11th October

A circle has a radius of 7

The centre of the circle is $(-3, 4)$

Write down the equation of the circle.

Work out the coefficient of x^2 in the expansion of $(8 + 3x)^4$

$$y = \frac{8x^4 - x^3}{2x}$$

Work out $\dfrac{d^2y}{dx^2}$

Show that

$$\frac{cosx}{1 - sinx} - \frac{cosx}{1 + sinx} \equiv 2tanx$$