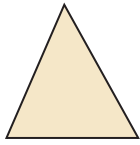


# Classifying Triangles

You can use angle measures and side lengths to classify triangles.

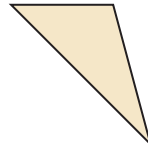
## Classifying Triangles Using Angles

*acute* triangle



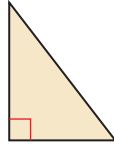
all acute angles

*obtuse* triangle



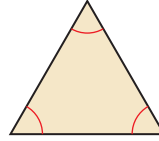
1 obtuse angle

*right* triangle



1 right angle

*equiangular* triangle



3 congruent angles

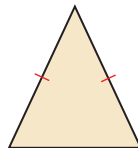
## Classifying Triangles Using Sides

*scalene* triangle



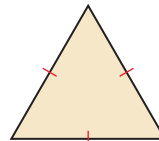
no congruent sides

*isosceles* triangle



at least 2 congruent sides

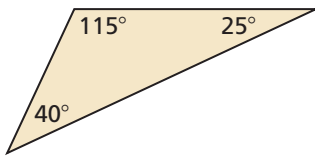
*equilateral* triangle



3 congruent sides

**Example 1** Classify each triangle by its angles and by its sides.

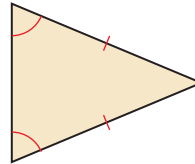
a.



The triangle has one obtuse angle and no congruent sides.

► So, the triangle is an obtuse scalene triangle.

b.



The triangle has all acute angles and two congruent sides.

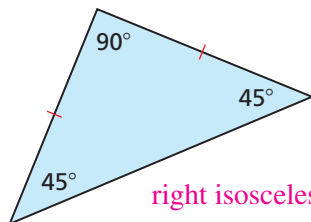
► So, the triangle is an acute isosceles triangle.

## Practice

Check your answers at [BigIdeasMath.com](http://BigIdeasMath.com).

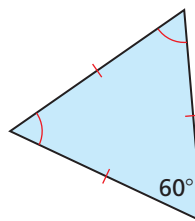
Classify the triangle by its angles and by its sides.

1.



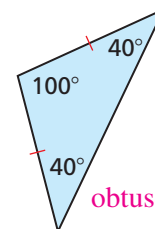
right isosceles

2.



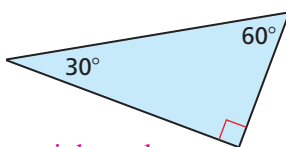
equiangular  
equilateral

3.



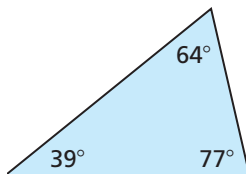
obtuse isosceles

4.



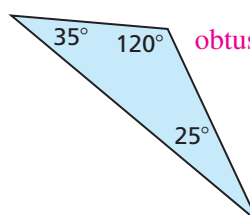
right scalene

5.



acute scalene

6.



obtuse scalene