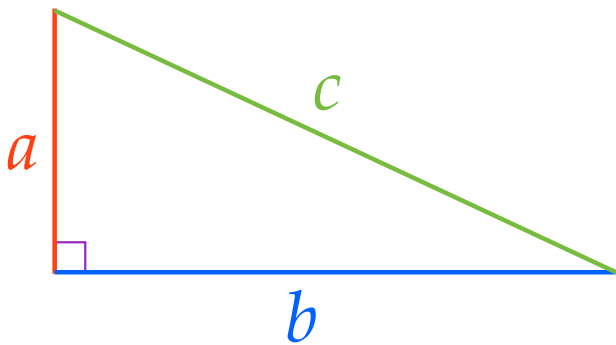Name _____

Date _____ Period _____

In a right triangle, the sum of the squares of the legs
is equal to the square of the hypotenuse.

$$(\text{leg})^2 + (\text{leg})^2 = (\text{hypotenuse})^2$$

$$a^2 + b^2 = c^2$$

$$a^2 + b^2 \neq c^2$$

c

a

b

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,
then the triangle is an
obtuse triangle.

If $a^2 + b^2 = c^2$,
then the triangle is a
right triangle.

If $a^2 + b^2 > c^2$,
then the triangle is an
acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 4, 8, and 10

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,

then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,

then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,

then the triangle is an acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 9, 12, and 15

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,

then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,

then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,

then the triangle is an acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 12, 10, and 14

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,

then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,

then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,

then the triangle is an acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 6, 8, and 10

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,

then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,

then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,

then the triangle is an acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 2, 4, and 5

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,
then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,
then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,
then the triangle is an acute triangle.

Classify the following triangles as obtuse, right, or acute.

Side lengths 8, 8, and 9

Given three sides of a triangle, a, b, and c (c being the longest side)...

If $a^2 + b^2 < c^2$,
then the triangle is an obtuse triangle.

If $a^2 + b^2 = c^2$,
then the triangle is a right triangle.

If $a^2 + b^2 > c^2$,
then the triangle is an acute triangle.