

Date _____ Time (GMT) _____

Your estimated Latitude _____ Longitude _____

SUN GHA

GHA for day _____
Hrly accn. _____
Quad corr. _____
Carried **GHA** _____
Hours inc. _____
Minutes inc. _____
Seconds inc. _____
Final GHA _____
If needed 360°- _____

STAR GHA for

GHA Aries for day _____
a inc. _____
Hours inc. _____
Minutes inc. _____
Seconds inc. _____
Final **GHA Aries** _____
If needed 360°- _____
SHA Star + _____
GHA Star _____
If needed 360°- _____

DECLINATION

Dec for the day _____
Hrly inc. _____
Ann/Quad corr. _____
Final Dec _____

A = Declination of the Celestial Body

B = 90° - latitude, if latitude and declination have the same name
B = 90° + latitude, if latitude and declination have contrary names

LHA = GHA - longitude, if longitude is West
LHA = GHA + longitude, if longitude is East

If LHA is less than 90°, C = LHA
If 90° < LHA < 180°, C = 180° - LHA
If 180° < LHA < 270°, C = LHA - 180°
If LHA is greater than 270°, C = 360° - LHA

A = _____
B = _____
LHA = _____
C = _____

LOGCOS A _____ → **LOGSIN A** _____

LOGSIN C + _____

LOGSIN D _____ → **LOGCOS D** _____

LOGSIN A

LOGCOS D - _____

LOGCOS E _____ → **E** _____

If 90° < LHA < 270°,
then F = B + E
Otherwise, F = B - E

LOGCOS D _____ **B (E)** _____

LOGCOS F + _____ **E (B) ±** _____

← **F** _____

LOGSIN Hc _____ → **Hc** _____

LOGSIN D

LOGCOS Hc - _____

LOGSIN G _____ → **G** _____ → **Zn** _____

If the observed body is in the WEST and SOUTH, Zn = G + 180°
If the observed body is in the WEST and NORTH, Zn = 360° - G
If the observed body is in the EAST and SOUTH, Zn = 180° - G
If the observed body is in the EAST and NORTH, Zn = G

NOTES

When the observed body is in the East or West and it is uncertain whether the body is in the Northern or Southern azimuth quadrant, the following test will resolve the problem.

If (90 - E) is greater than the latitude:
The observed body is in a Northern (Southern) quadrant if the positions are in the Northern (Southern) hemisphere.