

19th September

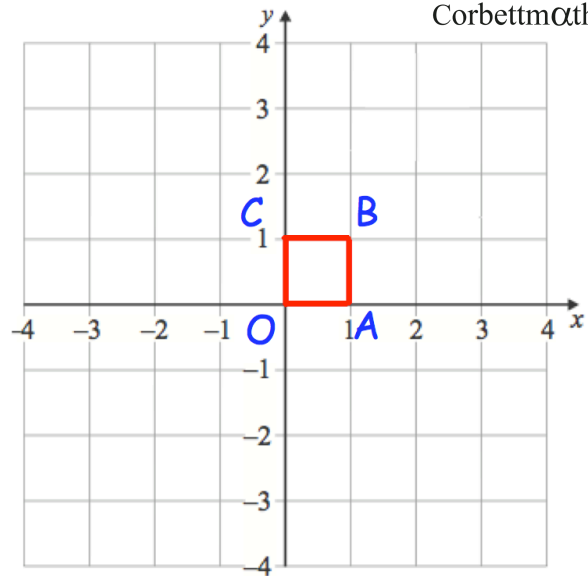
Corbettmaths

OABC is transformed by the matrix

$$\begin{pmatrix} 3 & 0 \\ 0 & 3 \end{pmatrix}$$

to give OA'B'C'

Draw and label OA'B'C'



Describe the transformation fully.

Work out the rate of change of y with respect to x at the point on the curve

$$y = \frac{1}{x^2} + x \text{ where } x = 2$$

A circle has centre C and equation

$$x^2 + y^2 + 12x - 4y - 10 = 0$$

Find the centre of the circle

Find the radius of the circle