

**14th January**

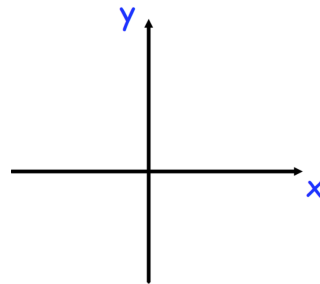
Corbettmaths

For what values of  $x$  is  $y = x^2 + 3$   
an increasing function?

$$y = (x + 7)(x + 3)$$

Work out  $\frac{dy}{dx}$

Sketch the graph of  
 $y = 2x^2 - 3x - 14$   
and work out the equation of the line of  
symmetry of the graph.



$$\begin{pmatrix} 1 & 2 \\ x & 3x \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 3 \\ 10 \end{pmatrix}$$

Work out the possible values for  $x$  and  $y$