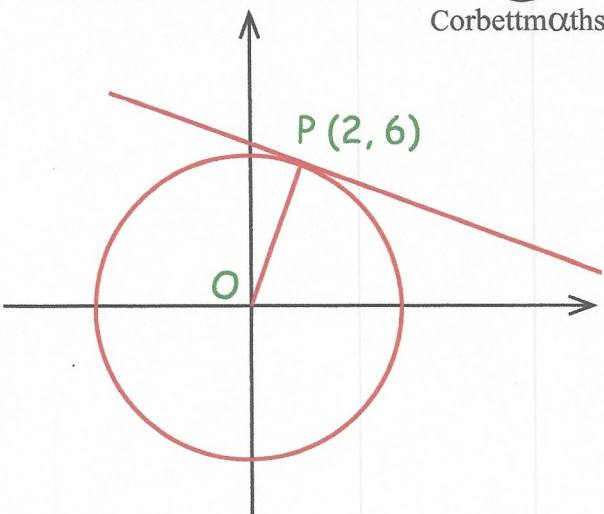
 Corbettmaths	
12th October	
The diagram shows the circle $x^2 + y^2 = 40$ with a tangent at the point (2, 6) Find the gradient of the line OP <div style="text-align: center; font-size: 2em;">3</div>	
Find the gradient of the tangent <div style="font-size: 2em;">-1/3</div>	Find the equation of the tangent <div style="font-size: 1.5em;">$y = -\frac{1}{3}x + 6\frac{2}{3}$</div>
There are 25 beads in a bag. There are only pink and green beads in the bag. <div style="margin-left: 40px;"> $\begin{matrix} x & 25-x \\ 16 & 9 \end{matrix}$ </div> Jonah picks two beads at random, without replacement. The probability that he picks two pink beads is 0.4	Work out the probability that Jonah picks two green beads. <div style="margin-left: 20px;"> $\frac{x}{25} \times \frac{x-1}{24} = \frac{2}{5}$ $\frac{x^2 - x}{600} = \frac{2}{5}$ $x^2 - x = 240$ $x^2 - x - 240 = 0$ </div> <div style="border: 1px solid black; padding: 5px; margin-left: 20px; display: inline-block;"> $x = 16$ pink </div> <div style="border: 1px solid black; padding: 5px; margin-left: 20px; display: inline-block;"> Two greens $\frac{9}{25} \times \frac{8}{24} = \frac{3}{25}$ </div>
Solve $2w^{\frac{1}{4}} - 14 = 0$ $2w^{\frac{1}{4}} = 14$ $w^{\frac{1}{4}} = 7$	$w = 2401$
Evaluate $(2\frac{7}{9})^{-\frac{1}{2}}$ $(\frac{25}{9})^{-\frac{1}{2}}$	$(\frac{9}{25})^{\frac{1}{2}} = \frac{3}{5}$