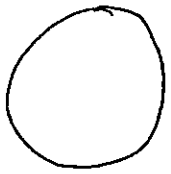
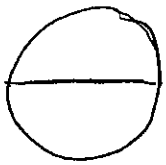
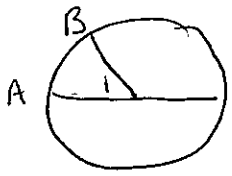
Circle Notes



a circle is 360°



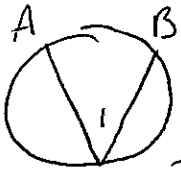
a semi circle is 180°



a <u>central angle</u> has a Vertex in the <u>center</u> of a circle

The measure of a central angle is equal to the measure of its corresponding arc.

$\overset{\frown}{AB} = \angle 1$ If $\overset{\frown}{AB} = 80°$ then $m\angle 1 = 80°$

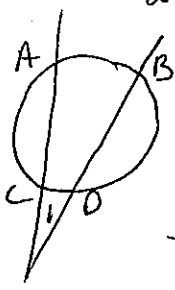


<u>Inscribed Angles</u>

If the vertex of an angle lies <u>on</u> the circle - it is an Inscribed Angle

The angle measure of an inscribed angle is half the measure of its corresponding arc - AND The arc is twice the measure of its corresponding angle.

$\angle 1 = \frac{\overset{\frown}{AB}}{2}$ AND $\overset{\frown}{AB} = 2(\angle 1)$. If $\overset{\frown}{AB} = 80°$, Then $m\angle 1 = 40°$



<u>Circumscribed Angle</u>

a circumscribed angle goes through the circle and the vertex lies outside the circle.

The $m\angle 1 = \frac{\overset{\frown}{AB} - \overset{\frown}{CD}}{2}$

If $\overset{\frown}{AB} = 80°$

$\overset{\frown}{CD} = 30°$

$50°$

Then $\frac{50}{2} = 25°$. The measure of $\angle 1 = 25°$