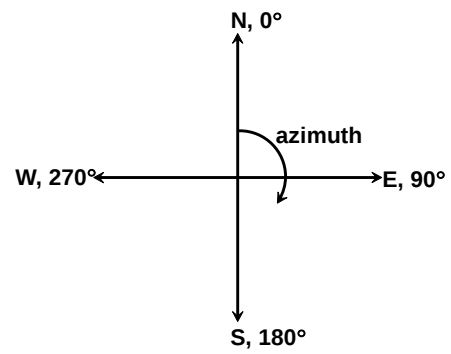


Bearings are a way of talking about directions using angles. This is very useful for people in ships or planes, because you can use bearings to tell them the direction they need to travel in. There are two main ways to describe the direction.

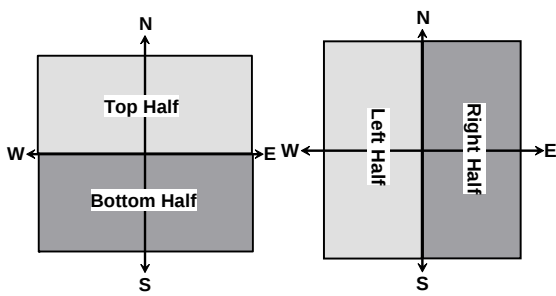
Azimuths

Azimuths describe a direction as being somewhere between 0 and 360 degrees. 0 degrees is the direction north, which is usually 'up' when you draw it on a piece of paper. The angles increase as you travel in a *clockwise* direction from north.



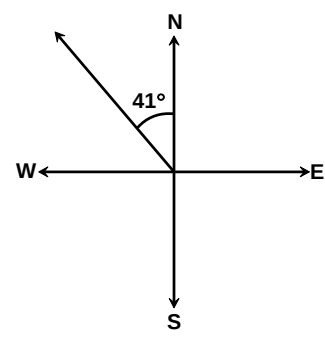
Bearings

Bearings use a combination of angles and compass directions to describe a direction. A direction is described by how far towards east or west it is from north or south.



Bearings and Azimuths

Example



It's obviously in the top half, so we'll be describing how *far away from north* it is. So we can write something like:

Bearing is ... degrees of north

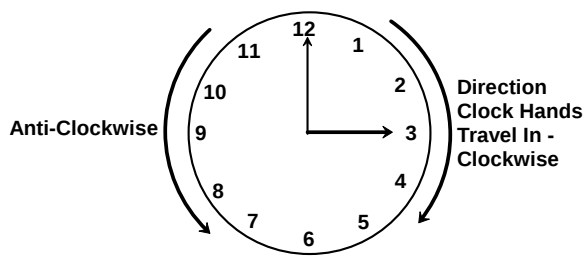
It's in the left half, so we'll be using west:

Bearing is ... degrees west of north

So now all we've got to do is provide the number of degrees. Well, if we start at north, and rotate towards west until we reach our direction, how many degrees have we rotated? Luckily, it's already marked on the diagram - 41°. So we can write:

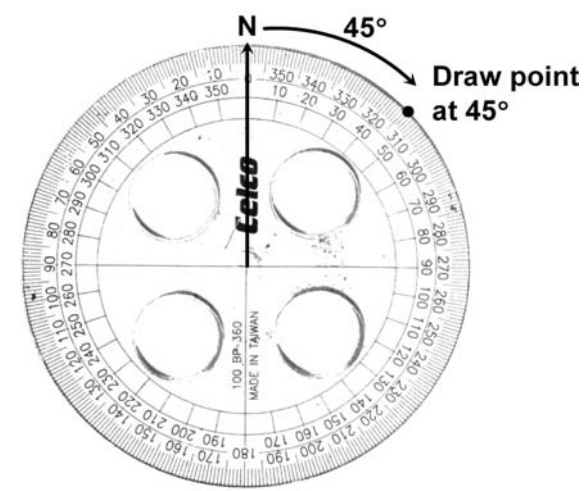
Bearing is 41° degrees west of north

Clockwise and anti-clockwise

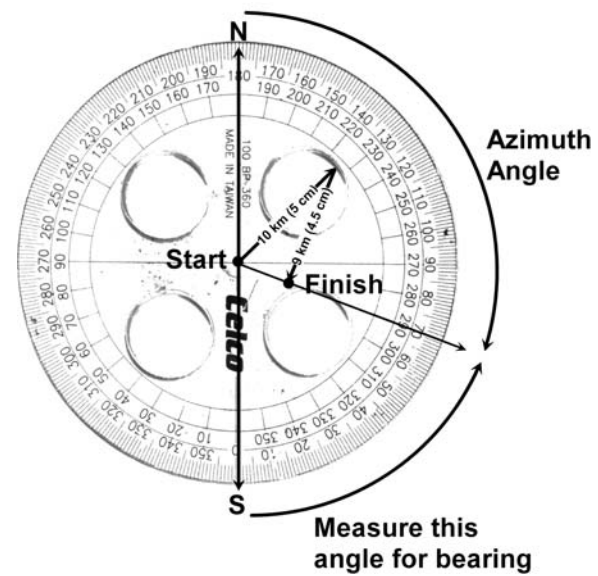


Using Your Protractor

Measuring 45° east of north:



Measuring both an azimuth angle and a bearing from the 'Start' location to the 'Finish' location:



Azimuth = 110°.

Bearing = 70 degrees east of south.