## Measuring Angles

A protractor is a tool used for measuring angle in degrees. On your protractor there is a measure or scale going clockwise from $0^{\circ}$ to $180^{\circ}$ ( that is from left to right). And there is another measure or scale going anti-clockwise from $0^{\circ}$ to $180^{\circ}$ ( that is from right to left). Using either of these directions we can measure angles from $0^{\circ}$ to $180^{\circ}$. Angles between $180^{\circ}$ and $360^{\circ}$ are attained by subtracting.

In measuring an angle, the middle or centre of the protractor is placed at the vertex of the angle. And the horizontal base is placed along an arm or limb of the angle (this matches with the $0^{\circ}$ position). The size of the angle is read off the protractor using the proper scale (that is the scale or direction that goes from $0^{\circ}$ to $\mathrm{y}^{\circ}$ ).

## How to Measure an Angle with a Protractor?

Step 1. The line marked zero of the protractor needs to be aligned with one side of the angle. You read the set of numbers from your zero line onwards.

Step 2. To draw an angle of 60 degrees first draw a part of a line that is to become one side of the angle.

Step 3. After place the protractor so its zero line is aligned with your line segment and that the vertex is in place.

Step 4. Then put a mark at the 60 degree point.

Step 5. After that take out the protractor and draw a line through your mark.

Measuring an acute angle


Measuring an acute angle of $60^{\circ}$


## Measuring a Reflex angle



Measuring $270^{\circ}$ that is $180^{\circ}$ plus $90^{\circ}$ or $360^{\circ}$ minus $90^{\circ}$

## Drawing Angles

The process is to draw a straight line to behave like an arm of the angle and tick a point on the line to behave as the vertex of the angle. After a protractor is set up as customary and the angle found by measurement. A point Y is then positioned above the protractor in line with the measured angle. A line is then drawn through the point and the vertex and the angle is finished.


