

4th March

Corbettmaths

Factorise fully

$$x^3 - 9x^2 + 20x$$

Work out the gradient of the curve
 $y = (x - 3)(2x + 1)$ at the point
when $x = -4$

George has the six number cards below.



How many 4-digit numbers can be made
that are less than 5000?

Find the value of y

$$2^y \times 4^{y+3} = 16$$

Show that $2\sin x = \frac{4\cos x - 1}{\tan x}$

can be expressed in the form

$$6\cos^2 x - \cos x - 2 = 0$$