


29th July	
Factorise $2x^2 + 7x - 15$	 Corbettmaths $\frac{(x + 5)(2x - 3)}{}$
Hence solve $2(y - 3)^2 + 7(y - 3) - 15 = 0$	$y - 3 = -5, \frac{3}{2}$ $\underline{y = -2, \frac{9}{2}}$
A circle has centre $(-1, 7)$ has circumference $16\pi$  Work out the equation of the circle.	$2\pi r = 16\pi$ $r = 8$ $\underline{(x + 1)^2 + (y - 7)^2 = 64}$
A curve has equation $y = x^2 + 4x - 5$  Work out the equation of the normal to the curve $y = x^2 + 4x - 5$ at the point $(2, 7)$	$\frac{dy}{dx} = 2x + 4$ $x = 2 \Rightarrow \frac{dy}{dx} = 8 \Rightarrow m_{\perp} = -\frac{1}{8}$ $y - 7 = -\frac{1}{8}(x - 2)$ $\underline{y = -\frac{1}{8}x + \frac{29}{4}}$