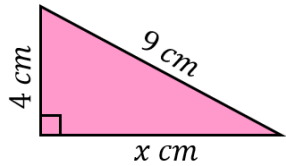


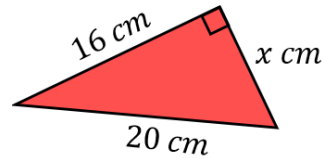
## Finding the Length of a Short Side using Pythagoras' Theorem

**(a)** Find  $x$  to 1 decimal place



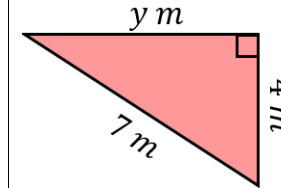
$$\begin{aligned} 9^2 &= x^2 + 4^2 \\ x^2 &= 9^2 - 4^2 \\ x^2 &= 65 \\ x &= \sqrt{65} \\ x &= 8.1 \text{ cm (1 dp)} \end{aligned}$$

**(b)** Find  $x$



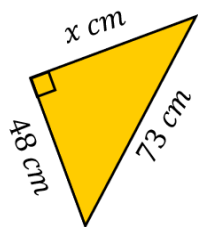
$$\begin{aligned} 20^2 &= x^2 + 16^2 \\ x^2 &= 20^2 - 16^2 \end{aligned}$$

**(c)** Find  $y$  to 1 decimal place

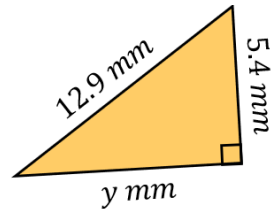


$$\begin{aligned} 7^2 &= y^2 + 4^2 \\ y^2 &= 7^2 - 4^2 \end{aligned}$$

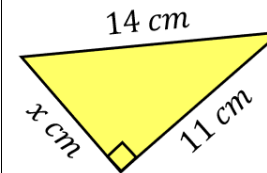
**(d)** Find  $x$



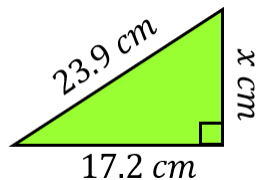
**(e)** Find  $y$  to 1 decimal place



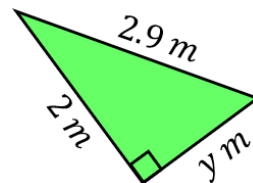
**(f)** Find  $x$  to 1 decimal place



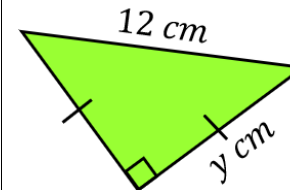
**(g)** Find  $x$  to 1 decimal place



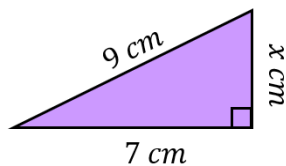
**(h)** Find  $y$



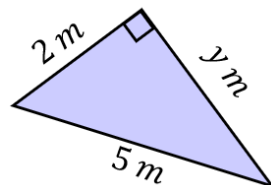
**(i)** Find  $y$  to 1 decimal place



**(j)** Find  $x$ , leaving your answer as a surd



**(k)** Find  $y$ , leaving your answer as a surd



**(l)** Find  $x$ , leaving your answer as a surd

