FACT SHEET: CALCULATING MAGNETIC DECLINATION

Formula: Grid Magnetic Angle + [(Current Year - Year of Declination Information) × (Annual Change)] = Current Declination

Grid Magnetic Angle. The angle between grid north and magnetic north, found on the declination diagram. Written in degrees and minutes.



1 degree (°) = 60 minutes ('), similar to calculating time (eg, 1 hour = 60 minutes).

This ratio is very important to remember when adjusting the grid magnetic angle to the current declination. This is where most errors occur.

Current Year. The current calendar year.

Year of Declination Information. Found below the declination diagram.

Annual Change. Found below the declination diagram and is written in minutes.



It is important that the annual change be inserted into the formula correctly:

- If annual change is **increasing**, insert into formula as a **positive** number.
- If annual change is **decreasing**, insert into formula as a **negative** number.

Current Declination. This is the result of the formula. It is the magnetic declination to be set on the compass.

East Declination. When magnetic north is east (to the left) of grid north on the declination diagram.

West Declination. When magnetic north is west (to the right) of grid north on the declination diagram.



If the current declination calculates to a negative number, an east declination changes to a west declination and vice versa.

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