	32 07	2	20
2	30	46 30	45 12	43 56	42 42	41 29	40 17	39 07	37 57	36 49	35 42	34 36	33 32	2	30
2	40	47 49	46 33	45 17	44 03	42 50	41 38	40 27	39 18	38 10	37 02	35 56	34 51	2	40
2	50	48 59	47 43	46 29	45 16	44 03	42 52	41 42	40 32	39 24	38 15	37 08	36 03	2	50
3	00	50 01	48 46	47 33	46 20	45 09	43 57	42 47	41 38	40 30	39 22	38 15	37 09	3	00
3	10	50 57	49 43	48 30	47 19	46 07	44 57	43 47	42 38	41 29	40 21	39 15	38 09	3	10
3	20	51 44	50 32	49 20	48 09	46 59	45 49	44 40	43 31	42 23	41 16	40 09	39 03	3	20
3	30	52 27	51 16	50 05	48 54	47 45	46 35	45 27	44 18	43 11	42 04	40 57	39 51	3	30
3	40	53 03	51 53	50 43	49 34	48 25	47 17	46 09	45 01	43 54	42 47	41 40	40 34	3	40
3	50	53 34	52 25	51 17	50 08	49 00	47 53	46 45	45 38	44 31	43 24	42 19	41 13	3	50
4	00	54 01	52 53	51 45	50 38	49 31	48 23	47 16	46 10	45 04	43 58	42 52	41 46	4	00
4	10	54 23	53 16	52 09	51 02	49 56	48 50	47 44	46 38	45 32	44 27	43 21	42 16	4	10
4	20	54 41	53 35	52 29	51 22	50 17	49 11	48 06	47 00	45 55	44 50	43 46	42 41	4	20
4	30	54 55	53 50	52 44	51 39	50 34	49 29	48 24	47 20	46 15	45 10	44 06	43 02	4	30
4	40	55 04	54 00	52 56	51 51	50 47	49 43	48 39	47 34	46 30	45 26	44 22	43 19	4	40
4	50	55 11	54 07	53 03	51 59	50 56	49 53	48 49	47 46	46 42	45 38	44 35	43 32	4	50
5	00	55 14	54 11	53 07	52 04	51 01	49 59	48 56	47 53	46 50	45 47	44 44	43 41	5	00
5	10	55 13	54 11	53 08	52 07	51 04	50 01	48 59	47 57	46 55	45 52	44 51	43 48	5	10
5	20	55 10	54 08	53 06	52 05	51 02	50 01	49 00	47 57	46 56	45 53	44 51	43 50	5	20
5	30	55 03	54 02	53 01	52 00	50 58	49 57	48 56	47 55	46 53	45 52	44 51	43 48	5	30
5	40	54 53	53 52	52 52	51 51	50 51	49 50	48 49	47 48	46 47	45 46	44 46	43 45	5	40
5	50	54 41	53 40	52 40	51 40	50 40	49 40	48 39	47 39	46 39	45 38	44 38	43 37	5	50
6	00	54 25	53 25	52 26	51 26	50 26	49 26	48 26	47 27	46 27	45 26	44 27	43 25	6	00
6	10	54 06	53 06	52 06	51 06	50 06	49 10	48 10	47 10	46 11	45 11	44 12	43 12	6	10
6	20	53 45	52 46	51 46	50 46	49 49	48 50	47 51	46 52	45 53	44 53	43 55	42 55	6	20
6	30	53 20	52 21	51 22	50 24	49 25	48 27	47 29	46 30	45 32	44 32	43 34	42 36	6	30
6	40	52 52	51 54	50 55	49 57	48 00	47 01	46 03	45 04	44 06	43 08	42 10	41 12	6	40
6	50	52 21	51 23	50 25	49 28	48 29	47 32	46 34	45 37	44 39	43 41	42 42	41 45	6	50
7	00	51 47	50 50	49 52	48 55	47 57	46 59	46 03	45 05	44 08	43 10	42 13	41 16	7	00
7	10	51 09	50 13	49 15	48 18	47 21	46 24	45 27	44 29	43 33	42 36	41 39	40 42	7	10
7	20	50 29	49 32	48 36	47 38	46 42	45 45	44 48	43 51	42 56	41 59	41 03	40 07	7	20
7	30	49 45	48 49	47 52	46 55	45 59	45 03	44 06	43 11	42 15	41 18	40 23	39 27	7	30
7	40	48 58	48 01	47 04	46 08	45 12	44 18	43 21	42 25	41 31	40 35	39 40	38 45	7	40
7	50	48 06	47 10	46 14	45 18	44 23	43 29	42 33	41 37	40 42	39 47	38 53	37 58	7	50
8	00	47 11	46 15	45 19	44 23	43 29	42 34	41 40	40 45	39 51	38 57	38 03	37 09	8	00
8	10	46 12	45 16	44 21	43 26	42 32	41 37	40 43	39 49	38 56	38 02	37 09	36 17	8	10
8	20	45 08	44 13	43 19	42 24	41 30	40 36	39 43	38 49	37 57	37 04	36 10	35 16	8	20
8	30	44 01	43 06	42 12	41 17	40 24	39 32	38 38	37 46	36 55	36 03	35 10	34 20	8	30
8	40	42 48	41 54	41 00	40 07	39 15	38 22	37 30	36 39	35 47	34 56	34 06	33 17	8	40
8	50	41 39	40 38	39 44	38 52	38 00	37 09	36 18	35 27	34 37	33 47	32 58	32 06	8	50
9	00	40 08	39 16	38 23	37 32	36 41	35 51	35 01	34 11	33 22	32 32	31 45	30 58	9	00
9	10	38 41	37 50	36 58	36 08	35 18	34 28	33 39	32 51	32 03	31 15	30 29	29 42	9	10
9	20	37 09	36 18	35 28	34 38	33 50	33 01	32 14	31 27	30 40	29 54	29 08	28 24	9	20
9	30	35 30	34 41	33 52	33 04	32 16	31 30	30 43	29 58	29 13	28 28	27 44	27 01	9	30
9	40	33 46	32 58	32 11	31 24	30 38	29 53	29 08	28 24	27 42	26 58	26 16	25 34	9	40
9	50	31 57	31 09	30 24	29 39	28 54	28 11	27 29	26 47	26 05	25 24	24 44	24 05	9	50
10	00	30 00	29 16	28 31	27 49	27 06	26 25	25 44	25 04	24 26	23 47	23 08	22 31	10	00
10	10	27 58	27 15	26 34	25 53	25 13	24 33	23 56	23 18	22 41	22 04	21 28	20 53	10	10
10	20	25 50	25 10	24 31	23 53	23 15	22 39	22 03	21 27	20 52	20 18	19 45	19 12	10	20
10	30	23 36	22 59	22 22	21 47	21 12	20 38	20 05	19 32	19 00	18 29	17 58	17 27	10	30
10	40	21 16	20 42	20 09	19 35	19 04	18 33	18 02	17 33	17 04	16 36	16 07	15 40	10	40
10	50	18 51	18 19	17 50	17 21	16 54	16 25	15 57	15 30	15 05	14 39	14 14	13 50	10	50
11	00	16 19	15 53	15 26	15 01	14 36	14 11	13 47	13 24	13 02	12 40	12 18	11 57	11	00
11	10	13 44	13 21	12 59	12 37	12 16	11 55	11 35	11 16	10 57	10 38	10 19	10 01	11	10
11	20	11 04	10 45	10 27	10 10	9 53	9 36	9 20	9 04	8 48	8 33	8 18	8 03	11	20
11	30	8 22	8 07	7 53	7 40	7 26	7 14	7 02	6 50	6 38	6 26	6 15	6 04	11	30
11	40	5 36	5 27	5 17	5 08	4 59	4 51	4 42	4 34	4 26	4 18	4 10	4 04	11	40
11	50	2 49	2 44	2 39	2 34	2 30	2 26	2 21	2 17	2 13	2 10	2 06	2 02	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 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	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	2 43	2 36	2 30	2 23	2 18	2 12	2 07	2 01	1 57	1 52	1 47	1 42		10
	20	5 24	5 12	4 59	4 47	4 35	4 24	4 13	4 03	3 52	3 43	3 33	3 25		20
	30	8 04	7 44	7 25	7 07	6 51	6 34	6 17	6 02	5 47	5 32	5 19	5 05		30
	40	10 40	10 14	9 49	9 26	9 03	8 41	8 20	8 00	7 40	7 21	7 03	6 45		40
	50	13 11	12 40	12 10	11 41	11 14	10 47	10 20	9 55	9 32	9 08	8 45	8 23		50
1	00	15 37	15 01	14 26	13 52	13 20	12 48	12 18	11 48	11 20	10 51	10 25	9 59	1	00
	10	17 57	17 16	16 36	15 58	15 22	14 46	14 11	13 37	13 05	12 33	12 02	11 33		10
	20	20 11	19 25	18 41	18 0	17 19	16 39	16 00	15 23	14 47	14 11	13 36	13 03		20
	30	22 18	21 29	20 41	19 56	19 11	18 28	17 45	17 04	16 24	15 45	15 07	14 30		30
	40	24 18	23 26	22 35	21 46	20 58	20 11	19 26	18 41	17 59	17 16	16 35	15 56		40
	50	26 10	25 15	24 21	23 30	22 39	21 50	21 01	20 14	19 28	18 43	17 59	17 16		50
2	00	27 56	26 58	26 02	25 08	24 16	23 23	22 32	21 43	20 53	20 06	19 20	18 34	2	00
	10	29 34	28 35	27 37	26 40	25 45	24 50	23 58	23 06	22 15	21 25	20 36	19 48		10
	20	31 05	30 04	29 05	28 06	27 09	26 13	25 18	24 25	23 31	22 39	21 49	20 59		20
	30	32 30	31 28	30 26	29 27	28 29	27 30	26 33	25 38	24 44	23 49	22 57	22 04		30
	40	33 46	32 44	31 42	30 42	29 42	28 42	27 44	26 47	25 51	24 56	24 00	23 07		40
	50	34 58	33 55	32 52	31 50	30 50	29 49	28 49	27 51	26 54	25 57	25 01	24 06		50
3	00	36 04	34 59	33 55	32 53	31 52	30 50	29 50	28 50	27 52	26 54	25 56	25 01	3	00
	10	37 03	35 58	34 54	33 51	32 49	31 47	30 46	29 46	28 46	27 47	26 48	25 51		10
	20	37 57	36 53	35 48	34 45	33 43	32 40	31 38	30 37	29 36	28 36	27 37	26 38		20
	30	38 46	37 41	36 37	35 33	34 30	33 27	32 25	31 23	30 22	29 21	28 21	27 21		30
	40	39 29	38 24	37 20	36 16	35 13	34 09	33 07	32 04	31 03	30 02	29 01	28 01		40
	50	40 08	39 03	37 59	36 55	35 52	34 48	33 45	32 42	31 41	30 39	29 38	28 38		50
4	00	40 42	39 37	38 32	37 29	36 25	35 22	34 19	33 16	32 14	31 12	30 11	29 09	4	00
	10	41 12	40 07	39 02	37 59	36 56	35 52	34 49	33 47	32 44	31 42	30 40	29 38		10
	20	41 37	40 33	39 28	38 25	37 22	36 19	35 16	34 12	33 10	32 07	31 06	30 04		20
	30	41 58	40 54	39 51	38 47	37 44	36 41	35 38	34 35	33 33	32 31	31 28	30 26		30
	40	42 15	41 12	40 08	39 05	38 03	36 59	35 57	34 54	33 51	32 49	31 47	30 45		40
	50	42 29	41 26	40 22	39 20	38 18	37 14	36 12	35 10	34 07	33 04	32 03	31 00		50
5	00	42 38	41 36	40 33	39 30	38 29	37 26	36 23	35 21	34 19	33 17	32 14	31 13	5	00
	10	42 45	41 42	40 39	39 36	38 36	37 34	36 32	35 30	34 28	33 26	32 24	31 22		10
	20	42 48	41 46	40 43	39 42	38 41	37 38	36 37	35 35	34 33	33 31	32 30	31 29		20
	30	42 47	41 46	40 44	39 43	38 42	37 40	36 39	35 38	34 36	33 35	32 33	31 31		30
	40	42 44	41 42	40 41	39 41	38 40	37 38	36 38	35 36	34 35	33 34	32 32	31 32		40
	50	42 37	41 36	40 36	39 35	38 34	37 34	36 32	35 32	34 32	33 30	32 30	31 29		50
6	00	42 26	41 26	40 26	39 26	38 26	37 25	36 25	35 25	34 24	33 25	32 24	31 23	6	00
	10	42 13	41 13	40 13	39 13	38 14	37 14	36 15	35 14	34 15	33 14	32 15	31 15		10
	20	41 57	40 57	39 58	38 58	38 00	37 00	36 01	35 01	34 02	33 02	32 02	31 04		20
	30	41 36	40 36	39 39	38 40	37 42	36 43	35 44	34 45	33 46	32 47	31 48	30 49		30
	40	41 13	40 16	39 17	38 19	37 21	36 23	35 25	34 26	33 28	32 29	31 31	30 33		40
	50	40 48	39 50	38 53	37 55	36 57	35 59	35 02	34 03	33 06	32 08	31 11	30 13		50
7	00	40 19	39 21	38 24	37 27	36 31	35 33	34 36	33 39	32 42	31 44	30 47	29 50	7	00
	10	39 46	38 50	37 53	36 56	36 01	35 03	34 07	33 11	32 14	31 18	30 21	29 25		10
	20	39 11	38 14	37 18	36 23	35 27	34 31	33 36	32 40	31 44	30 48	29 53	28 58		20
	30	38 32	37 37	36 41	35 46	34 52	33 56	33 01	32 06	31 10	30 16	29 21	28 27		30
	40	37 49	36 55	36 01	35 06	34 12	33 17	32 23	31 29	30 35	29 41	28 47	27 54		40
	50	37 04	36 11	35 16	34 23	33 30	32 36	31 43	30 49	29 57	29 03	28 10	27 17		50
8	00	36 15	35 22	34 29	33 37	32 44	31 51	30 59	30 06	29 15	28 22	27 30	26 39	8	00
	10	35 22	34 31	33 39	32 47	31 56	31 04	30 13	29 21	28 30	27 39	26 48	25 58		10
	20	34 28	33 37	32 45	31 54	31 04	30 13	29 23	28 33	27 43	26 53	26 03	25 14		20
	30	33 29	32 38	31 49	30 58	30 09	29 19	28 31	27 41	26 53	26 04	25 15	24 27		30
	40	32 26	31 37	30 48	29 59	29 11	28 22	27 35	26 47	26 00	25 12	24 25	23 38		40
	50	31 20	30 32	29 43	28 57	28 10	27 22	26 36	25 49	25 03	24 17	23 31	22 47		50
9	00	30 10	29 23	28 37	27 51	27 05	26 19	25 34	24 48	24 05	23 20	22 36	21 52	9	00
	10	28 57	28 11	27 25	26 41	25 57	25 13	24 29	23 46	23 03	22 20	21 37	20 56		10
	20	27 39	26 55	26 12	25 28	24 46	24 04	23 22	22 40	21 58	21 18	20 37	19 56		20
	30	26 18	25 36	24 54	24 13	23 32	22 51	22 11	21 31	20 52	20 12	19 33	18 54		30
	40	24 53	24 13	23 33	22 54	22 15	21 36	20 57	20 20	19 42	19 05	18 27	17 51		40
	50	23 25	22 46	22 09	21 32	20 54	20 18	19 41	19 05	18 30	17 54	17 20	16 45		50
10	00	21 54	21 18	20 42	20 06	19 31	18 57	18 22	17 48	17 15	16 42	16 09	15 37	10	00
	10	20 19	19 44	19 11	18 37	18 05	17 32	17 01	16 29	15 58	15 27	14 56	14 27		10
	20	18 40	18 08	17 37	17 06	16 36	16 06	15 36	15 07	14 39	14 10	13 41	13 14		20
	30	16 58	16 29	16 00	15 33	15 05	14 37	14 11	13 44	13 17	12 51	12 26	12 00		30
	40	15 14	14 47	14 21	13 55	13 31	13 06	12 42	12 18	11 54	11 31	11 07	10 45		40
	50	13 26	13 02	12 39	12 16	11 55	11 33	11 12	10 49	10 29	10 09	9 48	9 27		50
11	00	11 36	11 16	10 55	10 35	10 16	9 58	9 38	9 20	9 02	8 44	8 26	8 10	11	00
	10	9 43	9 26	9 09	8 53	8 37	8 20	8 05	7 49	7 34	7 19	7 04	6 50		10
	20	7 49	7 36	7 21	7 08	6 55	6 42	6 29	6 17	6 05	5 52	5 40	5 29		20
	30	5 53	5 43	5 32	5 22	5 13	5 02	4 53	4 44	4 34	4 25	4 17	4 08		30
	40	3 56	3 49	3 43	3 35	3 29	3 22	3 16	3 10	3 04	2 57	2 51	2 45		40
	50	1 58	1 55	1 51	1 48	1 45	1 42	1 38	1 35	1 32	1 29	1 25	1 22		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.		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 38	1 34	1 29	1 25	1 21	1 18	1 14	1 10	1 06	1 03	1 00	1	10	
	20	3 15	3 06	2 58	2 50	2 43	2 34	2 26	2 20	2 12	2 05	1 59	2	20	
	30	4 51	4 39	4 27	4 14	4 03	3 51	3 40	3 29	3 18	3 07	2 57	3	30	
	40	6 28	6 11	5 54	5 38	5 22	5 07	4 52	4 37	4 23	4 08	3 55	4	40	
	50	8 01	7 40	7 20	6 57	6 40	6 21	6 03	5 45	5 27	5 09	4 53	5	50	
1	00	9 33	9 09	8 44	8 21	7 57	7 35	7 13	6 51	6 30	6 09	5 49	1	00	
	10	11 03	10 35	10 07	9 40	9 13	8 47	8 21	7 57	7 33	7 09	6 45	1	10	
	20	12 30	11 58	11 27	10 56	10 26	9 57	9 28	9 01	8 33	8 06	7 40	2	20	
	30	13 54	13 19	12 45	12 11	11 38	11 06	10 34	10 03	9 32	9 03	8 33	2	30	
	40	15 17	14 38	14 00	13 24	12 47	12 12	11 38	11 04	10 30	9 58	9 25	3	40	
	50	16 35	15 53	15 13	14 33	13 54	13 16	12 39	12 02	11 26	10 51	10 15	3	50	
2	00	17 50	17 05	16 23	15 40	14 58	14 18	13 36	12 58	12 20	11 42	11 04	2	00	
	10	19 01	18 15	17 30	16 44	16 01	15 17	14 35	13 53	13 12	12 31	11 51	2	10	
	20	20 09	19 20	18 33	17 46	17 00	16 14	15 29	14 45	14 01	13 19	12 37	2	20	
	30	21 14	20 23	19 33	18 44	17 56	17 08	16 21	15 35	14 49	14 05	13 20	2	30	
	40	22 14	21 22	20 31	19 40	18 49	18 00	17 11	16 23	15 35	14 48	14 02	3	40	
	50	23 12	22 17	21 24	20 32	19 40	18 49	17 58	17 07	16 18	15 29	14 41	3	50	
3	00	24 05	23 09	22 15	21 21	20 27	19 34	18 42	17 50	16 59	16 09	15 19	3	00	
	10	24 54	23 58	22 62	21 67	20 72	19 79	18 87	17 94	17 03	16 15	15 24	3	10	
	20	25 41	24 43	23 46	22 49	21 53	20 57	20 02	19 07	18 14	17 21	16 27	3	20	
	30	26 26	25 24	24 27	23 29	22 32	21 35	20 38	19 43	18 48	17 53	16 58	3	30	
	40	27 02	26 02	25 03	24 05	23 07	22 09	21 12	20 15	19 19	18 23	17 27	3	40	
	50	27 37	26 36	25 38	24 38	23 39	22 41	21 43	20 45	19 47	18 50	17 53	3	50	
4	00	28 09	27 08	26 08	25 08	24 09	23 09	22 10	21 12	20 13	19 15	18 17	4	00	
	10	28 37	27 36	26 36	25 35	24 35	23 35	22 36	21 36	20 37	19 39	18 40	4	10	
	20	29 03	28 01	27 00	25 59	24 58	23 58	22 58	21 58	20 58	19 59	18 59	4	20	
	30	29 25	28 23	27 22	26 20	25 20	24 19	23 18	22 18	21 17	20 17	19 17	4	30	
	40	29 43	28 41	27 40	26 39	25 37	24 36	23 35	22 34	21 34	20 33	19 32	4	40	
	50	29 59	28 57	27 55	26 53	25 52	24 51	23 50	22 49	21 47	20 47	19 46	4	50	
5	00	30 11	29 09	28 08	27 06	26 04	25 03	24 01	23 00	21 59	20 58	19 57	5	00	
	10	30 20	29 18	28 17	27 15	26 13	25 12	24 11	23 09	22 08	21 08	20 06	5	10	
	20	30 27	29 25	28 24	27 22	26 21	25 19	24 17	23 16	22 15	21 14	20 12	5	20	
	30	30 30	29 29	28 28	27 26	26 25	25 24	24 21	23 20	22 19	21 18	20 16	5	30	
	40	30 39	29 38	28 37	27 35	26 34	25 33	24 32	23 31	22 30	21 29	20 28	5	40	
	50	30 49	29 47	28 46	27 45	26 44	25 43	24 42	23 41	22 40	21 39	20 38	5	50	
6	00	30 53	29 51	28 50	27 48	26 47	25 46	24 45	23 44	22 43	21 42	20 41	6	00	
	10	30 55	29 53	28 52	27 50	26 49	25 48	24 47	23 46	22 45	21 44	20 43	6	10	
	20	30 58	29 56	28 55	27 53	26 52	25 51	24 50	23 49	22 48	21 47	20 46	6	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	6	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	6	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	6	50	
7	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	00	
	10	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	10	
	20	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	7	50	
8	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	00	
	10	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	10	
	20	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	8	50	
9	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	00	
	10	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	10	
	20	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	9	50	
10	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	00	
	10	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	10	
	20	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	10	50	
11	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	00	
	10	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	10	
	20	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	20	
	30	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	30	
	40	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	40	
	50	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	11	50	
12	00	30 59	29 57	28 56	27 54	26 53	25 52	24 51	23 50	22 49	21 48	20 47	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 11°.		DECLINATION—SAME NAME AS—LATITUDE.												LATITUDE 11°.	
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.
		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	10 02	9 17	8 37	8 01	7 30	7 02	6 37	6 15	5 53	5 34	5 17	5 01	1	00
0	20	19 27	18 02	16 48	15 42	14 42	13 50	13 02	12 18	11 38	11 02	10 27	9 56	1	10
0	30	27 46	25 55	24 16	22 46	21 25	20 11	19 04	18 03	17 06	16 14	15 26	14 41	1	20
0	40	34 53	32 46	30 51	29 05	27 29	26 00	24 38	23 23	22 12	21 07	20 07	19 10	1	30
0	50	40 48	38 34	36 31	34 35	32 49	31 11	29 38	28 12	26 53	25 37	24 27	23 22	1	40
1	00	45 40	43 25	41 19	39 19	37 28	35 43	34 05	32 32	31 06	29 44	28 26	27 13	1	50
1	10	49 42	47 28	45 23	43 23	41 30	39 43	38 00	36 25	34 53	33 26	32 04	30 45	2	00
1	20	53 00	50 50	48 48	46 50	44 57	43 09	41 26	39 48	38 14	36 44	35 19	33 56	2	10
1	30	55 43	53 40	51 40	49 46	47 55	46 09	44 26	42 47	41 13	39 41	38 13	36 49	2	20
1	40	58 00	56 01	54 06	52 15	50 27	48 43	47 02	45 23	43 50	42 18	40 49	39 24	2	30
1	50	59 53	58 00	56 10	54 22	52 38	50 55	49 17	47 41	46 07	44 36	43 08	41 42	2	40
2	00	61 28	59 41	57 55	56 11	54 30	52 51	51 14	49 40	48 08	46 39	45 11	43 45	2	50
2	10	62 48	61 05	59 23	57 44	56 06	54 30	52 57	51 24	49 54	48 26	46 59	45 35	3	00
2	20	63 55	62 17	60 39	59 03	57 29	55 56	54 25	52 55	51 27	50 00	48 35	47 12	3	10
2	30	64 52	63 17	61 45	60 11	58 40	57 11	55 42	54 15	52 48	51 24	50 00	48 38	3	20
2	40	65 39	64 08	62 38	61 10	59 42	58 15	56 48	55 23	53 59	52 36	51 15	49 55	3	30
2	50	66 18	64 52	63 25	61 59	60 33	59 09	57 45	56 23	55 01	53 40	52 20	51 01	3	40
3	00	66 51	65 28	64 04	62 41	61 19	59 57	58 35	57 15	55 55	54 36	53 18	52 00	3	50
3	10	67 19	65 58	64 37	63 16	61 56	60 37	59 18	57 59	56 42	55 24	54 07	52 52	4	00
3	20	67 41	66 22	65 04	63 46	62 28	61 11	59 54	58 37	57 21	56 05	54 51	53 36	4	10
3	30	67 59	66 42	65 26	64 11	62 55	61 39	60 24	59 10	57 56	56 41	55 28	54 14	4	20
3	40	68 12	66 58	65 44	64 30	63 16	62 03	60 50	59 36	58 24	57 12	56 00	54 48	4	30
3	50	68 21	67 09	65 57	64 46	63 34	62 22	61 11	59 59	58 48	57 36	56 26	55 15	4	40
4	00	68 29	67 18	66 07	64 57	63 46	62 37	61 27	60 17	59 07	57 57	56 48	55 39	4	50
4	10	68 32	67 23	66 14	65 05	63 56	62 48	61 39	60 31	59 22	58 14	57 05	55 57	5	00
4	20	68 32	67 25	66 18	65 09	64 02	62 54	61 47	60 41	59 33	58 26	57 19	56 12	5	10
4	30	68 30	67 24	66 18	65 12	64 05	62 59	61 53	60 47	59 41	58 35	57 29	56 22	5	20
4	40	68 25	67 20	66 15	65 10	64 05	63 00	61 54	60 49	59 44	58 39	57 34	56 29	5	30
4	50	68 17	67 14	66 10	65 06	64 02	62 58	61 54	60 50	59 46	58 41	57 37	56 34	5	40
5	00	68 08	67 05	66 02	65 00	63 56	62 53	61 50	60 47	59 43	58 40	57 36	56 33	5	50
5	10	67 56	66 54	65 52	64 49	63 47	62 45	61 43	60 40	59 38	58 35	57 33	56 30	6	00
5	20	67 42	66 41	65 39	64 38	63 36	62 35	61 33	60 31	59 30	58 28	57 26	56 24	6	10
5	30	67 25	66 25	65 24	64 23	63 23	62 21	61 20	60 20	59 19	58 18	57 16	56 15	6	20
5	40	67 07	66 07	65 07	64 07	63 06	62 06	61 06	60 06	59 05	58 04	57 04	56 03	6	30
5	50	66 47	65 46	64 47	63 47	62 48	61 48	60 48	59 48	58 48	57 48	56 48	55 47	6	40
6	00	66 24	65 24	64 25	63 26	62 26	61 27	60 27	59 28	58 28	57 29	56 29	55 29	6	50
6	10	65 58	64 59	64 01	63 02	62 03	61 04	60 05	59 05	58 06	57 07	56 06	55 09	7	00
6	20	65 31	64 32	63 34	62 35	61 36	60 38	59 39	58 41	57 42	56 43	55 44	54 45	7	10
6	30	65 01	64 02	63 04	62 06	61 07	60 09	59 11	58 12	57 13	56 15	55 17	54 19	7	20
6	40	64 29	63 31	62 32	61 34	60 35	59 37	58 39	57 41	56 43	55 45	54 47	53 48	7	30
6	50	63 53	62 56	61 58	61 00	60 01	59 03	58 05	57 08	56 09	55 11	54 13	53 15	7	40
7	00	63 17	62 18	61 20	60 22	59 23	58 26	57 28	56 31	55 33	54 35	53 38	52 40	7	50
7	10	62 36	61 38	60 39	59 41	58 43	57 46	56 47	55 50	54 53	53 55	52 58	52 01	8	00
7	20	61 53	60 54	59 56	58 58	58 00	57 02	56 05	55 08	54 10	53 12	52 15	51 19	8	10
7	30	61 06	60 07	59 09	58 11	57 13	56 15	55 18	54 21	53 24	52 25	51 30	50 33	8	20
7	40	60 15	59 17	58 19	57 22	56 23	55 25	54 28	53 31	52 33	51 36	50 42	49 44	8	30
7	50	59 23	58 24	57 26	56 28	55 29	54 31	53 34	52 37	51 40	50 43	49 46	48 51	8	40
8	00	58 25	57 26	56 27	55 29	54 31	53 33	52 36	51 39	50 42	49 46	48 50	47 53	8	50
8	10	57 23	56 25	55 26	54 27	53 29	52 31	51 34	50 37	49 41	48 45	47 49	46 52	9	00
8	20	56 18	55 18	54 19	53 21	52 23	51 25	50 28	49 31	48 35	47 36	46 43	45 48	9	10
8	30	55 07	54 07	53 08	52 10	51 12	50 13	49 17	48 21	47 24	46 28	45 33	44 39	9	20
8	40	53 51	52 51	51 52	50 53	49 55	48 58	48 01	47 05	46 09	45 13	44 19	43 24	9	30
8	50	52 30	51 29	50 30	49 32	48 34	47 37	46 40	45 44	44 48	43 54	42 59	42 05	9	40
9	00	51 02	50 02	49 02	48 05	47 06	46 09	45 14	44 18	43 23	42 28	41 35	40 41	9	50
9	10	49 28	48 28	47 29	46 31	45 34	44 37	43 41	42 46	41 52	40 58	40 05	39 13	10	00
9	20	47 48	46 48	45 49	44 51	43 54	42 57	42 03	41 09	40 14	39 22	38 29	37 38	10	10
9	30	45 59	45 00	44 01	43 03	42 07	41 12	40 18	39 24	38 32	37 39	36 49	35 58	10	20
9	40	44 01	43 00	42 05	41 09	40 13	39 19	38 25	37 34	36 42	35 50	35 01	34 13	10	30
9	50	41 56	40 59	40 02	39 07	38 12	37 18	36 27	35 36	34 45	33 56	33 08	32 21	10	40
10	00	39 43	38 45	37 49	36 55	36 03	35 11	34 21	33 31	32 43	31 55	31 09	30 23	10	50
10	10	37 17	36 22	35 28	34 36	33 44	32 54	32 06	31 19	30 32	29 47	29 03	28 19	11	00
10	20	34 44	33 49	32 58	32 08	31 18	30 31	29 45	28 59	28 16	27 32	26 51	26 10	11	10
10	30	31 58	31 07	30 18	29 31	28 44	27 58	27 16	26 33	25 51	25 11	24 32	23 54	11	20
10	40	29 02	28 14	27 28	26 44	26 00	25 18	24 38	23 58	23 20	22 43	22 07	21 32	11	30
10	50	25 55	25 11	24 28	23 48	23 07	22 30	21 53	21 18	20 42	20 09	19 37	19 05	11	40
11	00	22 37	21 57	21 20	20 43	20 07	19 34	19 01	18 29	17 58	17 29	17 00	16 32	11	50
11	10	19 09	18 35	18 02	17 31	17 00	16 30	16 03	15 35	15 08	14 44	14 19	13 55	12	00
11	20	15 32	15 03	14 36	14 10	13 45	13 21	12 58	12 35	12 14	11 53	11 33	11 13	12	10
11	30	11 46	11 24	11 03	10 44	10 24	10 06	9 47	9 31	9 14	8 59	8 43	8 28	12	20
11	40	7 55	7 40	7 25	7 12	6 58	6 46	6 34	6 23	6 12	6 01	5 51	5 40	12	30
11	50	3 58	3 51	3 44	3 37	3 30	3 23	3 18	3 12	3 06	3 01	2 56	2 51	12	40
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	50

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.

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

When the 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.

When the 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 azimuth of the tabulated azimuth is to be taken for the required true bearing.

AZIMUTH OR TRUE BEARING.

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