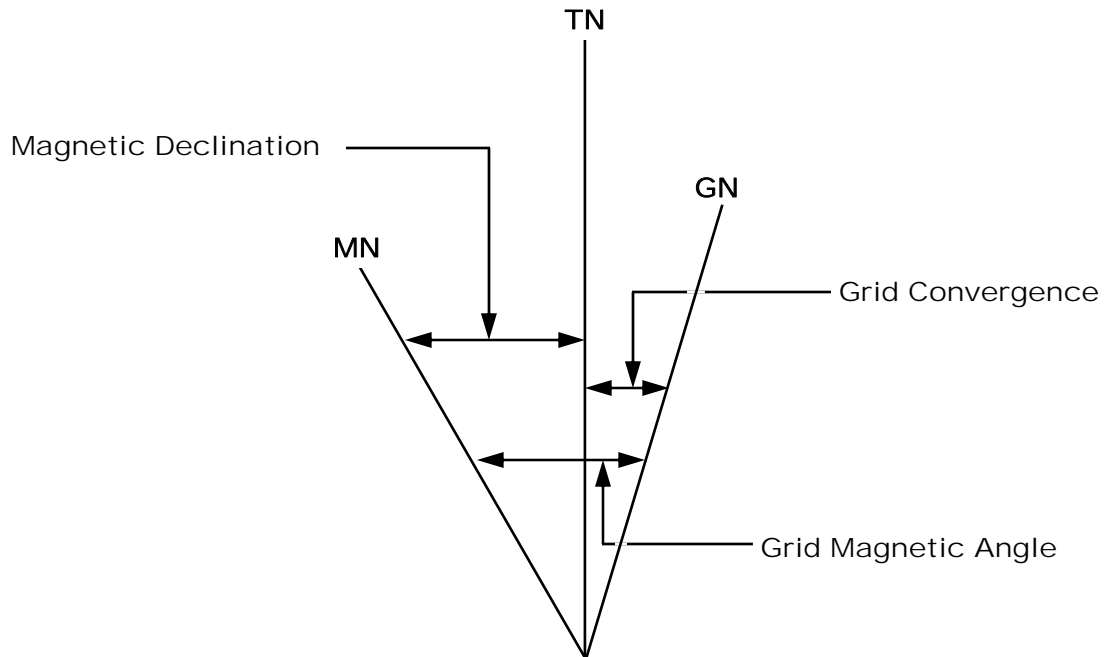


# North Points



**TN** — TRUE NORTH is the actual direction of the geographical north pole.

**GN** — GRID NORTH is The direction of the vertical (Eastings) grid lines on a map. For all practical purposes TRUE and GRID NORTH are the same.

**MN** — MAGNETIC NORTH is the direction towards which the compass needle is attracted is the MAGNETIC NORTH POLE, see diagram above.

**Magnetic Declination** - This is the ever decreasing angle between MAGNETIC NORTH and TRUE NORTH. The reason there is a angle between the two, and they are not same, is because at the centre of the earth there is molten iron which causes magnetic fields this is constantly moving, therefore the magnetic north pole is constantly moving.

**Grid Convergence** - As you know the earth is a sphere and cannot physically be covered in squares with out some over lapping, this means there will be a slight difference between GN and TN on nearly all maps. For all practical purposes this angle should be regarded as non excitant or the same.

**Grid Magnetic Angle** - shortened to **GMA**, this is used mainly for navigation purposes when walking on bearings. For all practical purposes it is the same as Magnetic Declination.