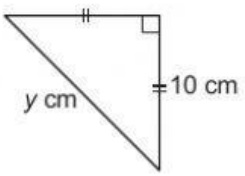
Chapter 13 The Pythagoras' Theorem

MASTery Q 13.1

1. Using the Pythagoras' Theorem, find the value of y in each of the following diagrams. Give your answers correct to two decimal places.

(a)



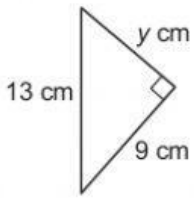
$y^2 = \square^2 + \square^2$

$y^2 = \square$

$y = \sqrt{}$

$y = \square$ cm

(b)



$13^2 = \square^2 + \square^2$

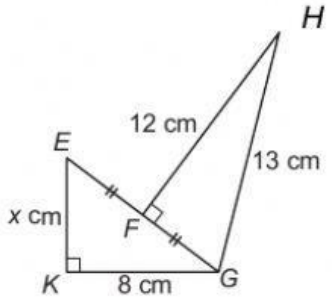
$y^2 = 13^2 - \square^2$

$y = \sqrt{}$

$y = \square$ cm

2. Calculate the value of x in each of the following diagrams:

(a)



$GF^2 = 13^2 - \square^2$

$GF^2 = \square$

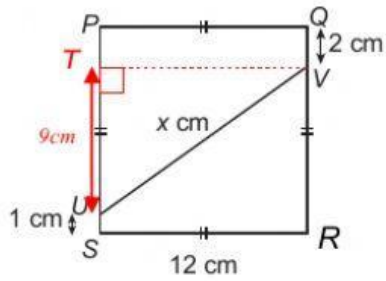
$GF = \sqrt{} = \square$ cm

EG = 2 GF = 10 cm

$x^2 = 10^2 - 8^2$

$x = \sqrt{} = \square$ cm

(b)



Note: Red dotted line is a newly added line to form a right angled triangle. Point T is a newly added point.

SR = PQ = PS = $\square$ cm

UT = 12 − 1 − 2 = $\square$

$x^2 = 9^2 + \square^2$

$x = \sqrt{} = \square$ cm