Acute triangle

A triangle with three acute angles

Equiangular triangle

A triangle with three angles, each measuring 60°

Obtuse triangle

A triangle with one obtuse angle

Scalene triangle

A triangle with no equal sides

Isosceles triangle

A triangle with two sides of equal length

Lines may be used to mark the sides of a figure. A single line represents one side length, double lines another, and triple lines a third. For example, a triangle that has a single line marking each side has three sides of equal length.

Triangles are named by their angles and by their sides.

Triangles Named by Their Angles

Acute

Each angle of an **acute triangle** measures less than 90°.

Equiangular
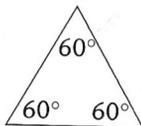
All of the angles of an **equiangular triangle** measure 60°.

Obtuse
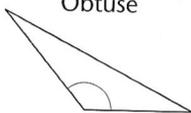
One angle of an **obtuse triangle** measures more than 90°.

Right
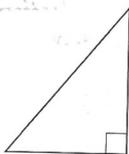
One angle of a right triangle measures 90°.

**Triangles Named by Their Sides**

Scalene

Each side of a **scalene triangle** is a different length.

Isosceles

Two sides of an **isosceles triangle** have the same length.

Equilateral
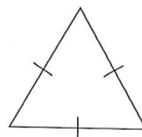
All of the sides of an equilateral triangle have the same length.

You can use these characteristics of triangles to name triangles.

EXAMPLE 1 What name or names best describe this triangle?
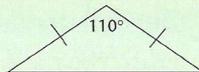
Step 1 Consider the angles of the triangle. Because one angle measures more than 90°, it is an obtuse triangle.

Step 2 Consider the sides of the triangle. Because two sides have the same length, it is an isosceles triangle.

**Step 3** Name the triangle: The triangle is *obtuse isosceles*.

TRY THIS

Naming Triangles

EXAMPLE Triangles can be classified according to their sides.
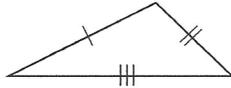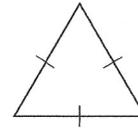
| Scalene | Isosceles | Equilateral |

Directions Fill in the chart by writing the classification word to describe the triangle with the given sides.

Triangle—Measurements of the Sides	Classification
2.5 inches, 1.5 inches, 2.0 inches	**1.** _____
11 cm, 8 cm, 6.5 cm	**2.** _____
2 feet, 3 feet, 3 feet	**3.** _____
35 mm, 35 mm, 35 mm	**4.** _____
5 units, 10 units, 5 units	**5.** _____

EXAMPLE Triangles can be classified according to their angles.
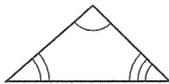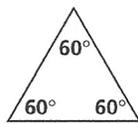
| Acute | Equiangular | Obtuse | Right |

Directions Fill in the chart by writing the classification word to describe the triangle with the given angles.

Triangle—Measurements of the Angles	Classification
60°, 60°, 60°	**6.** _____
30°, 110°, 40°	**7.** _____
60°, 15°, 105°	**8.** _____
90°, 70°, 20°	**9.** _____
70°, 30°, 80°	**10.** _____

Algebra