
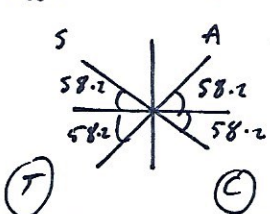


12th January	
Factorise fully $6a^5b^2 - 12a^8b^3 + 9a^6b^4$ $3a^5b^2(2 - 4a^3b + 3ab^2)$	 Corbettmaths
Write down the limiting value of $\frac{2n}{5n+4}$ as $n \rightarrow \infty$ $\frac{2}{5}$	
Solve $2 + \sin\theta = 1.15$ for $0^\circ \leq \theta \leq 360^\circ$ $\sin\theta = -0.85$ $\sin^{-1} 0.85 = 58.2$ 	$\theta = 238.2^\circ, 301.8^\circ$
Work out the equation of the normal to the curve $y = 2x^2 - 4x + 3$ at the point (2, 3) $\frac{dy}{dx}$ Give your answer in the form $y = mx + c$ $\frac{dy}{dx} = 4x - 4$ $x = 2, \frac{dy}{dx} = 4$ gradient of normal is $-\frac{1}{4}$	$y = -\frac{1}{4}x + c$ $3 = -\frac{1}{2} + c$ $c = 3.5$ $y = -\frac{1}{4}x + \frac{7}{2}$ or $y = -0.25x + 3.5$