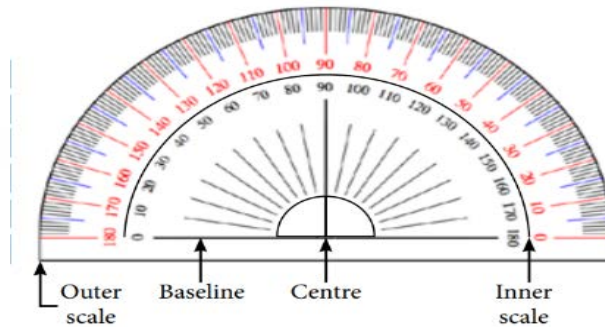


Measuring and Drawing an Angle



A protractor is an instrument we use to measure an angle. A protractor has two scales of measurements, the inner scale and the outer one.



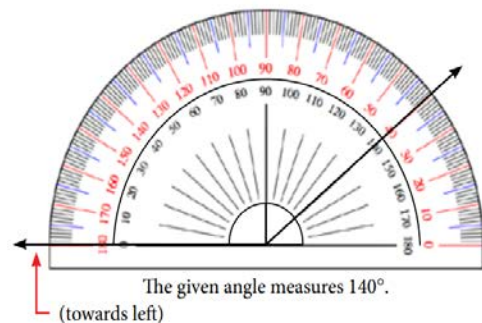
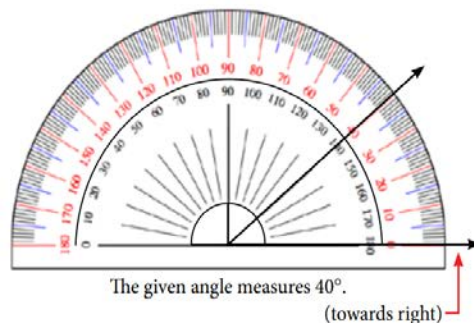
Angles are marked in degrees from 0 to 180 on both the scales. The outer scale is in the clockwise direction and the inner scale is in the anticlockwise direction.



Measuring Angles Using a Protractor

Follow these steps to measure an angle using a protractor.

- Place the baseline of the protractor on the arm of the angle we want to measure.
- The point at the centre of the protractor should be on the vertex of the angle to measure.
- If the arm (base line) of the angle to measure is towards the right, read from the inner scale and if the arm (base line) angle is towards the left, read from the outer scale.
- Read the measure of the angle where the other arm of the angle crosses the scale.



Measuring and Drawing an Angle



Drawing an Angle

Here are the steps to be followed to construct an angle using a protractor.

Example: Construct an angle BOA equal to 75° .

- Draw a ray OA using a ruler.
- Place the centre of the protractor at O on the ray OA.
- Adjust the protractor so that the baseline of the protractor is on the ray OA.
- Now if the ray is towards the right side read the inner scale and if the ray is towards the left side read the outer scale.
- Measure carefully.
- Mark a point at 75° and name it as B.
- Join point B and O.
- $\angle BOA = 75^\circ$ is ready.

