

Compass Heading Worksheet

Compass HeadingClear

True Heading

THdg =203°

Magnetic Heading

MHdg =207°

Compass Heading

CHdg =211°

Variation

Deviation

Var =4°

Dev =4°

Clear	Set all variables to a invalid state keeping the current value. If it is touched again, clears all values to 0.
THdg	Stores the True Heading of the aircraft.
MHdg	Stores the Magnetic Heading.
CHdg	Stores the Compass Heading.
Var	Stores the magnetic variation of the magnetic compass from the magnetic tru north pole.
Dev	Stores the magnetic disturbances within the aircraft.

This function is used to account for the inherent inaccuracies of the compass, caused by the difference between the direction indicated by the magnetic compass and the true North Pole (magnetic variation), as well as magnetic disturbances within the aircraft (deviation).

Example 1:

What is the compass heading for a flight on a true heading of 203°, where the compass deviation card indicates a 4° and the sectional chart indicates the flight will have a 4° westerly variation?

Solution:

Keystrokes	Description
[Clear]	Invalidate all inputs to start a new calculation.
type 203 [THdg]	Stores 203° true heading in THdg (the button change to blue).
type 4 [Var]	Stores 4° variation in Var (the button change to blue) and automatically calculates the magnetic heading: MHdg = 207° (the button change to red)..
type 4 [Dev]	Stores 4° deviation in Dev (the button change to blue) and automatically calculates the compass heading: CHdg = 211° (the button change to red).

Appendix : Equations Used

The equations that this worksheet calculates are:

- a) Magnetic Heading: **MHdg = THdg + Var**
- b) Compass Heading: **CHdg = THdg + Var + Dev**
- c) True Heading: **THdg = CHdg - Var - Dev**