

POLARIS (POLE STAR) TABLES, 2013
FOR DETERMINING LATITUDE FROM SEXTANT ALTITUDE AND FOR AZIMUTH

LHA ARIES	0° – 9°	10° – 19°	20° – 29°	30° – 39°	40° – 49°	50° – 59°	60° – 69°	70° – 79°	80° – 89°	90° – 99°	100° – 109°	110° – 119°
	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀	<i>a</i> ₀
0	0 28.8	0 24.5	0 21.2	0 19.0	0 18.1	0 18.5	0 20.1	0 22.8	0 26.7	0 31.6	0 37.3	0 43.6
1	28.3	24.1	20.9	18.9	18.1	18.6	20.3	23.2	27.2	32.1	37.9	44.3
2	27.9	23.7	20.7	18.8	18.1	18.7	20.5	23.5	27.6	32.7	38.5	44.9
3	27.4	23.4	20.4	18.6	18.1	18.8	20.8	23.9	28.1	33.2	39.1	45.6
4	27.0	23.0	20.2	18.5	18.1	19.0	21.0	24.3	28.5	33.8	39.7	46.3
5	0 26.5	0 22.7	0 20.0	0 18.4	0 18.1	0 19.1	0 21.3	0 24.6	0 29.0	0 34.3	0 40.4	0 47.0
6	26.1	22.4	19.8	18.3	18.2	19.3	21.6	25.0	29.5	34.9	41.0	47.7
7	25.7	22.1	19.6	18.3	18.2	19.5	21.9	25.4	30.0	35.5	41.7	48.3
8	25.3	21.7	19.4	18.2	18.3	19.6	22.2	25.9	30.5	36.1	42.3	49.0
9	24.9	21.5	19.2	18.2	18.4	19.8	22.5	26.3	31.0	36.7	43.0	49.7
10	0 24.5	0 21.2	0 19.0	0 18.1	0 18.5	0 20.1	0 22.8	0 26.7	0 31.6	0 37.3	0 43.6	0 50.4
Lat.	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁	<i>a</i> ₁
0	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3
10	.5	.5	.6	.6	.6	.6	.6	.5	.5	.4	.4	.4
20	.5	.6	.6	.6	.6	.6	.6	.5	.5	.5	.4	.4
30	.5	.6	.6	.6	.6	.6	.6	.6	.5	.5	.5	.5
40	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
45	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
50	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
55	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.7
60	.6	.6	.6	.6	.6	.6	.6	.6	.7	.7	.7	.7
62	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8
64	.7	.6	.6	.6	.6	.6	.6	.7	.7	.7	.8	.8
66	.7	.7	.6	.6	.6	.6	.6	.7	.7	.8	.8	.8
68	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9
Month	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂	<i>a</i> ₂
Jan.	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Feb.	.7	.7	.8	.8	.8	.9	.9	.9	.9	.9	.9	.8
Mar.	.5	.6	.7	.7	.8	.8	.9	.9	.9	.9	.9	0.9
Apr.	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	0.9	1.0
May	.3	.3	.4	.4	.5	.6	.6	.7	.7	.8	.9	0.9
June	.2	.3	.3	.3	.4	.4	.5	.5	.6	.7	.7	.8
July	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6
Aug.	.4	.4	.3	.3	.3	.3	.3	.3	.3	.4	.4	.5
Sept.	.6	.5	.5	.4	.4	.4	.3	.3	.3	.3	.3	.3
Oct.	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3
Nov.	0.9	0.9	0.8	.8	.7	.6	.6	.5	.4	.4	.3	.3
Dec.	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.6	0.5	0.4	0.4
Lat.	AZIMUTH											
0	0.4	0.3	0.2	0.1	0.0	359.9	359.7	359.6	359.5	359.5	359.4	359.4
20	0.4	0.3	0.2	0.1	0.0	359.8	359.7	359.6	359.5	359.4	359.4	359.3
40	0.5	0.4	0.3	0.1	0.0	359.8	359.7	359.5	359.4	359.3	359.2	359.2
50	0.6	0.5	0.3	0.1	359.9	359.8	359.6	359.4	359.3	359.2	359.1	359.0
55	0.7	0.6	0.4	0.2	359.9	359.7	359.5	359.4	359.2	359.0	358.9	358.9
60	0.8	0.6	0.4	0.2	359.9	359.7	359.5	359.3	359.1	358.9	358.8	358.7
65	1.0	0.8	0.5	0.2	359.9	359.6	359.4	359.1	358.9	358.7	358.6	358.5

Latitude = Apparent altitude (corrected for refraction) $-1^{\circ} + a_0 + a_1 + a_2$

The table is entered with LHA Aries to determine the column to be used; each column refers to a range of 10°. *a*₀ is taken, with mental interpolation, from the upper table with the units of LHA Aries in degrees as argument; *a*₁, *a*₂ are taken, without interpolation, from the second and third tables with arguments latitude and month respectively. *a*₀, *a*₁, *a*₂, are always positive. The final table gives the azimuth of *Polaris*.