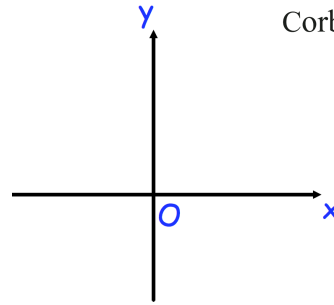


27th October

Corbettmaths

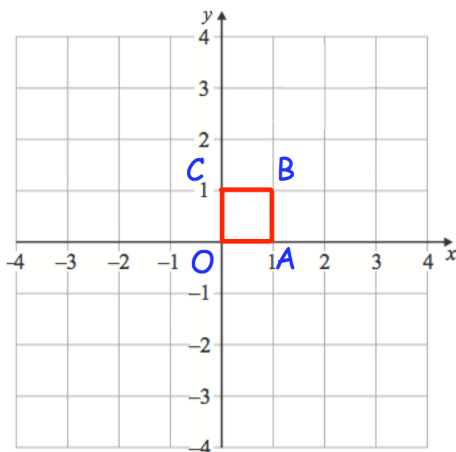
Sketch the graph of $y = 8 \times \left(\frac{1}{2}\right)^x$

Label the coordinates of any points of intersection with the coordinate axes.



Solve the inequality

$$(2x + 5)^2 - 3x(x + 2) > 0$$



Draw and label OA'B'C'

Describe the transformation fully.

OABC is transformed by the matrix

$$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix} \text{ to give OA'B'C'}$$

Show that $(2n + 5)^3 + 2n^3$ is divisible by 5 for all integer values of n