They can also be solved using the following key stroke sequence on a calculator with three memories.

This sequence actually solves for Hc in this order:

(cos LHA x cos dec x cos lat) + (sin lat x sin dec) = arc sin hc

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Assumed Lat
2nd DMS-D.D (changes to decimal degree format)
STO 1 (stored A. LAT in 1)

Declination
2nd DMS-D.D
STO 2   (stored DEC in 2)

GHA
2nd DMS-D.D

-
Assumed Longitude
2nd DMS - D.D
= (computed LHA)
STO 3   (LHA stored in 3)
COS

X
RECALL 2 (recalled declination)
COS

X
RECALL 1 (recalled Assumed latitude)
COS

+
RECALL 1 (recalled A. LAT)
SIN

X
RECALL 2 (recalled DEC)
SIN
=
2nd SIN (ARCSIN, computed Hc)

2nd D.D-DMS (changes decimal degree Hc to degree-minute-second so it can be written down)

2nd DMS - D.D (changes it back)
COS

1/x   (converts COS Hc to SEC Hc)

X
RECALL 3 (recalled LHA)
SIN

X
RECALL 2 (recalled DEC)

```
COS

=
2nd SIN  (ARCSIN, computed Z)

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