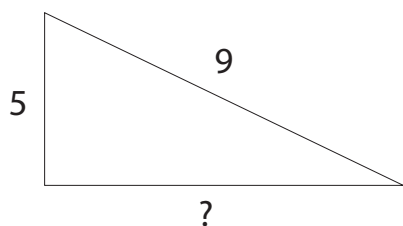


Pythagoras' Theorem

"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 $5^2 + b^2 = 9^2$

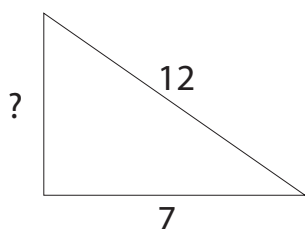
$$25 + b^2 = 81$$

$$b^2 = 56$$

$$b = 7.5 \text{ (1dp)}$$

Find the hypotenuse of these triangles yourself:

1.



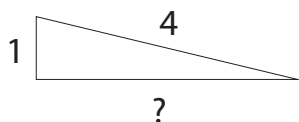
$$\underline{\quad}^2 + b^2 = \underline{\quad}$$

$$\underline{\quad} + b^2 = \underline{\quad}$$

$$b^2 = \underline{\quad}$$

$$b = \underline{\quad}$$

2.



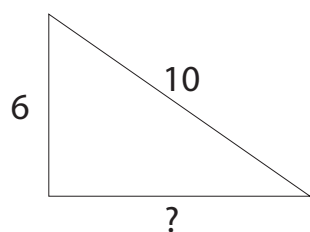
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

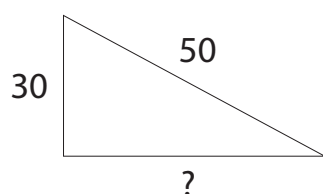
$$\underline{\quad} = \underline{\quad}$$

$$\underline{\quad} = \underline{\quad}$$

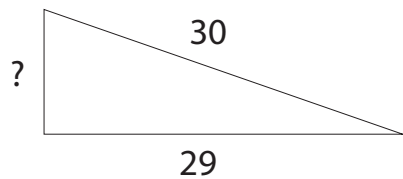
3.



4.

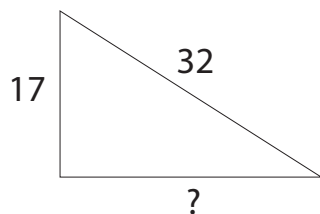


5.



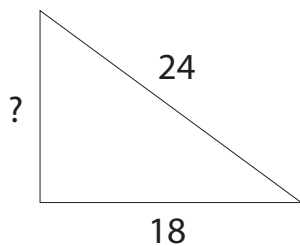
$$\begin{aligned} \underline{\quad}^2 + b^2 &= \underline{\quad} \\ \underline{\quad} + b^2 &= \underline{\quad} \\ b^2 &= \underline{\quad} \\ b &= \underline{\quad} \end{aligned}$$

6.

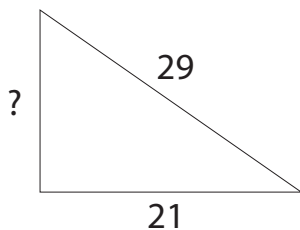


$$\begin{aligned} \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} &= \underline{\quad} \\ \underline{\quad} &= \underline{\quad} \end{aligned}$$

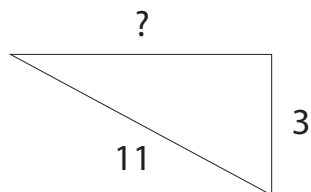
7.



8.



9.



10.

