

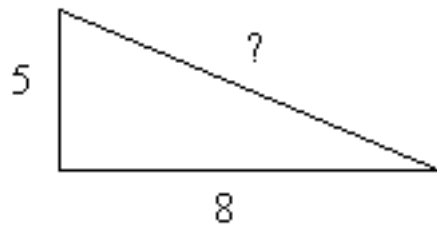
Pythagoras' Theorem Pythagoras' Worksheet 1

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;



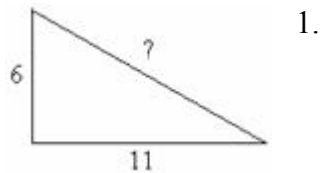
We know $a^2 + b^2 = c^2$, so

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

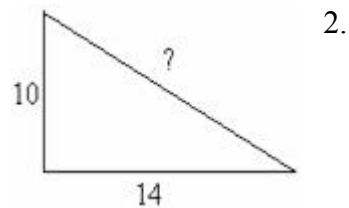
$$25 + 64 = c^2 \quad 89 = c^2$$

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

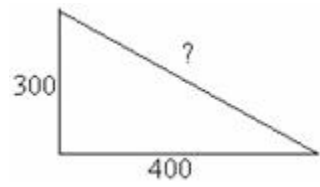
Find the hypotenuse of these triangles yourself:



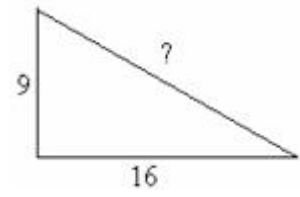
$$\begin{array}{rcl} ______^2 + ______^2 & = & c^2 \\ ______ + ______ & = & c^2 \\ ______ & = & c^2 \\ ______ & = & c \end{array}$$



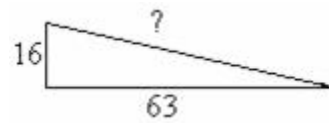
$$\begin{array}{rcl} ______ + ______ & = & ______ \\ ______ + ______ & = & ______ \\ ______ & = & ______ \\ ______ & = & ______ \end{array}$$



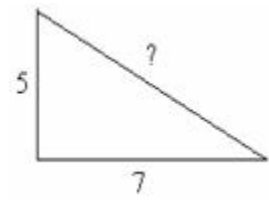
3.



4.

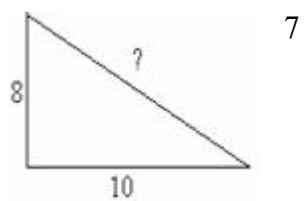


5.

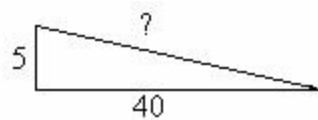


6.

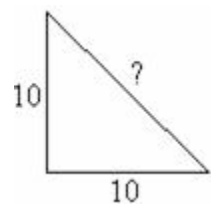
$$\begin{array}{rcl}
 \underline{\hspace{1cm}}^2 + \underline{\hspace{1cm}}^2 & = & c^2 \\
 \underline{\hspace{1cm}} + \underline{\hspace{1cm}} & = & c^2 \\
 \underline{\hspace{1cm}} & = & c^2 \\
 \underline{\hspace{1cm}} & = & c
 \end{array}$$



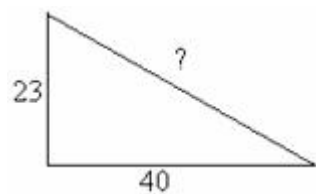
7



8.



9.



10.

$$\begin{array}{rcl} ___ & + & ___ = ___ \\ ___ & + & ___ = ___ \\ & & ___ = ___ \\ & & ___ = ___ \end{array}$$