

**22nd January**

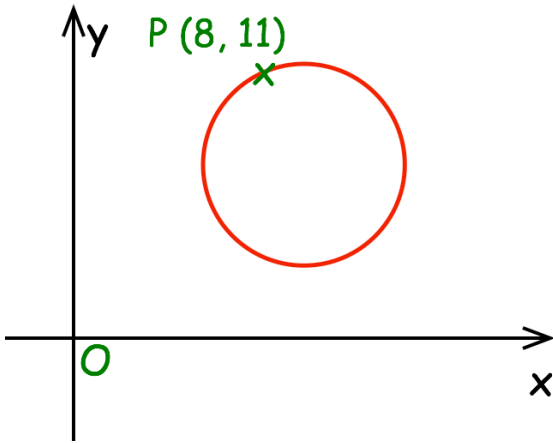
Corbettmaths

$$\mathbf{A} = \begin{pmatrix} -4 & 1 \\ 2 & 3 \end{pmatrix}$$

$$\mathbf{B} = \begin{pmatrix} 9 & -1 \\ -1 & 0 \end{pmatrix}$$

Work out the matrix **BA**

The diagram shows the circle with equation  $(x - 9)^2 + (y - 8)^2 = 10$  with a tangent at the point  $(8, 11)$



Find the equation of the tangent to the circle at P

$y = f(x)$  has exactly two stationary points.

The stationary points are

a minimum at  $D(3, -2)$ 

a maximum at  $E(b, c)$  where  $0 < b < 3$  and  $-2 < c < 0$

Sketch the curve and label D and E.

