



In 2014 the value of a house was £180,000

The value of the house increases by 5% in the first year and 11% each year for the next 3 years

Work out the value of the house in 2018

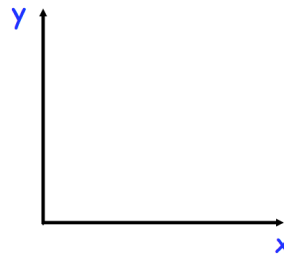
Solve

$$5x^2 - 11x + 2 = 0$$

Sketch the graph of

$$y = 0.5^x$$

for  $x \geq 0$



A bag contains 12 chocolates.

9 of the chocolates are milk chocolate and the rest are white chocolate.

Victoria picks two sweets at random.

Find the probability that both sweets are white chocolate.

$$\mathbf{a} = \begin{pmatrix} 5 \\ -6 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} p \\ -3 \end{pmatrix}$$

$$\text{Given that } 2\mathbf{a} + 3\mathbf{b} = \begin{pmatrix} -15.5 \\ q \end{pmatrix}$$

Find the values of  $p$  and  $q$