

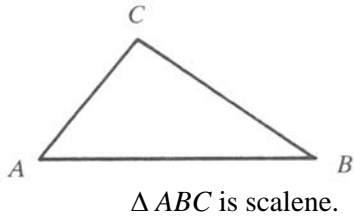
SKILL BUILDER TWELVE

Properties of Triangles

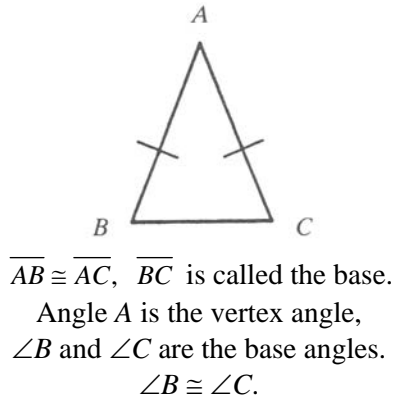
Classification by Sides

Triangles that are classified according to the lengths of their sides are equilateral, isosceles, or scalene.

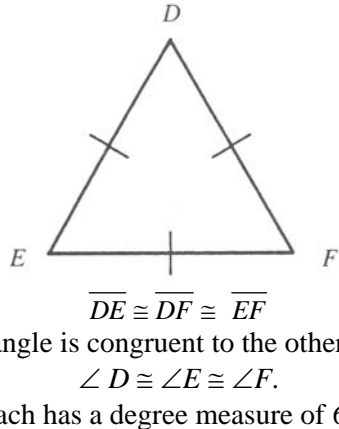
Scalene Triangle: A triangle with no congruent sides.



Isosceles Triangle: A triangle with two or more congruent sides.

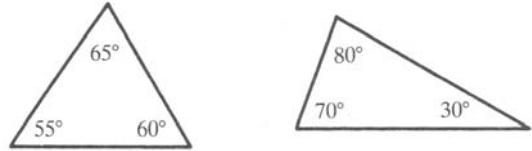


Equilateral Triangle: A triangle with three congruent sides.

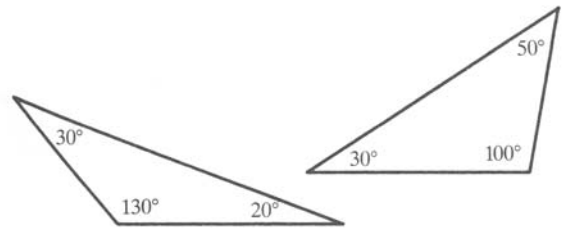


Classification by Angles

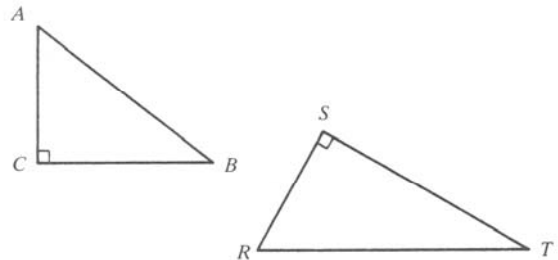
Triangles can be classified by their angles. An **acute triangle** is a triangle that has three **acute angles**. An acute angle is an angle whose measure is less than 90° .



An **obtuse angle** is an angle whose degree measure is greater than 90° but less than 180° . An **obtuse triangle** has one obtuse angle.



A **right triangle** is a triangle that has one right angle. A right angle is an angle whose degree measure is 90° . The symbol for a right angle in a triangle is shown below.



NOTE: In a right triangle, the sides have special names. The side opposite the 90° angle is the hypotenuse (the longest side of the right triangle). The two sides that form the 90° angle are called legs.

Thus, \overline{AC} and \overline{CB} , \overline{RS} and \overline{ST} are legs. \overline{AB} and \overline{RT} are each called a hypotenuse.