

5th January

Corbettmaths

Expand and simplify fully

$$(x + 1)(x + 2)(x + 4)$$

The first five terms of a sequence are shown below.

$$200, 196, 190, 182, 172 \dots$$

Work out an expression for the n th term of the sequence

$$y = \frac{4}{5}x^{10} + 2x^7$$

Work out $\frac{dy}{dx}$

Prove

$$\cos^2 x - 2\sin^2 x \equiv 3\cos^2 x - 2$$

Hence, work out the values of x between 0° and 360° for which

$$\cos^2 x - 2\sin^2 x = 0$$