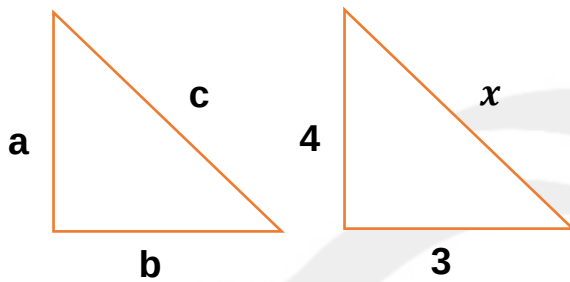




Pythagorean Theorem

Pythagoras' Theorem

The three sides of a right-angled triangle are connected by a formula.



Pythagorean Formula

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

where c is the hypotenuse

Given that you have two sides,
you can always find the third side.

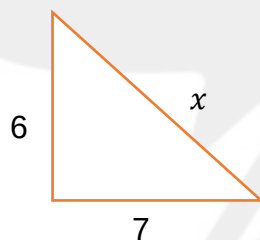
EXAMPLE: Find the missing side x above.

In this right-angled triangle, x is the hypotenuse c . Let's find c .

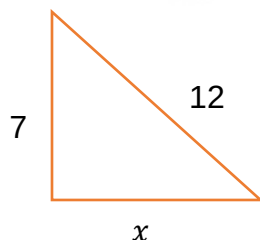
$$\begin{aligned} a^2 + b^2 &= c^2 \\ 4^2 + 3^2 &= x^2 \\ 16 + 9 &= x^2 \end{aligned} \quad \begin{aligned} &\rightarrow 25 = x^2 \\ &\sqrt{25} = x \\ &x = 5 \end{aligned}$$

Instructions: Solve for x using Pythagoras. Round to two decimals.

1

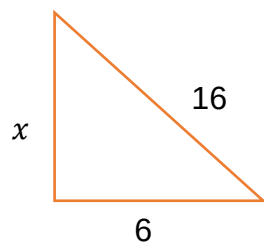


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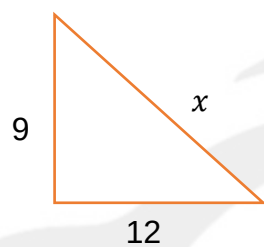




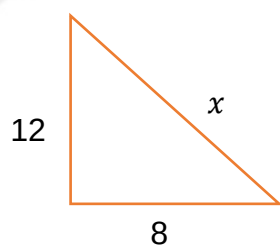
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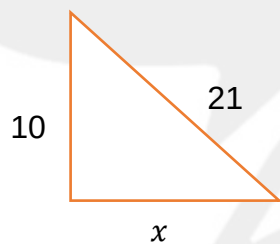
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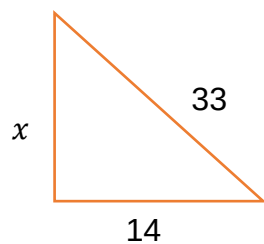
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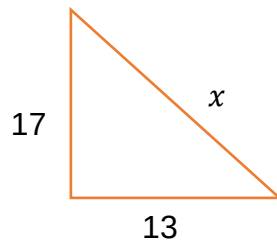


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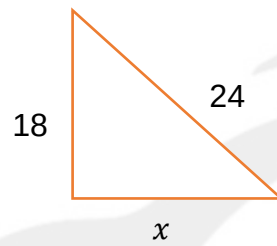




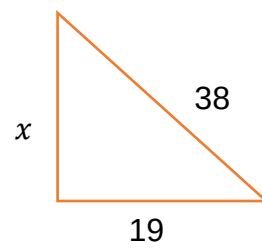
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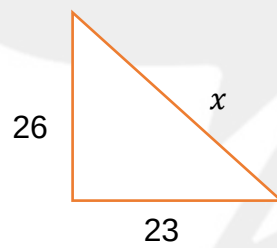
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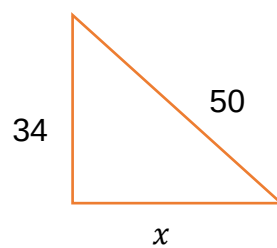
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11



12

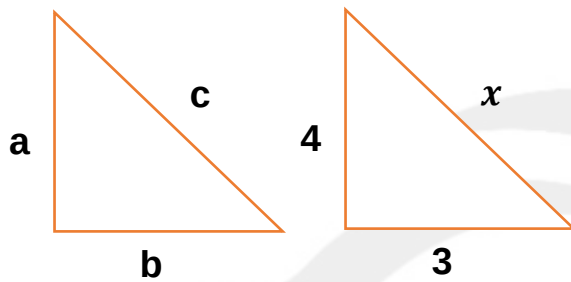




Pythagorean Theorem

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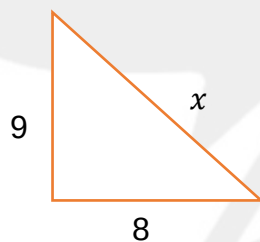
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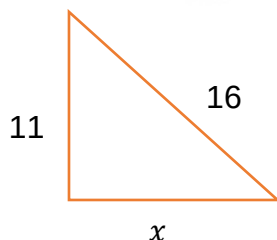
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1

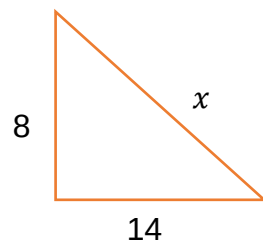


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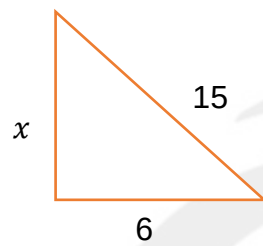




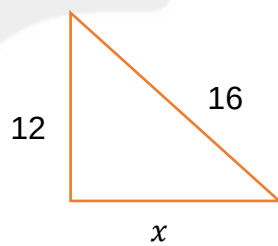
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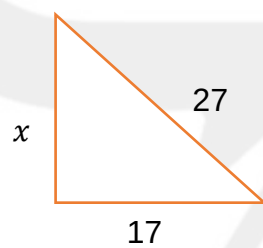
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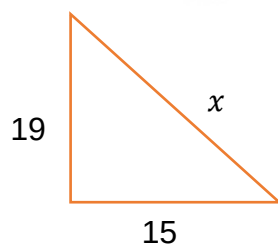
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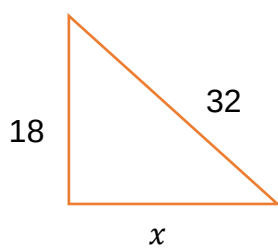


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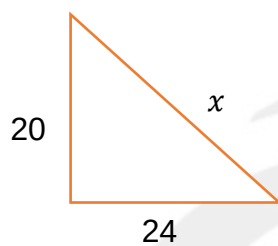




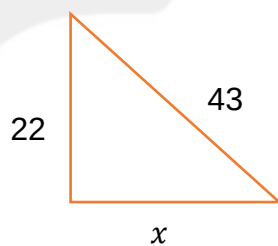
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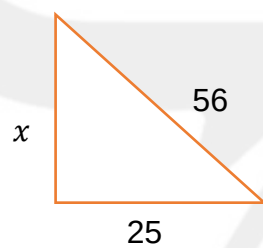
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