

Question	Answer	Mark	Mark scheme	Additional guidance
22	(12, -8)	<p>P1</p> <p>P1</p> <p>P1</p> <p>A1</p>	<p>for process to rearrange the equation to give y in terms of x, eg $y = \frac{3x-52}{2}$ or $y = \frac{3}{2}x - 26$ or $m = \frac{3}{2}$</p> <p>for process to find gradient of OP, eg $-1 \div \frac{3}{2}$ ($= -\frac{2}{3}$) or $-1 \div [m]$</p> <p>(dep on equation of the form $y = \frac{-1}{[m]}x$ for the radius may be implied in subsequent working) for starting to solve $3x - 2y = 52$ with $y = \frac{-1}{[m]}x$ simultaneously to find the value of x or y eg substituting $y = \frac{-2}{3}x$ or $y = \frac{-1}{[m]}x$ into $y = \frac{3}{2}x - 26$ or $3x - 2y = 52$ or an equation of the form $y = \frac{3}{2}x + c$ eg $-\frac{2}{3}x = \frac{3}{2}x - 26$ or $3x - 2\left(-\frac{2}{3}x\right) = 52$ or $-\frac{2}{3}x = \frac{3}{2}x + c$ or $-\frac{1}{[m]}x = \frac{3}{2}x - 26$ or $3x - 2\left(-\frac{1}{[m]}x\right) = 52$ or $-\frac{1}{[m]}x = \frac{3}{2}x + c$</p> <p>cao</p>	<p>Condone an incorrect value for the y intercept ($= c$)</p> <p>Where $[m]$ is clearly identified as the gradient of the straight line $3x - 2y = 52$ Allow 0.66(6...) or 0.67 for $\frac{2}{3}$ throughout</p> <p>Where $[m]$ is clearly identified as the gradient of the straight line $3x - 2y = 52$ Can be done by elimination Award P1 for a correct method to eliminate x or y: coefficient of x or y the same and correct operator to eliminate selected variable eg $\begin{array}{r} 9x - 6y = 156 \\ + 4x + 6y = 0 \\ \hline (13x = 156) \end{array}$ $\begin{array}{r} 6x - 4y = 104 \\ - 6x + 9y = 0 \\ \hline (-13y = 104) \end{array}$</p>