

25th September



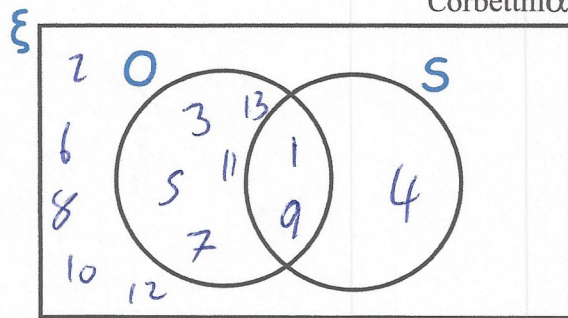
Corbettmaths

$\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13\}$

O = odd numbers

S = square numbers

Complete the venn diagram



Write down $P(O \cup S)$

$$\frac{8}{13}$$

Write down $P(O \cap S)$

$$\frac{2}{13}$$

y is directly proportional to the square of x.

When $y = 45$, $x = 3$.

$$y \propto x^2$$

Find the value of y when $x = 6$.

$$y = kx^2$$

$$45 = k \times 9$$

$$k = 5$$

$$y = 5x^2$$

$$y = 5 \times 6^2$$

$$y = 180$$

The price of a computer is reduced by 40%.

A week later it is reduced by another 10%.

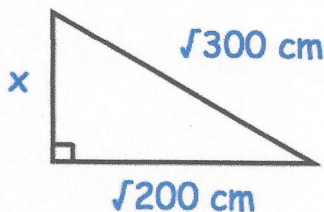
Rosie says that the computer has been reduced by 50% in total.

Is Rosie right? No
Explain your answer.

$$100 \times 0.6 \times 0.9 = 54\%$$

It has only been reduced by 46%

Find x



$$x^2 + (\sqrt{200})^2 = (\sqrt{300})^2$$

$$x^2 + 200 = 300$$

$$x^2 = 100$$

$$x = 10$$