

Pythagoras' Worksheet 2

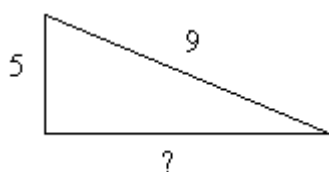
Pythagoras' Theorem

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

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

9

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



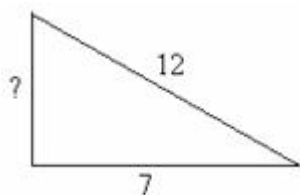
We know $a^2 + b^2 = c^2$, so $5^2 + b^2 = 9^2$

$$25 + b^2 = 81$$

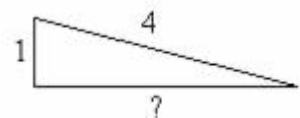
$$b^2 = 56$$

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

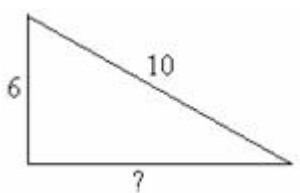
Find the unknown side of these triangles yourself:



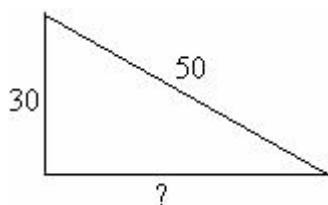
$$\begin{aligned} \underline{\quad}^2 + b^2 &= \underline{\quad} \\ \underline{\quad} + b^2 &= \underline{\quad} \\ b^2 &= \underline{\quad} \\ b &= \underline{\quad} \end{aligned}$$

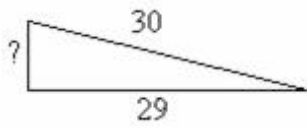


$$\begin{aligned} \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} + \underline{\quad} &= \underline{\quad} \\ \underline{\quad} &= \underline{\quad} \\ \underline{\quad} &= \underline{\quad} \end{aligned}$$

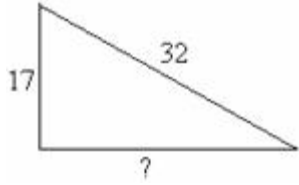


4.

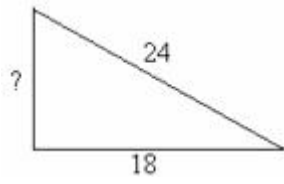




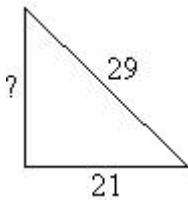
5.



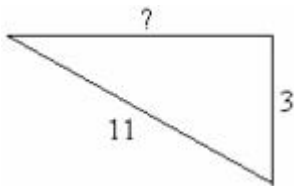
6.



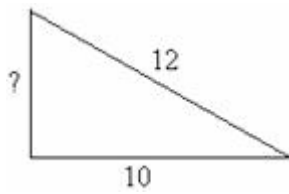
7.



8.



9.



10.

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

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