

**5th June**

Corbettmaths

Simplify this ratio fully

$$\sqrt{45} : \sqrt{180} : \sqrt{320}$$

Describe fully the **single** transformationrepresented by  $\begin{pmatrix} 2 & 0 \\ 0 & 2 \end{pmatrix}$ 

$$y = x^4 - \frac{4}{x}$$

Work out the value of  $\frac{d^2y}{dx^2}$  when  $x = -1$ Work out the equation of the normal to the curve  $y = (2x + 1)(x + 7)$  at the point where  $x = -5$