Name _____

Classify Triangles

(**I Can**) classify triangles.
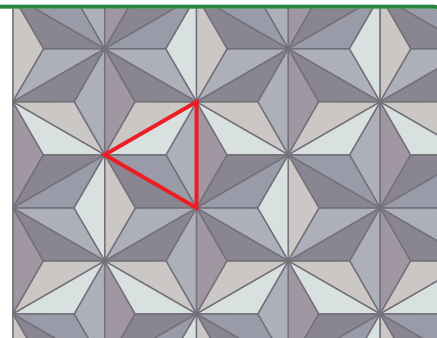
🔓 UNLOCK the Problem Real World

If you look closely at Epcot Center's Spaceship Earth building in Orlando, Florida, you may see a pattern of triangles. The triangle outlined in the pattern at the right has 3 sides of the same length and 3 acute angles. What type of triangle is outlined?
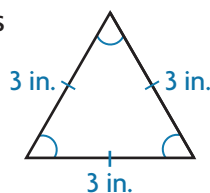
Complete the sentence that describes each type of triangle.
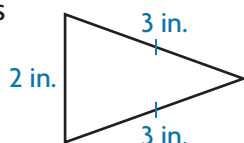
Classify triangles by the lengths of their sides.

An **equilateral triangle** has
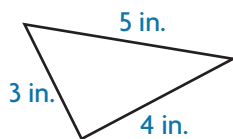
_____ sides of equal length.

3 in.   3 in.
3 in.

An **isosceles triangle** has

_____ sides of equal length.

3 in.
2 in.
3 in.

A **scalene triangle** has

_____ sides of equal length.

5 in.
3 in.
4 in.

Classify triangles by the measures of their angles.

A **right triangle** has one 90°, or

_____ angle.

60°
30°
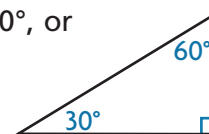
An **acute triangle** has 3

_____ angles.

75°
30°   75°
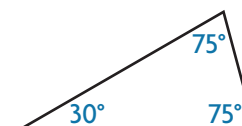
An **obtuse triangle** has 1

_____ angle.

32°
18°   130°
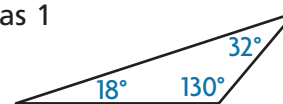
The type of triangle outlined in the pattern can be classified by the length of its sides as an _____ triangle.

The triangle can also be classified by the measures of its angles as an _____ triangle.

(Math Talk)

MTR 5.1 Use patterns and structure.

Is an equilateral triangle also a regular polygon? Explain.

(**Go Online**) For more help

Activity

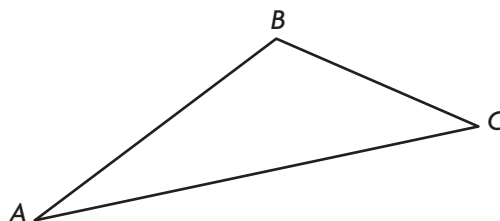**Classify triangle *ABC* by the lengths of its sides and by the measures of its angles.**

Materials ■ centimeter ruler ■ protractor

STEP 1 Measure the sides of the triangle using a centimeter ruler. Label each side with its length. Classify the triangle by the lengths of its sides.

STEP 2 Measure the angles of the triangle using a protractor. Label each angle with its measure. Classify the triangle by the measures of its angles.

● What type of triangle has 3 sides of different lengths?

_____

● What is an angle called that is greater than 90° and less than 180°?

_____

Triangle *ABC* is a _____ _____ triangle.

Try This! Draw the type of triangle described by the lengths of its sides and by the measures of its angles.

		Triangle by Length of Sides	
		Scalene	**Isosceles**
Triangle by Angle Measure	**Acute**	**Think:** I need to draw a triangle that is acute and scalene.	
	Obtuse		

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Can you draw a triangle that is right equilateral? Explain.