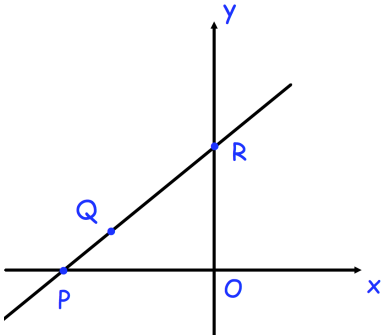


**30th January**

Corbettmaths

Rationalise the denominator and  
simplify fully  $\frac{9}{\sqrt{10} + 3}$



The line  $y = 2x + 10$  passes through the points P, Q and R.

$$PQ : QR = 1 : 2$$

Find the coordinates of the point Q

$$\mathbf{A} = \begin{pmatrix} 5 & -1 \\ -2 & 5 \end{pmatrix} \quad \mathbf{B} = \begin{pmatrix} -1 & 6 \\ 7 & 2 \end{pmatrix}$$

$$\mathbf{C} = \begin{pmatrix} -3 \\ 2 \end{pmatrix}$$

Work out the matrix **BAC**