

**12th February**

Corbettmaths

A circle has equation

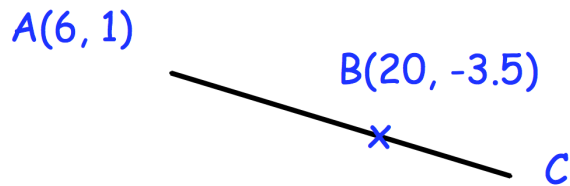
$$(x - 9)^2 + (y + 2)^2 = 25$$

Write down the coordinates of 5 points on the circle.

$$y = \frac{3}{x^2}$$

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

ABC is a straight line with A:B = 5:3



Work out the coordinates of C

$$\mathbf{A} = \begin{pmatrix} 3 & -2 \\ 5 & 1 \end{pmatrix} \quad \mathbf{B} = \begin{pmatrix} p \\ -3 \end{pmatrix}$$

$$\mathbf{C} = \begin{pmatrix} 27 \\ q \end{pmatrix}$$

**AB = C**

Work out p and q

Work out **AC**