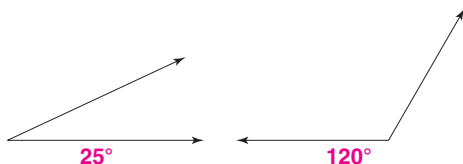


Activity

How do you use a protractor?

You can use a **protractor** to measure and draw angles.

- a. Trace each angle and extend its sides. Follow the directions at the right to measure each angle.



- b. There are two scales of numbers on a protractor. How did you decide which one to use?
See margin.
 c. Follow the directions at the right to draw an angle with each measure. **See margin.**

160°

90°

1. Sample answer:
 Acute: angle between
 2 blades on scissors;

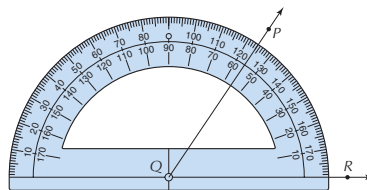
35°

180°

Right: angle at corner of doorway; Obtuse: angle formed by hour and minute hand on clock; Straight: angle formed by putting two pencils end to end

To Measure an Angle

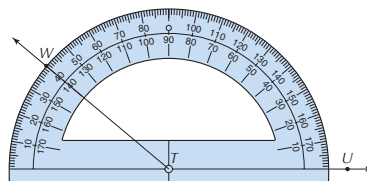
Place the protractor's center on the angle's vertex. Place the 0° mark on one side of the angle. Read the measure where the other side of the angle crosses the protractor.



The measure of $\angle PQR$ is 56° .

To Draw an Angle of 140°

Draw \overrightarrow{TU} . Be sure to label the endpoint T . Place the protractor's center on T . Line up \overrightarrow{TU} with the 0° mark. Place a point at 140°. Label it W . Draw \overrightarrow{TW} .



The measure of $\angle WTU$ is 140° .

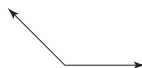
How can you classify angles?



An **acute angle** has a measure between 0° and 90° .



A **right angle** has a measure of 90° .



An **obtuse angle** has a measure between 90° and 180° .



A **straight angle** has a measure of 180° .

Talk About It

1. Find an example of each of the four types of angles in your classroom. **See above.**