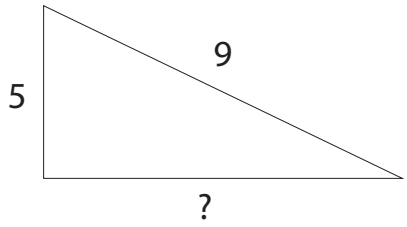
Pythagoras' Theorem

"For any right-angled triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides."

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

So, to find the unknown side of a right-angled triangle;



We know $a^2 + b^2 = c^2$, so $5^2 + b^2 = 9^2$

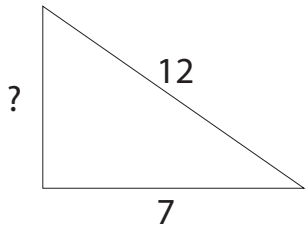
$25 + b^2 = 81$

$b^2 = 56$

$b = 7.5$ (1dp)

Find the hypotenuse of these triangles yourself:

1.



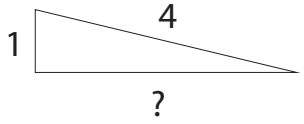
$\_\_\_^2 + b^2 = \_\_\_$

$\_\_\_ + b^2 = \_\_\_$

$b^2 = \_\_\_$

$b = \_\_\_$

2.



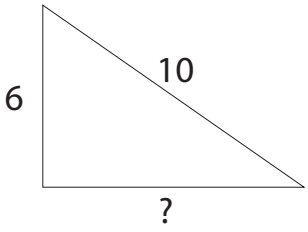
$\_\_\_ + \_\_\_ = \_\_\_$

$\_\_\_ + \_\_\_ = \_\_\_$

$\_\_\_ = \_\_\_$

$\_\_\_ = \_\_\_$

3.



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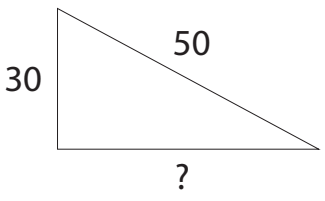

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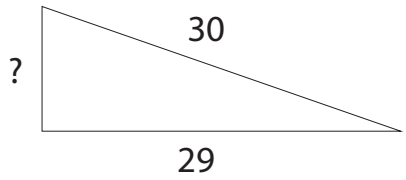
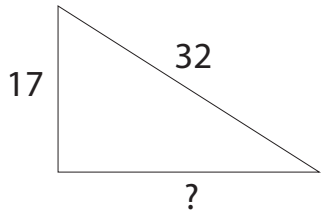


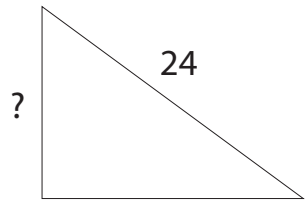
$\_\_\_^2 + b^2 = \_\_\_$
$\_\_\_ + b^2 = \_\_\_$
$b^2 = \_\_\_$
$b = \_\_\_$

6.



$\_\_\_ + \_\_\_ = \_\_\_$
$\_\_\_ + \_\_\_ = \_\_\_$
$\_\_\_ = \_\_\_$
$\_\_\_ = \_\_\_$

7.



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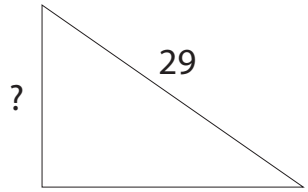

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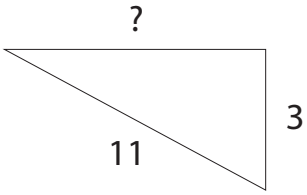

10.