Name _____

Date _____   Period _____
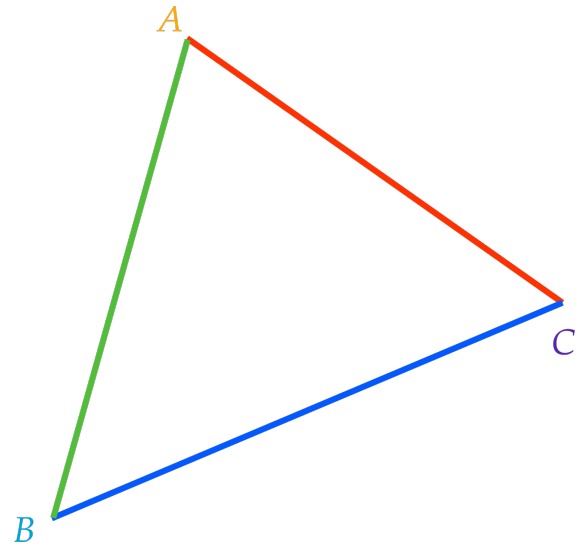
Triangle

A triangle is a polygon with three sides.
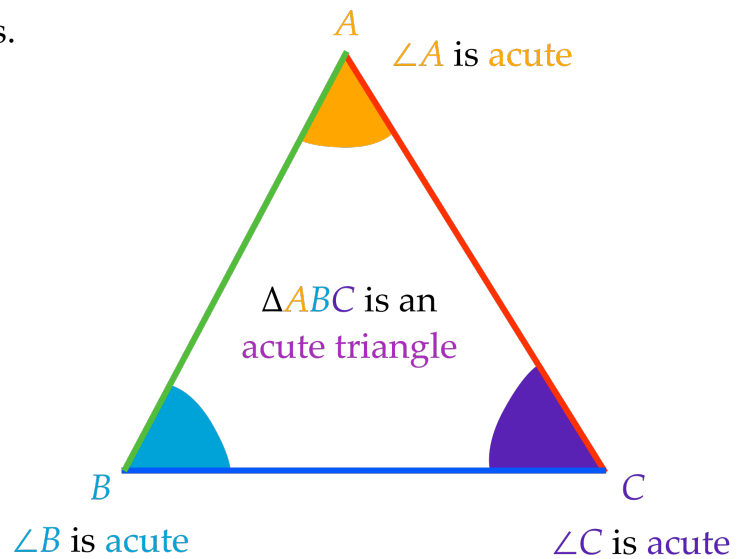
3 Sides   3 Vertices   3 Angles

A

C

B

Name a Triangle using the 3 Vertices

Triangles can be classified by their angles.

Acute Triangle

A triangle with all acute angles.

A

∠*A* is acute

Δ*ABC* is an
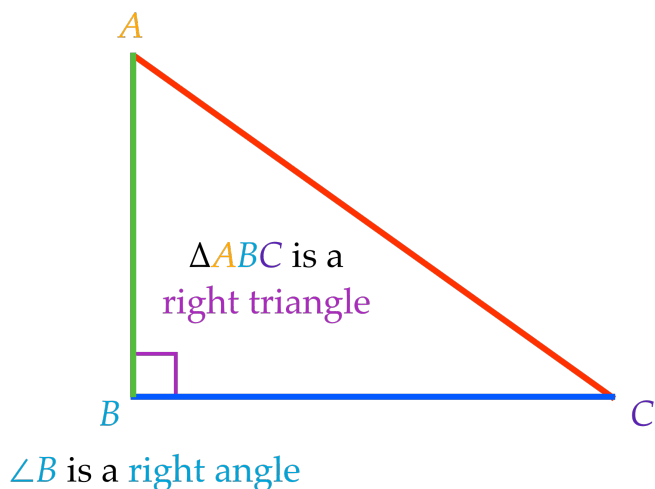acute triangle

B

C

∠*B* is acute

∠*C* is acute

Triangles can be classified by their angles.

Acute Triangle
A triangle with all acute angles.

Right Triangle
A triangle with a right angle.

A

Δ*ABC* is a
right triangle

B   *C*

∠*B* is a right angle

Triangles can be classified by their angles.

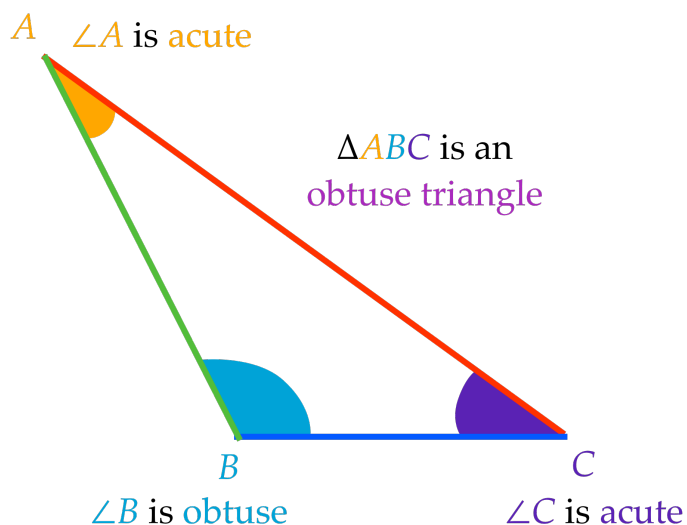*A*   ∠*A* is acute

Acute Triangle
A triangle with all acute angles.

Right Triangle
A triangle with a right angle.

Obtuse Triangle
A triangle with an obtuse angle.

Δ*ABC* is an
obtuse triangle

B   *C*

∠*B* is obtuse   ∠*C* is acute

Triangles can be classified by their angles.

Acute Triangle
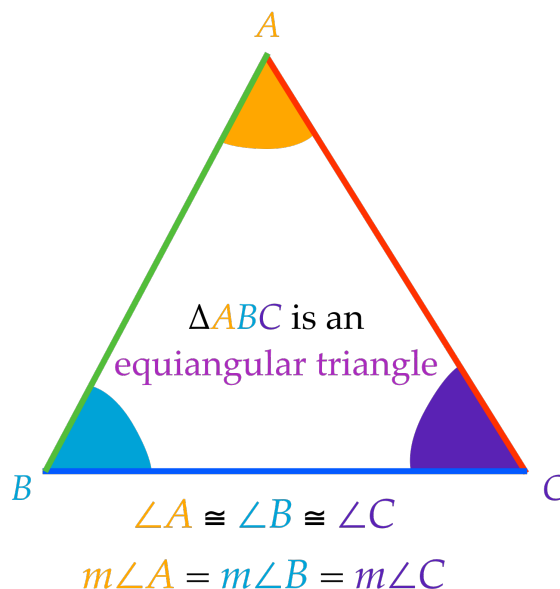A triangle with all acute angles.

Right Triangle
A triangle with a right angle.

Obtuse Triangle
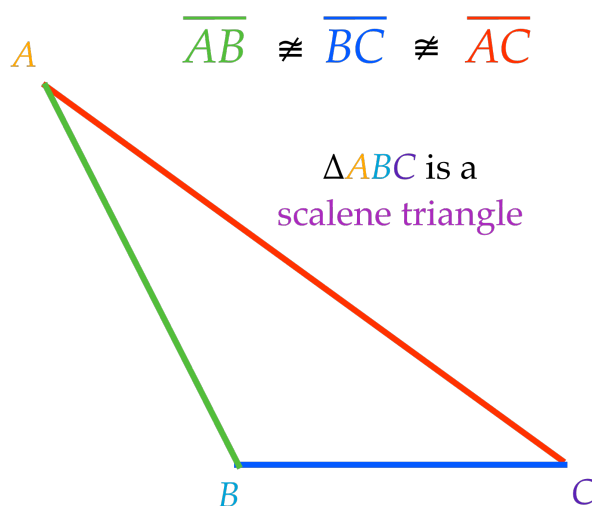A triangle with an obtuse angle.

Equiangular Triangle
A triangle with all congruent angles.

ΔABC is an
equiangular triangle

$\angle A \cong \angle B \cong \angle C$

$m\angle A = m\angle B = m\angle C$

Triangles can be classified by the number of congruent sides.

Scalene Triangle
A triangle with <u>no</u> congruent sides.

$\overline{AB} \not\cong \overline{BC} \not\cong \overline{AC}$
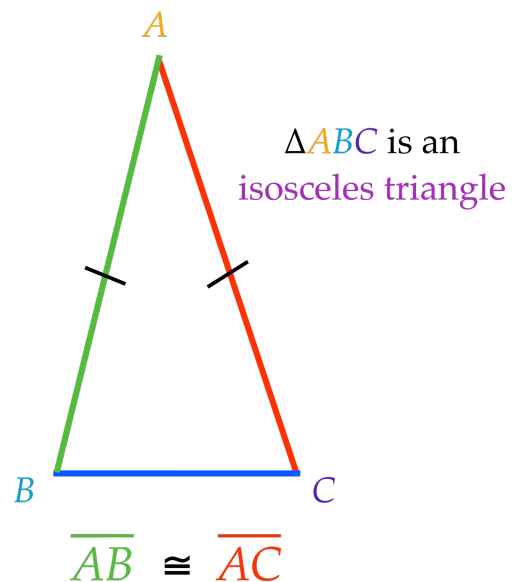
ΔABC is a
scalene triangle

Triangles can be classified by the number of congruent sides.

Scalene Triangle
A triangle with <u>no</u> congruent sides.

Isosceles Triangle
A triangle with <u>two</u> congruent sides.

ΔABC is an isosceles triangle

$$\overline{AB} \cong \overline{AC}$$

Triangles can be classified by the number of congruent sides.
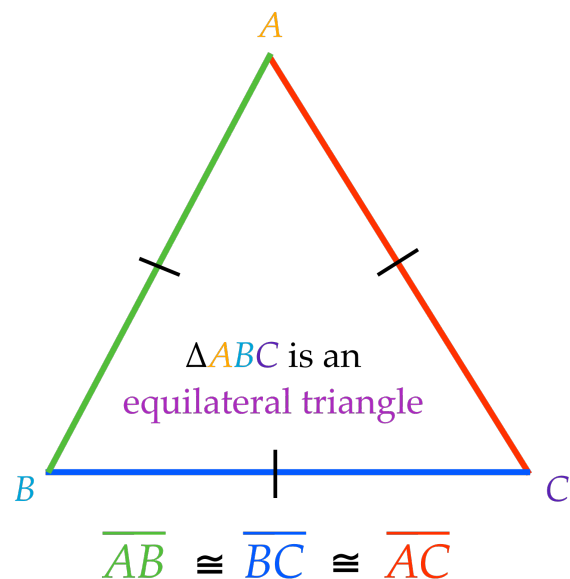
Scalene Triangle
A triangle with <u>no</u> congruent sides.

Isosceles Triangle
A triangle with <u>two</u> congruent sides.

Equilateral Triangle
A triangle with <u>three</u> congruent sides.

ΔABC is an equilateral triangle

$$\overline{AB} \cong \overline{BC} \cong \overline{AC}$$

Triangle
A triangle is a polygon with three sides.

Acute Triangle
A triangle with all acute angles.

Right Triangle
A triangle with a right angle.

Obtuse Triangle
A triangle with an obtuse angle.

Equiangular Triangle
A triangle with all equal angles.

Scalene Triangle
A triangle with no congruent sides.

Isosceles Triangle
A triangle with two congruent sides.

Equilateral Triangle
A triangle with three congruent sides.