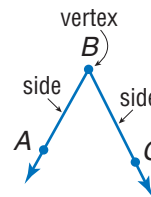


Measuring and Drawing Angles

Two rays that have a common endpoint form an **angle**. The common endpoint is called the **vertex**, and the two rays that make up the angle are called the **sides** of the angle.

A circle can be divided into 360 equal sections. Each section is one **degree**. You can use a **protractor** to measure an angle in degrees and draw an angle with a given degree measure.



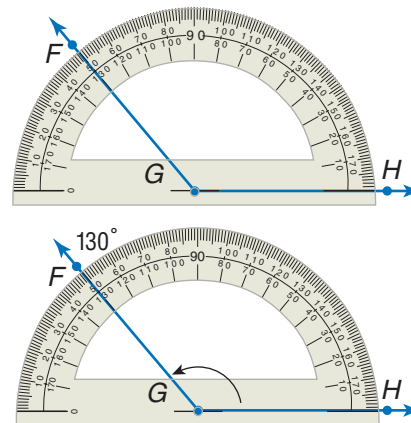
EXAMPLE Measure an Angle

1 Use a protractor to measure $\angle FGH$.

Step 1 Place the center point of the protractor's base on vertex G . Align the straight side with side \overrightarrow{GH} so that the marker for 0° is on the ray.

Step 2 Use the scale that begins with 0° at \overrightarrow{GH} . Read where the other side of the angle, \overrightarrow{GF} , crosses this scale.

The measure of angle FGH is 130° .
Using symbols, $m\angle FGH = 130^\circ$.



EXAMPLE Draw an Angle

2 Draw $\angle X$ having a measure of 75° .

Step 1 Draw a ray. Label the endpoint X.

Step 2 Place the center point of the protractor's base on point X. Align the mark labeled 0 with the ray.

Step 3 Use the scale that begins with 0. Locate the mark labeled 75. Then draw the other side of the angle.

