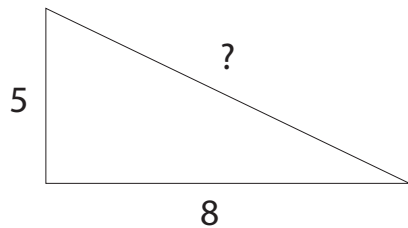


### Pythagoras' Theorem

"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 hypotenuse of a right-angled triangle;



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

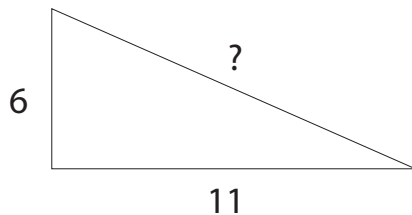
$$5^2 + 8^2 = c$$

$$25 + 64 = c^2 \quad 89 = c^2$$

$$9.4 \text{ (1dp)} = c$$

Find the hypotenuse of these triangles yourself:

1.



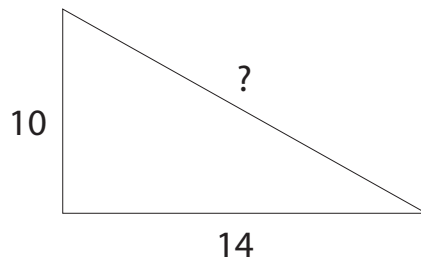
$$\underline{\quad}^2 + \underline{\quad}^2 = c^2$$

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

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

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

2.

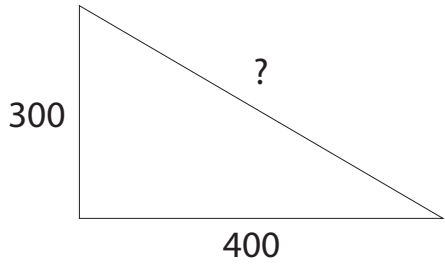


$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

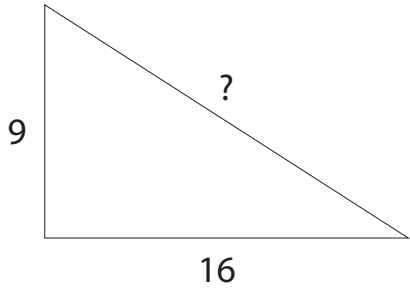
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

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

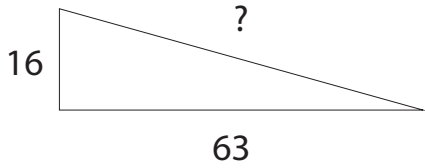
$$\underline{\quad} = \underline{\quad}$$



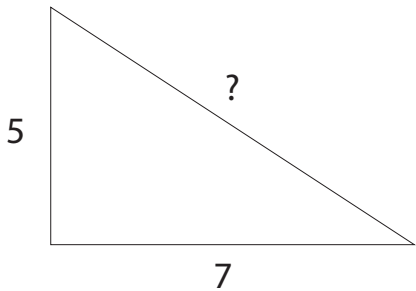
3.



4.

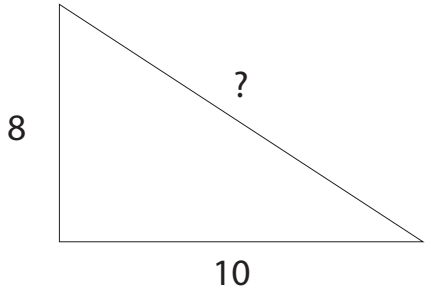


5.



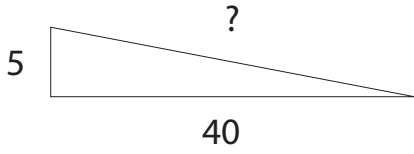
6.

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

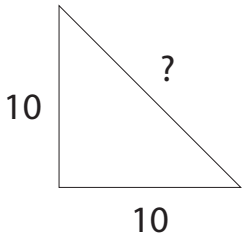


7.

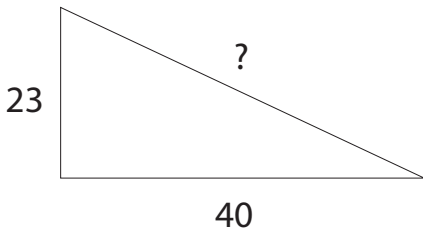
$$\begin{array}{r} \_ + \_ = \_ \\ \_ + \_ = \_ \\ \_ = \_ \\ \_ = \_ \end{array}$$



8.



9.



10.