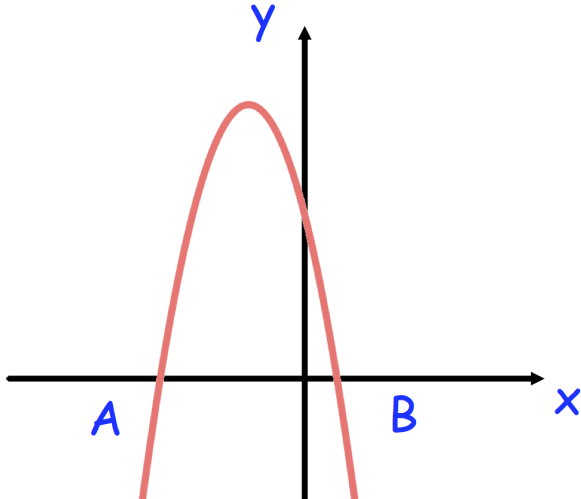


15th March

Corbettmaths

Expand and simplify fully

$$(x + 7)(x + 3)(x + 4)$$



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 $(-1.4, 2.6)$

Write down the coordinates of point B

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

Write down the value of k

$$y = ax^3 - 4x^2$$

Given $\frac{d^2y}{dx^2} = -20$ when $x = -\frac{1}{3}$

Find a

Solve $9\sin\theta = -6$

where $0^\circ < \theta < 360^\circ$