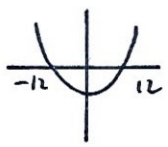



5th May	
<p>Solve</p> $y^2 \geq 144$ $y^2 - 144 \geq 0$ 	 Corbettmaths $y \leq -12 \text{ or } y \geq 12$
<p>Solve the simultaneous equations</p> $y = 9x^2 + 11x + 3$ $5x - y + 2 = 0$ $y = 5x + 2$ $5x + 2 = 9x^2 + 11x + 3$ $9x^2 + 6x + 1 = 0$ $(3x + 1)^2 = 0$ $3x + 1 = 0$	$x = -\frac{1}{3}$ $y = -\frac{5}{3} + 2 = \frac{1}{3}$ $x = -\frac{1}{3}, y = \frac{1}{3}$
<p>Given that $y = x(9 - 2x)$</p> <p>Work out the rate of change of y with respect to x when $x = -3$</p> $y = 9x - 2x^2$ $\frac{dy}{dx} = 9 - 4x$	$x = -3$ $\frac{dy}{dx} = 9 + 12 = 21$
<p>Given</p> $\begin{pmatrix} 4 & -1 \\ 0 & 6 \end{pmatrix} \begin{pmatrix} -1 \\ x \end{pmatrix} = \begin{pmatrix} 2 + y \\ 3y \end{pmatrix}$ <p>Work out x and y</p>	$-4 - x = 2 + y$ $6x = 3y \quad y = 2x$ $-4 - x = 2 + 2x$ $-6 = 3x$ $x = -2 \quad y = -4$