

**Objective:**

- 9-1 Classify Angles as Acute, Right, Obtuse, Straight and Reflex
- 9-2 Measuring Angles with a protractor
- 9-3 Use a compass to bisect angles (Construction)

**9.1 Angles**

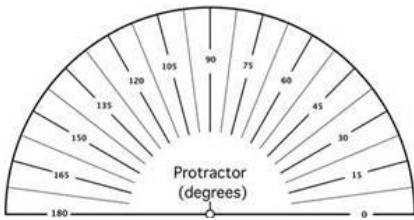
The point where two lines (segments) meet to form an **angle** is the **Vertex**.

The lines that form the angle are referred to as the **sides** of the angle.

The measure of the angle,  $\sphericalangle$  is measured in **Degrees**  $^{\circ}$ .

A circle consists of **360 $^{\circ}$** .

A **Protractor** is used to measure the degrees of an angle.



$\sphericalangle$  are classified by the measure of their angle as being either:  
**Acute, Right, Straight, Obtuse, or Reflex**

**Acute angles** are less than 90 $^{\circ}$

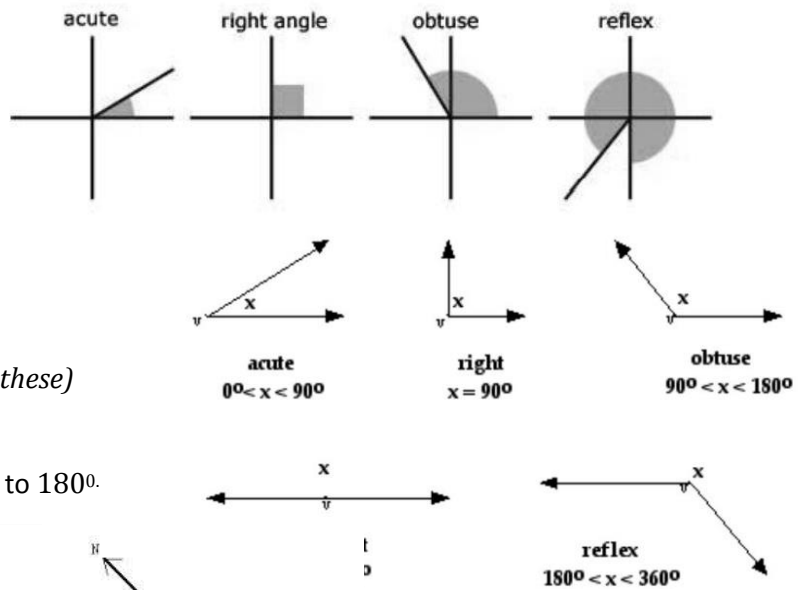
**Right angles** are 90 $^{\circ}$

**Obtuse angles** are > 90 $^{\circ}$  and < 180 $^{\circ}$

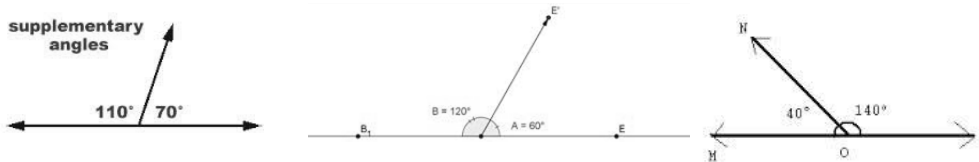
**Straight angles** are 180 $^{\circ}$

**Reflex angles** are > 180 $^{\circ}$  and < 360 $^{\circ}$

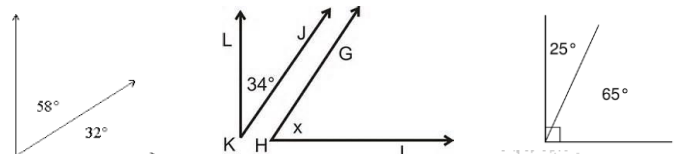
*(but little is done with these)*



**Supplementary Angles** are two angles that add to 180 $^{\circ}$ .

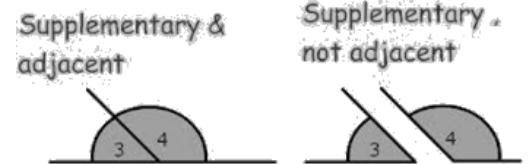


**Complementary Angles** are two angles that that add to 90 $^{\circ}$



Angles that are touching and share a vertex and a side are called **Adjacent Angles**.

(Angles can also be **Non-Adjacent** or non-touching.)



When two lines cross, they form **OPPOSITE** or **VERTICAL ANGLES**:

