26th August	
Solve $$\frac{\sqrt{6} \times \sqrt{y}}{\sqrt{3}} = 4\sqrt{23}$$	Corbettmaths $\sqrt{y} = \dfrac{4\sqrt{23} \times \sqrt{3}}{\sqrt{6}}$ $y = \dfrac{16 \times 23 \times 3}{6}$ $= 184$
$y = 8x^3 + 7x - 1$ Work out $\dfrac{d^2y}{dx^2}$	$\dfrac{dy}{dx} = 24x^2 + 7$ $\dfrac{d^2y}{dx^2} = 48x$
Circle 1 has an equation of $(x-9)^2 + (y-5)^2 = 49$ Circle 2 has an equation of $(x+1)^2 + (y-1)^2 = 121$	Calculate the distance between the centres of Circle 1 and Circle 2 $(9,5) \leftrightarrow (-1,1)$ $\sqrt{10^2 + 4^2} = \sqrt{116}$ (10.77)
Solve the simultaneous equations $10x + 20y + 30z = 17$ (1) $15x + 15y + 10z = 12$ (2) $25x - 10y - 20z = 2$ (3)	$(1) \times 2 + (3) \times 3$ $95x + 10y = 40$ $(2) \times 2 + (3)$ $55x + 20y = 26$ $190x + 20y = 80$ $\overline{135x \qquad = 54}$ $x = 0.4$ $y = 0.2$ $6 + 3 + 10z = 12$ $\Rightarrow z = 0.3$