

**30th April**

Corbettmaths

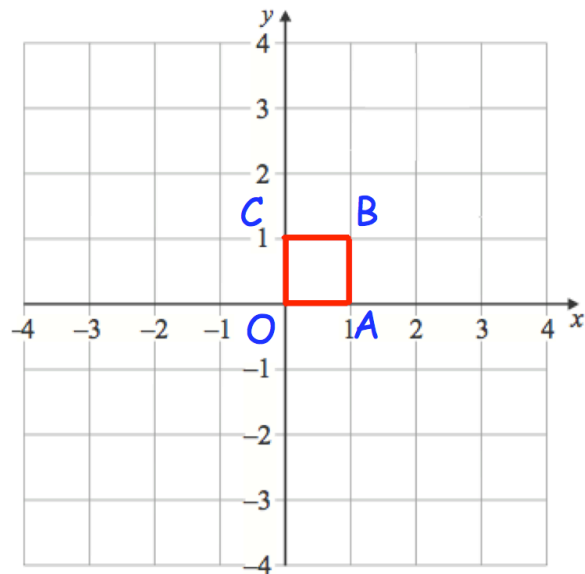
Solve  $2x^2 + 15x - 38 = 0$

OABC is transformed by the matrix

$$\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$$

to give OA'B'C'

Draw and label OA'B'C'



Describe the transformation fully.

The first five terms of a sequence are shown below.

$$80, 76, 70, 62, 52 \dots$$

Work out an expression for the  $n$ th term of the sequence

$$y = \frac{4}{5}x^{10} + 2x^7 + \frac{4}{x^3}$$

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