

Sight Reduction Worksheet for Ageton's Tables

A(t)

+B(Dec)

A(R)

-B(Hc)

A(Z)

→

Z

A(Dec)

-B(R)

A(K)

→

Give K the same name as Dec:
K

±Lat

B(K~Lat)

←

K~Lat*

+B(R)

A(Hc)

→

Hc

*Add K and Lat if they are of contrary name. Otherwise subtract the smaller from the greater quantity.

Quantities printed in the same color (red, green, or blue) should be looked up and noted at the same instant in order to reduce the number of page openings.

If the meridian angle, t , is greater than 90° , take K from the bottom of the table. Always take Z from the bottom of the table, except when K is same name and greater than Lat, in which case take Z from the top of the table. Apply the following rules to find the true azimuth, Z_N :

$$Z_N = \begin{cases} Z & \text{if } Lat > 0 \text{ (N)} \text{ AND } t < 0 \text{ (E)} \\ 180^\circ - Z & \text{if } Lat < 0 \text{ (S)} \text{ AND } t < 0 \text{ (E)} \\ 180^\circ + Z & \text{if } Lat < 0 \text{ (S)} \text{ AND } t > 0 \text{ (W)} \\ 360^\circ - Z & \text{if } Lat > 0 \text{ (N)} \text{ AND } t > 0 \text{ (W)} \end{cases}$$