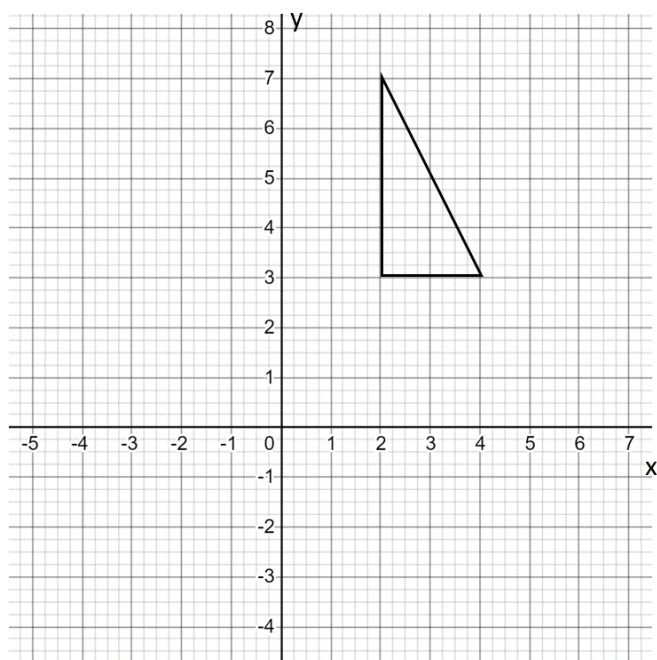


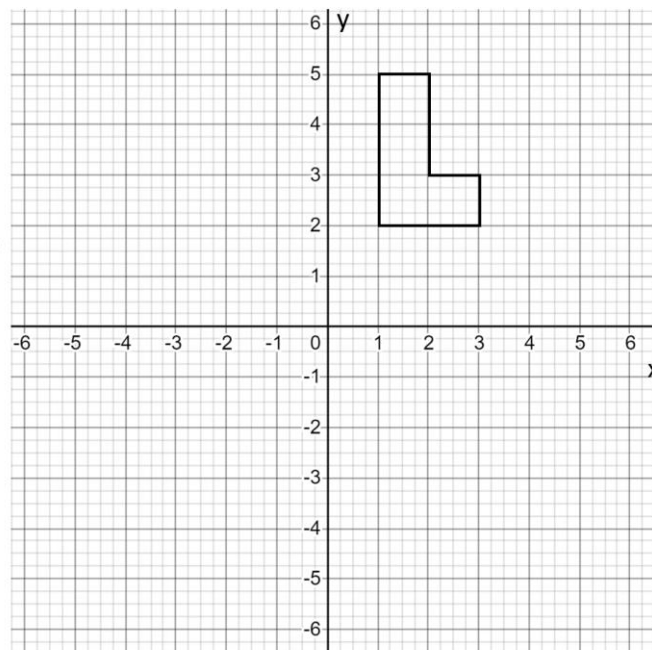


Translations Exam Practice

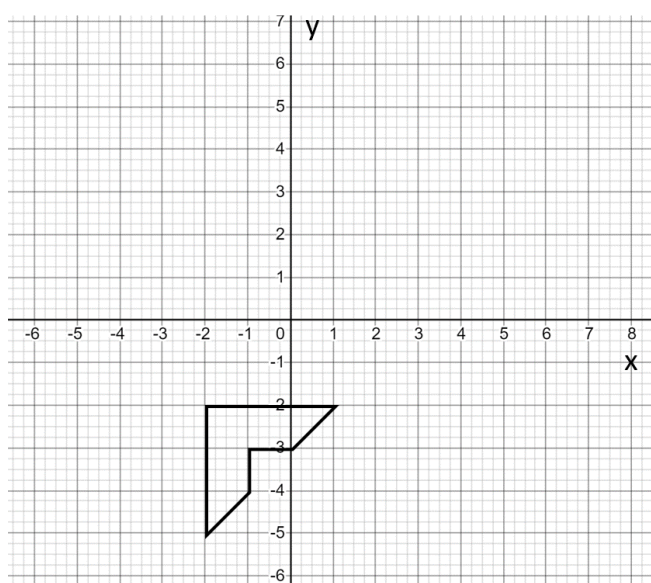
Q1. Translate the shape below by the vector $\begin{pmatrix} -5 \\ 1 \end{pmatrix}$ (2 marks)



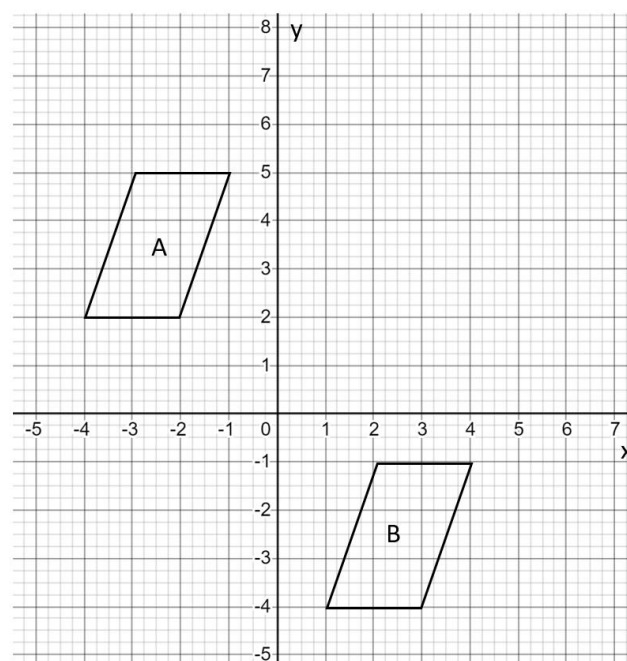
Q2. Translate the shape below by the vector $\begin{pmatrix} -2 \\ -3 \end{pmatrix}$ (2 marks)



Q3. Translate the shape below by the vector $\begin{pmatrix} 3 \\ 5 \end{pmatrix}$ (2 marks)



Q4. Describe fully the transformation which takes shape B to A. (3 marks)





Q5. Shape B is a translation of shape A by the vector $\begin{pmatrix} 2 \\ -8 \end{pmatrix}$.

State fully the transformation which takes shape B to shape A.

(3 marks)

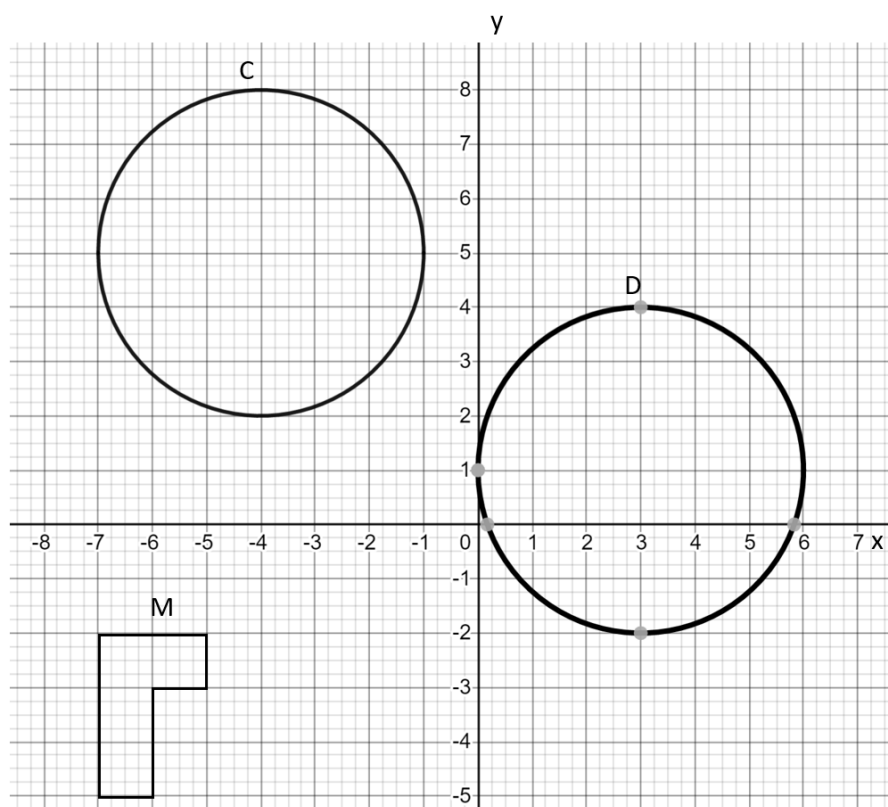
Q6. Shape Q is a translation of shape P by the vector $\begin{pmatrix} -4 \\ 0 \end{pmatrix}$ and shape R is a translation of shape Q by the vector $\begin{pmatrix} 9 \\ 5 \end{pmatrix}$.

State fully the transformation which takes shape R to shape P.

(3 marks)

Q7. a) State fully the transformation which takes shape C to shape D

(3 marks)



(b) Shape M is to be translated by the vector $\begin{pmatrix} a \\ b \end{pmatrix}$ where a and b are whole numbers. State the number of possible translations there exists so that M will be remain completely inside shape C or D.

(2 marks)

Q8. Shape PQR is such that $P = (4, -9)$, $Q = (2, 3)$ and $R = (-9, 12)$. Pat wishes to transform Shape PQR by translating each point in turn to form shape STQ. His working is below. Given that he has made exactly one error, find it and correct it.

P: $(4, -9) \rightarrow S: (-3, -6)$ Q: $(2, 3) \rightarrow (9, 6)$ R: $(-9, 12) \rightarrow (-16, 15)$

(2 marks)