Name: _____ 5-a-day Further Maths

20th August

Corbettmaths

Solve

$$\frac{216^x}{6^{x-5}} = 36\sqrt{6}$$

Show that $(2x - 3)$ is a factor of

$$2x^3 + 9x^2 - 32x + 21$$

Hence, factorise fully

$$2x^3 + 9x^2 - 32x + 21$$

$f(x) = \dfrac{3 - x^2}{8}$ for all values of x

Solve $f(2x) = -7$

Point A lies on the curve
$y = x^2 + 6x + 9$

The x-coordinate of A is 8

Find the equation of the normal to the curve at A.