

PREPLANS

MAP WALKING
CONTINGENCY PLANS
NORTHING

CHECKS

GUT CHECK
COMPASS CHECK
PLAN CHECK
TERRAIN CHECK

CONFIRMATIONS

TERRAIN CHECK
RESECTION
FEATURE CHECK
SURROUNDING TERRAIN CHECK

TAKING A BEARING IN REALITY:

1. ACKNOWLEDGE THE EXISTENCE OF YOUR MAGNETIC NEEDLE
2. Point the end of the compass in the direction of the intended bearing.
3. Swivel the compass bezel until it is aligned with magnetic north. Put the Shed over the Red.
4. Read the compass bearing where it says "Read Bearing Here."
5. You now have a bearing in MAGNETIC degrees.

TAKING A BEARING ON THE MAP:

1. DENY THE EXISTENCE OF YOUR MAGNETIC NEEDLE
2. Identify the two points you wish to take a bearing between.
3. Using the side of your compass as a straight edge, draw a line connecting them.
4. Place the center of your compass bezel over the starting point.
5. Swivel the base of the compass until it is aligned with the drawn line and pointing towards the ending point.
6. Read the bearing where it says "Read Bearing Here"
7. You now have a bearing in TRUE degrees

IMPORTANT NOTE:

If you ask me to follow a bearing of 90 degrees, I will respond “I cannot, that bearing does not exist.” Every single time you relay a bearing to yourself or someone else you should identify whether you are using a MAGNETIC bearing or a TRUE bearing. Every written bearing should read either 360M or 360T.

TAKING A RECIPROCAL:

1. Take a bearing. Identify whether it is TRUE or MAGNETIC.
2. If the bearing is between 0-180 degrees, add 180.
3. If the bearing is between 181-360 degrees, subtract 180.
4. You now have a reciprocal bearing in the same degrees as the original bearing. That is to say, if you had a TRUE bearing, you now have a TRUE reciprocal bearing.

ADJUSTING FOR DECLINATION:

1. Take a bearing. Identify whether it is TRUE or MAGNETIC. Remember TRUE bearings are taken on maps, MAGNETIC bearings are taken on reality. (During a free moment, consider the significance of us describing the bearing between two arbitrary points on a globe as “TRUE”)
2. For TRUE bearings, add the declination to get the MAGNETIC bearing. When going from Map to Compass Add.
3. For MAGNETIC bearings, subtract the declination to get the TRUE bearing. When going from Compass to Map Subtract.

DECLINATION MEMORY MNEMONICS:

I offer you two:

1. When going from MAP (true) to COMPASS (magnetic) ADD or **MCA**. When going from COMPASS (magnetic) to MAP (true) SUBTRACT or **CMS**. Remember those abbreviations
2. There is more detail in reality than on the map, so add declination when going from MAP (true) to COMPASS (magnetic). There is less detail on the map than in reality, so subtract declination when going from COMPASS (magnetic) to MAP (true).

USING A TRUE BEARING TO PLOT A COURSE IN REALITY:

1. Find your TRUE bearing.
2. Adjust for declination by adding the declination. You now have a MAGNETIC bearing.
3. ACKNOWLEDGE THE EXISTENCE OF YOUR MAGNETIC NEEDLE.
4. Rotate your bezel until the desired bearing is aligned with the “Read Bearing Here” mark.
5. Rotate yourself until the magnetic needle is aligned with north on the bezel. Put the Red in the Shed.
6. You are now facing the desired direction of travel. Follow the course as desired.

USING A MAGNETIC BEARING TO PLOT A COURSE ON THE MAP:

1. Find your MAGNETIC bearing.
2. Adjust for declination by subtracting the declination. You now have a TRUE bearing.
3. DENY THE EXISTENCE OF YOUR MAGNETIC NEEDLE.
4. Rotate your bezel until the desired bearing is aligned with the “Read Bearing Here”
5. Mark your starting point on the map with a pencil.
6. Place the center of the bezel over the starting point.
7. Rotate the compass until the North of the bezel is aligned with True north (HINT: The crosshatches can help.)
8. Mark the end of the direction of travel arrow with a pencil point. Remove compass and connect the two points.
9. You now have plotted the course on your map. It can be extended in either direction.