

**11th March**

Corbettmaths

Solve  $2x^2 + 5x + 2 = 0$

The line passing through (1, p) and (5, 1) has a gradient of 0.75

Find p.

The point (4, a) is invariant when transformed by the matrix  $\begin{pmatrix} -5 & -2 \\ 3 & 2 \end{pmatrix}$

Find the value of a

Angle  $\theta$  is obtuse and  $\cos\theta = -\frac{12}{13}$

Work out the value of  $\sin\theta$

A curve has equation  $y = 4x^2 - x + 1$

At point Q on the curve, the tangent is parallel to the line  $y = 9 - 3x$

Work out the coordinates of Q.