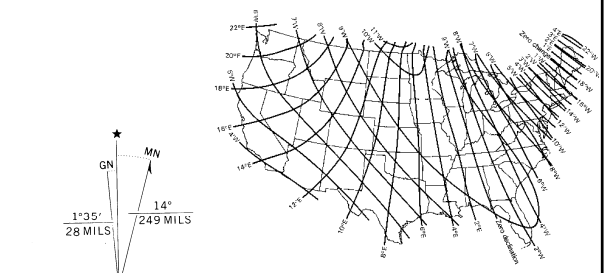
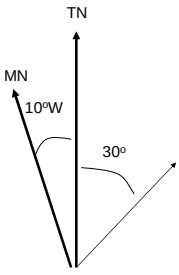
Dealing with Declination

Example declination diagram



UTM GRID AND 1988 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Declination WEST



Magnetic north is 10 degrees west of true north

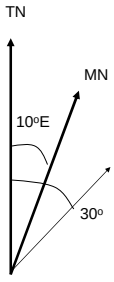
To correct a TRUE bearing (e.g. 30) to MAGNETIC, We need to rotate counterclockwise to correct

So declination is ADDED to the magnetic bearing

WEST IS BEST, SO ADD
30 + 10 = 40

For magnetic to true, do the opposite (SUBTRACT)

Declination EAST



Magnetic north is 10 degrees east of true north

To correct a TRUE bearing (e.g. 30) to MAGNETIC, We need to rotate clockwise to correct

So declination is SUBTRACTED from the true bearing

EAST IS LEAST, SO SUBTRACT
30 – 10 = 20

For magnetic to true, do the opposite (ADD)

Quick solution

- Remember:

1. START WITH THE TRUE BEARING (map to compass)
2. WEST IS BEST ADD: EAST IS LEAST SUBTRACT
3. NOTE THAT YOU MAY GO OVER 360, IF SO JUST SUBTRACT 360 FROM RESULT
4. TO START WITH MAGNETIC NORTH BEARINGS, DO THE OPPOSITE