

**11th September**

Corbettmaths

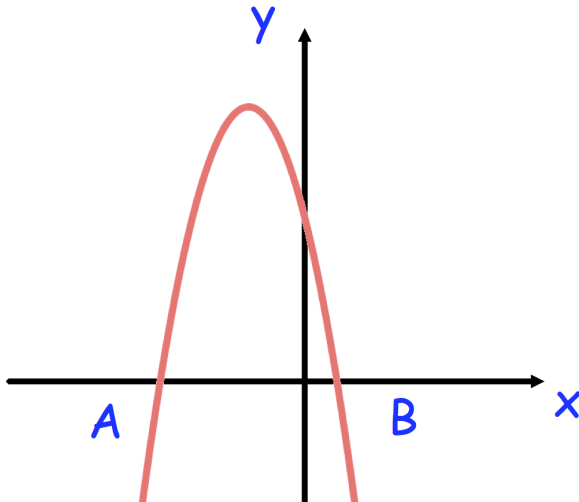
Use factor theorem to show that  $(2x - 1)$  is a factor of

$$2x^3 - 3x^2 - 3x + 2$$

A pizza parlour sells 11 different pizza toppings.

Grace orders a pizza with 2 different pizza toppings.

How many different pizzas can Grace order?



Shown is a graph  $y = f(x)$  where  $f(x)$  is a quadratic function.  
The coordinates of point A are  $(-4, 0)$   
The maximum point is  $(-1.2, 5.6)$

Write down the coordinates of point B

The equation  $f(x) = k$  has exactly one solution.

Write down the value of  $k$

$$y = \frac{10x^5 + x^9}{2x^3}$$

Work out the value of  $\frac{d^2y}{dx^2}$  when  $x = 2$