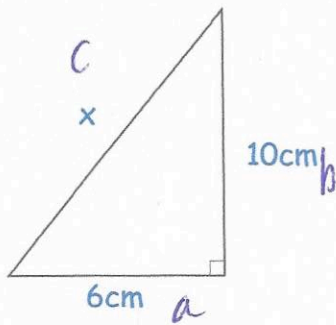


10th December



Corbettmaths

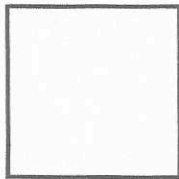
Find  $x$ 

$$\begin{aligned} a^2 + b^2 &= c^2 \\ 6^2 + 10^2 &= c^2 \\ 36 + 100 &= c^2 \\ c^2 &= 136 \\ c &= 11.66 \text{ cm} \end{aligned}$$

Factorise

$$\begin{aligned} x^2 - 9 \\ (x - 3)(x + 3) \end{aligned}$$

$$3x - 1 \text{ cm}$$



$$\begin{aligned} 20 \\ x + 13 \text{ cm} \\ 3x - 1 &= x + 13 \\ 2x &= 14 \\ x &= 7 \end{aligned}$$

Shown is a square.

Calculate the area of the square.

$$20 \times 20 = 400 \text{ cm}^2$$

It takes 6 hours for 20 workers to seed 40 acres.  
How long would it take 15 people to seed 25 acres?

$$\begin{aligned} 6 \times 20 &= 120 \\ 120 \div 40 &= 3 \\ 3 \times 25 &= 75 \end{aligned}$$

$$75 \div 15 = 5$$

5 hours

Write down the equation of a line parallel to  $y = 3x + 1$  that passes through the point  $(0, 6)$

$$y = 3x + 6$$