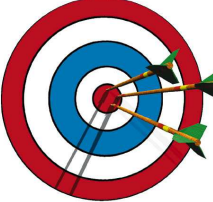


# Unit 1-11



## Pythagorean Theorem

Today's Learning Targets:

1.11 I can apply the Pythagorean Theorem to find an unknown side of a right triangle.

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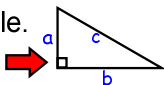
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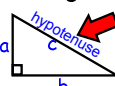
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A **Right Triangle** is a triangle in which one of its interior angles is a right angle.



The **Hypotenuse** is the longest side of a right triangle, it is opposite the right angle.



The two shorter sides are the **legs**.

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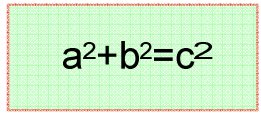
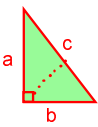
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The **Pythagorean Theorem** describes the unique relationship among the sides of a right triangle.


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

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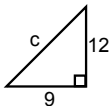
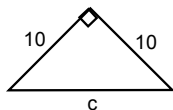
# Unit 1-11

How can we use the Pythagorean Theorem to find the length of  $c$ ?



*You Try!*

Find the lengths of the hypotenuses.



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Find the hypotenuse with the given leg lengths...

$$a = 9, b = 3, c = ?$$

$$a = 6, b = 8, c = ?$$

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