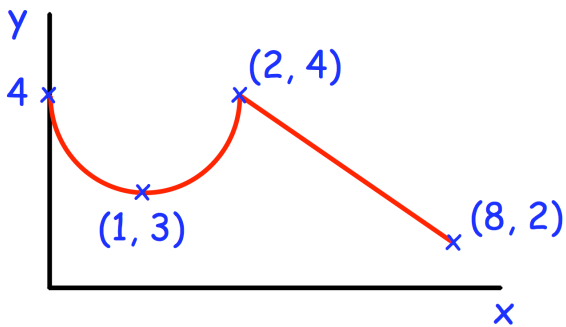


17th November

Corbettmaths

Expand and simplify fully

$$(3w + 1)(2w + 5)(w + 2)$$



$$f(x) = (x - a)^2 + b \quad \text{for } 0 \leq x < 2$$

$$= cx + d \quad \text{for } 2 \leq x \leq 8$$

Work out the values of a, b, c and d

The transformation matrix $\begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix}$
maps point P to point Q.

The transformation matrix $\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$
maps point Q to point R.

Point P is (0, 4).

Work out the coordinates of point R.