

Thank you for previewing the Pythagorean Theorem: Solve for the Hypotenuse!

If you encounter an issue, whether a typo or a mathematical error or something else, PLEASE contact me and I will be more than happy to help sort it out. I want you to enjoy this product to the fullest. You can email me here: johanna@misskuipersclassroom.com

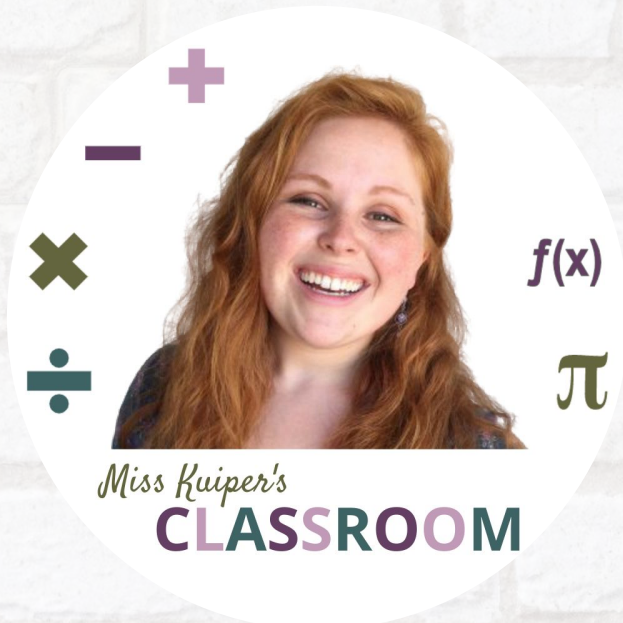


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8th Grade Math Activities

Algebra 1 Activities

Free Resources



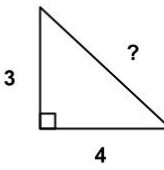
Worksheet 1

Uses only whole numbers

{Find the Hypotenuse #1} Name: _____ Per: _____

Learning Target: I can apply the Pythagorean Theorem to determine the hypotenuse lengths in right triangles.

To find the length of the hypotenuse, use the Pythagorean Theorem: $\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$

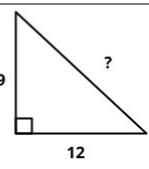
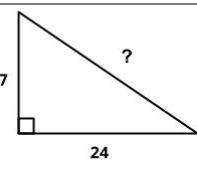
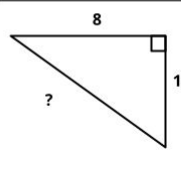
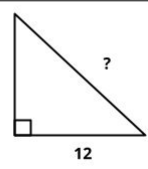


3
4
?

$\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$
 $3^2 + 4^2 = c^2$
 $9 + 16 = c^2$
 $25 = c^2$
 $5 = c$

Highlight the corresponding "leg" values in one color and the other "leg" values in another color.

Use the Pythagorean Theorem to find the length of the hypotenuse. Answers will be whole numbers.

 <p>9 12 ?</p>	 <p>7 24 ?</p>
 <p>8 15 ?</p>	 <p>5 12 ?</p>

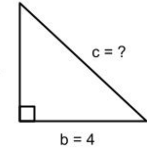
If one leg is 8 and one leg is 6, what is the length of hypotenuse?

Where could you use the Pythagorean Theorem outside math class?

{Find the Hypotenuse #1} Name: _____ Per: _____

Learning Target: I can apply the Pythagorean Theorem to determine the hypotenuse lengths in right triangles.

To find the length of the hypotenuse, use the Pythagorean Theorem: $a^2 + b^2 = c^2$

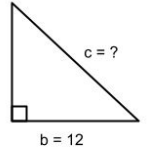
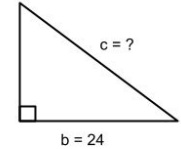
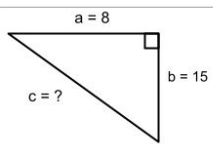
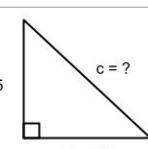


a = 3
b = 4
c = ?

$a^2 + b^2 = c^2$
 $3^2 + 4^2 = c^2$
 $9 + 16 = c^2$
 $25 = c^2$
 $5 = c$

Highlight the corresponding "a" values in one color and the "b" values in another color.

Use the Pythagorean Theorem to find the length of the hypotenuse. Answers will be whole numbers.

 <p>a = 9 b = 12 c = ?</p>	 <p>a = 7 b = 24 c = ?</p>
 <p>a = 8 b = 15 c = ?</p>	 <p>a = 5 b = 12 c = ?</p>

If a = 8 and b = 6, what is the length of c?

Where could you use the Pythagorean Theorem outside math class?

Version A uses formula:
 $\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$

Version B uses formula:
 $a^2 + b^2 = c^2$

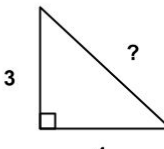
Worksheet 2

**Uses whole numbers
& decimals**

{Find the Hypotenuse #2} Name: _____ Per: _____

Learning Target: I can apply the Pythagorean Theorem to determine the hypotenuse lengths in right triangles.

To find the length of the hypotenuse, use the Pythagorean Theorem: $\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$

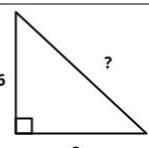
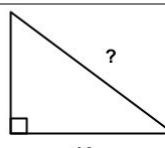
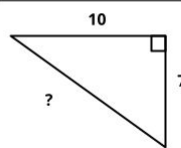
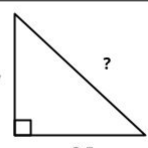


3
4
?

$\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$
 $3^2 + 4^2 = c^2$
 $9 + 16 = c^2$
 $25 = c^2$
 $5 = c$

Highlight the corresponding "leg" values in one color and the other "leg" values in another color.

Use the Pythagorean Theorem to find the length of the hypotenuse.

 <p>6 8 ?</p>	 <p>12 16 ?</p>
 <p>10 7 ?</p>	 <p>3.7 8.5 ?</p>

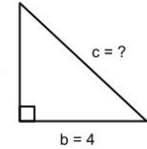
If one leg is 5 and one leg is 9, what is the length of hypotenuse? _____

I apply the Pythagorean Theorem to a right triangle by _____

{Find the Hypotenuse #2} Name: _____ Per: _____

Learning Target: I can apply the Pythagorean Theorem to determine the hypotenuse lengths in right triangles.

To find the length of the hypotenuse, use the Pythagorean Theorem: $a^2 + b^2 = c^2$

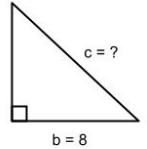
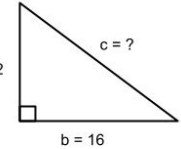
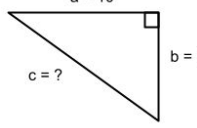
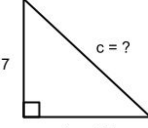


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c = ?

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 $9 + 16 = c^2$
 $25 = c^2$
 $5 = c$

Highlight the corresponding "a" values in one color and the "b" values in another color.

Use the Pythagorean Theorem to find the length of the hypotenuse.

 <p>a = 6 b = 8 c = ?</p>	 <p>a = 12 b = 16 c = ?</p>
 <p>a = 10 b = 7 c = ?</p>	 <p>a = 3.7 b = 8.5 c = ?</p>

If a = 5 and b = 9, what is the length of c? _____

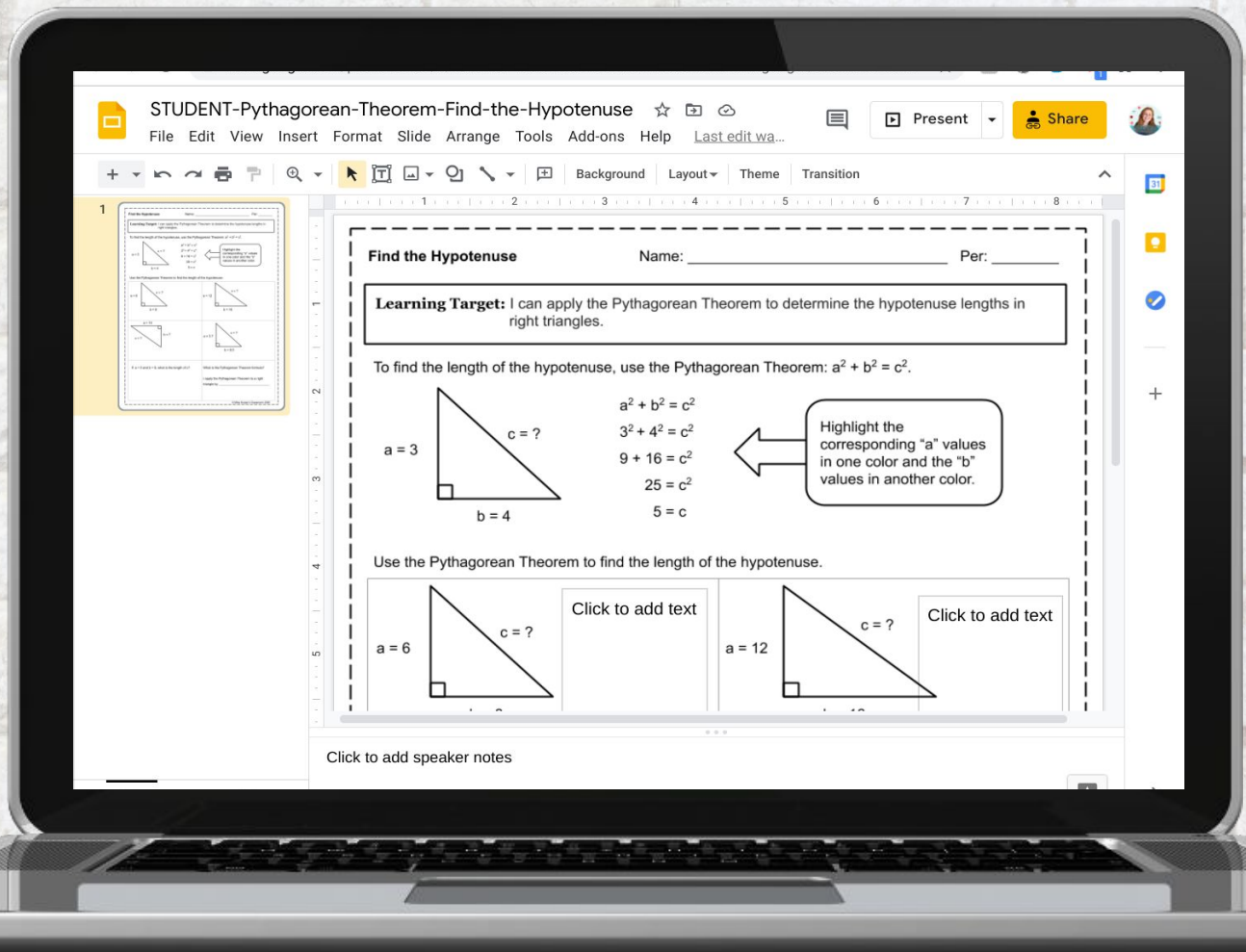
What is the Pythagorean Theorem formula? _____

I apply the Pythagorean Theorem to a right triangle by _____

Version A uses formula:
 $\text{leg}^2 + \text{leg}^2 = \text{hypotenuse}^2$

Version B uses formula:
 $a^2 + b^2 = c^2$

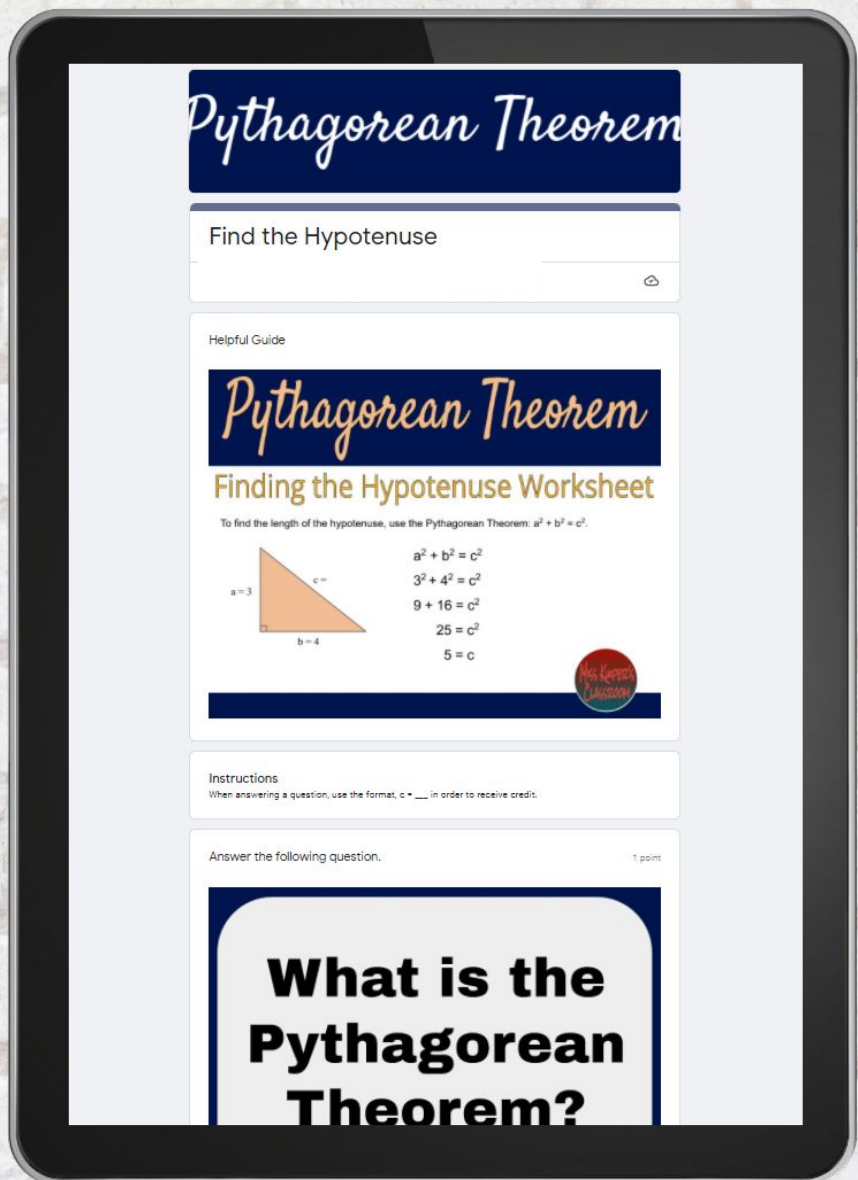
Digital Version



Same as the Worksheet 2.
Includes tech tips for students!

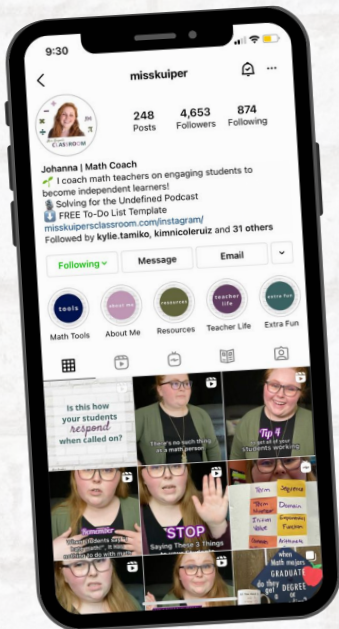
Google Forms

The Google Form works as homework or as an assessment!



What's Next?

You can read about how to reach your low-level learners and build them up to grade-level!



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