

**15th September**

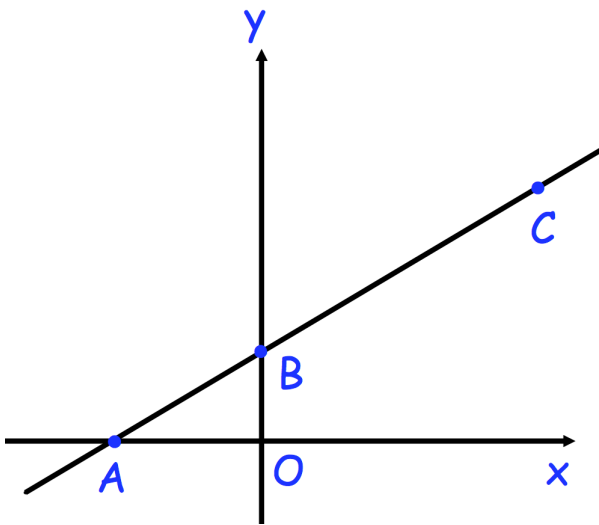
Corbettmaths

A circle, centre  $(5, -7)$  has circumference  $64\pi$

Work out the equation of the circle.

Find the first 3 terms, in ascending powers of  $x$ , of the expansion of  $(4 + 3x)^5$

A, B and C are points on the line  $5x + 3y + 12 = 0$



$AB : BC = 2 : 7$

Work out the area of triangle OBC.

Solve

$$\sin^2 x = \frac{1}{9} \text{ for } 0^\circ \leq x \leq 360^\circ$$