

6th December

Corbettmaths

<p>Given that $(x + 3)(x + a)(x + 7) \equiv x^3 + 15x^2 + 71x + 105$</p> <p>Find the value of a</p>	
<p>$f(x) = 18 - 2x^2$ for all values of x</p> <p>Write down the range of $f(x)$</p>	
<p>The equation of a circle is $(x - 1)^2 + (y + 8)^2 = 144$</p> <p>Describe the transformation that maps the circle to the circle $(x - 1)^2 + (y + 8)^2 = 4$</p>	
<p>Angle θ is obtuse and $\sin\theta = \frac{4}{5}$</p> <p>Work out the value of $\cos\theta$</p>	
<p>The tangent at the point A of the curve $y = x^2 - 3x + 3$ is perpendicular to the line $5x + y = 4$</p> <p>Work out the coordinates of A.</p>	