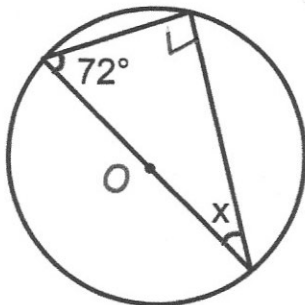


Enlarge the rectangle by scale factor  $-3$ , centre of enlargement  $(5, 3)$



Find  $x$

$$180 - 72 - 90 = 18^\circ$$

The pupils in Year 11 sit a maths test and an English test.

the number of pupils who passed the maths test : the number of pupils who failed the maths test =  $9 : 1$

From the pupils who passed the maths test, the number of pupils who passed the English test : the number of pupils who failed the English test =  $4 : 1$

From the pupils who failed the maths test, the number of pupils who passed the English test : the number of pupils who failed the English test =  $2 : 3$

What percentage of the pupils passed the English test?

$$\begin{array}{l} \text{maths} \\ \frac{9}{10} \end{array} \begin{array}{l} \text{Eng} \\ \frac{4}{5} \end{array} \checkmark \cdot \frac{9}{10} \times \frac{4}{5} = \frac{18}{25}$$

$$\begin{array}{l} \frac{1}{10} \end{array} \begin{array}{l} \frac{2}{5} \end{array} \checkmark \cdot \frac{1}{10} \times \frac{2}{5} = \frac{1}{25}$$

$$\frac{18}{25} + \frac{1}{25} = \frac{19}{25} \quad \boxed{76\%}$$

Expand and simplify  $(x + 1)(x + 4)(x - 2)$

$$(x^2 + 4x + x + 4)(x - 2)$$

$$(x^2 + 5x + 4)(x - 2)$$

$$x^3 - 2x^2 + 5x^2 - 10x + 4x - 8$$

$$x^3 + 3x^2 - 6x - 8$$