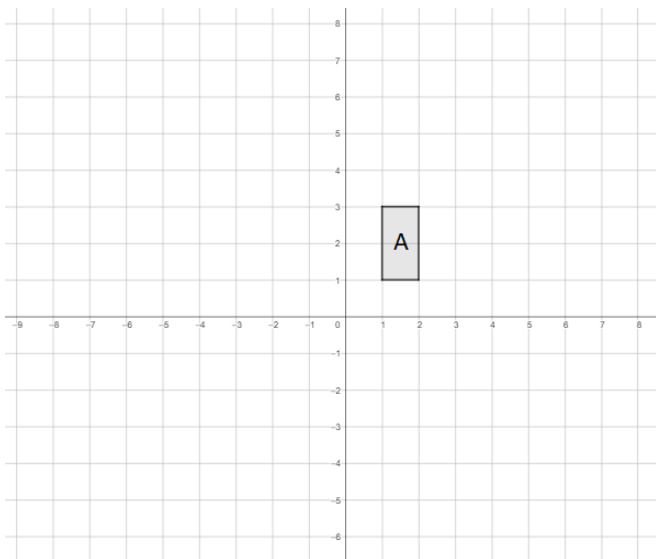


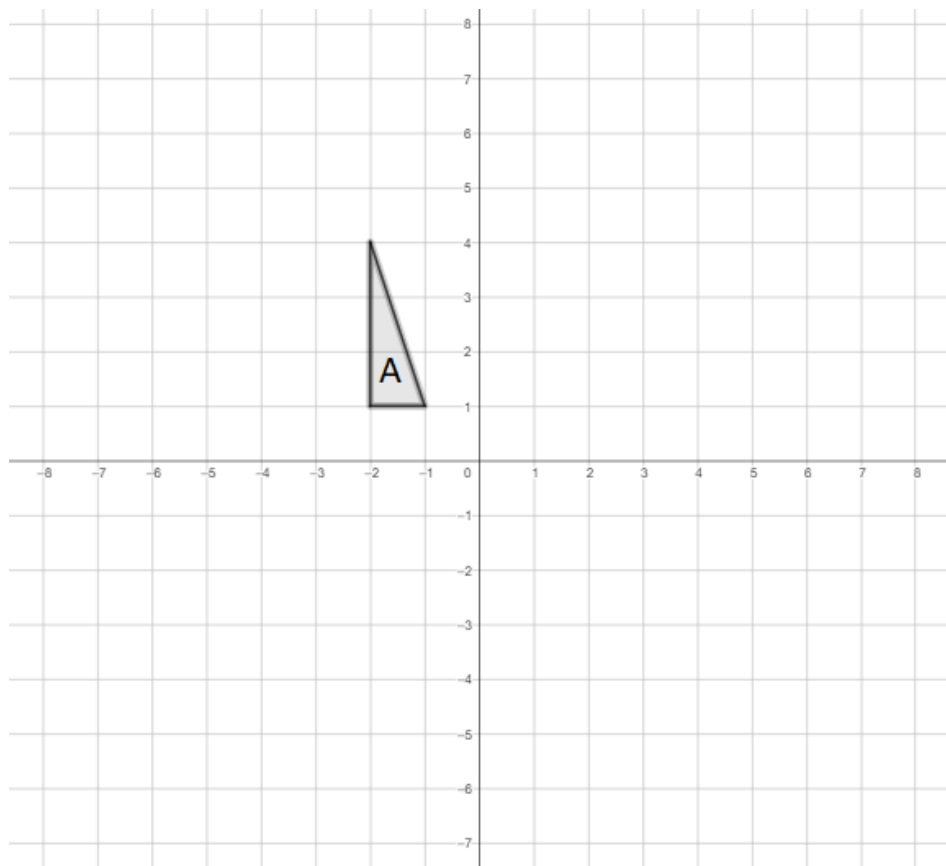


Question 1 – Carry out each translation below! – Copy the shape in your book such that the grid doesn't get too congested. Do 3-4 questions per grid.



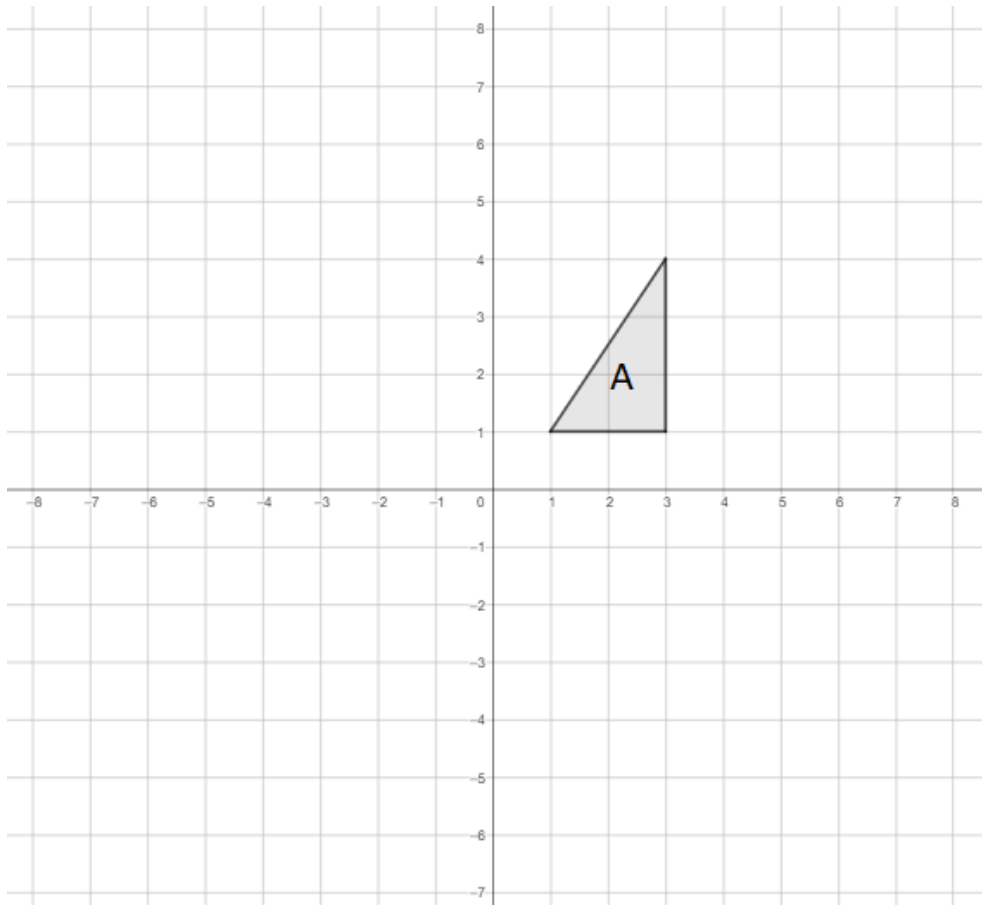
- (1) Translate Shape A by the vector $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$ and label the shape B
- (2) Translate Shape A by the vector $\begin{pmatrix} -1 \\ 4 \end{pmatrix}$ and label the shape C
- (3) Translate Shape A by the vector $\begin{pmatrix} 1 \\ -3 \end{pmatrix}$ and label the shape D
- (4) Translate Shape A by the vector $\begin{pmatrix} -3 \\ -5 \end{pmatrix}$ and label the shape E
- (5) Translate Shape A by the vector $\begin{pmatrix} 0 \\ 2 \end{pmatrix}$ and label the shape F
- (6) Translate Shape A by the vector $\begin{pmatrix} -2 \\ 0 \end{pmatrix}$ and label the shape G
- (7) Translate Shape A by the vector $\begin{pmatrix} 4 \\ 0 \end{pmatrix}$ and label the shape H
- (8) Translate Shape A by the vector $\begin{pmatrix} -3 \\ 5 \end{pmatrix}$ and label the shape I
- (9) Translate Shape A by the vector $\begin{pmatrix} 5 \\ 4 \end{pmatrix}$ and label the shape J
- (10) Translate Shape A by the vector $\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ and label the shape K

Question 2 – Carry out each rotation below – Copy the shape in your book such that the grid doesn't get too congested. Do 3-4 questions per grid



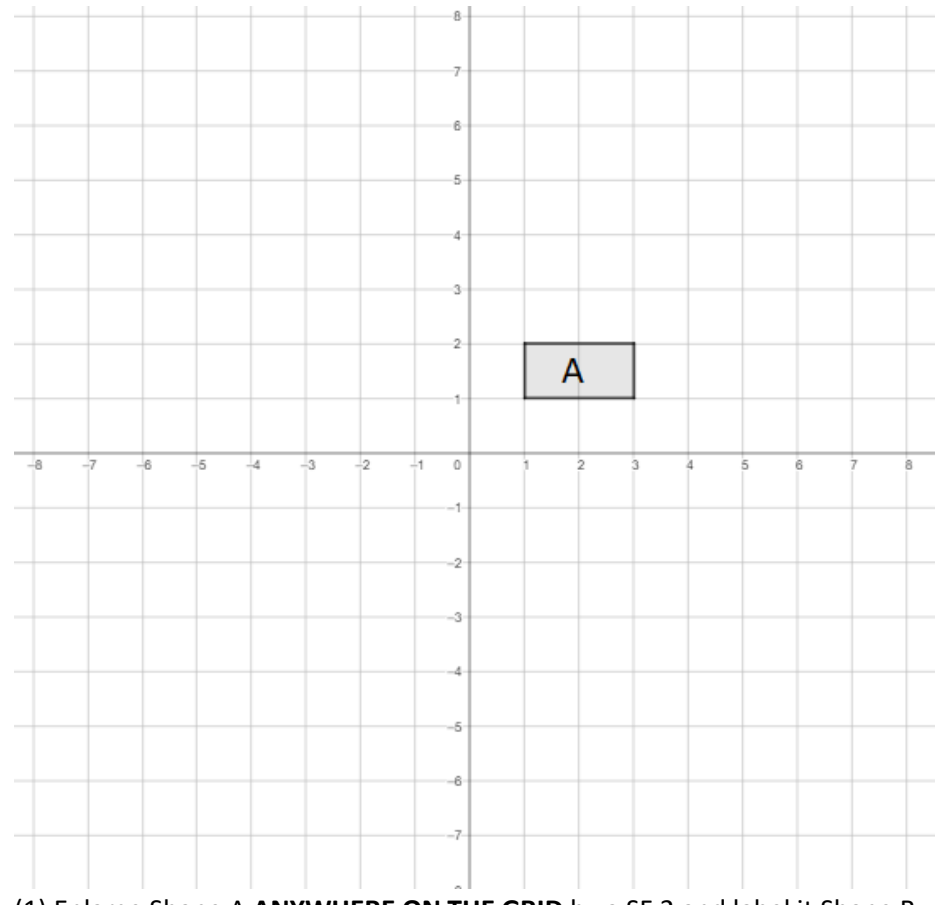
- (1) Rotate Shape A 90° clockwise about (0,0) and label it Shape B
- (2) Rotate Shape A 90° anticlockwise about (0,0) and label it Shape C
- (3) Rotate Shape A 180° clockwise about (1,0) and label it Shape D
- (4) Rotate Shape A 270° anticlockwise about (0,1) and label it Shape E
- (5) Rotate Shape A 90° clockwise about (3,1) and label it Shape F
- (6) Rotate Shape A 180° anticlockwise about (-1,2) and label it Shape G
- (7) Rotate Shape A 270° clockwise about (3,-1) and label it Shape H
- (8) Rotate Shape A a quarter turn anticlockwise about (0,0) and label it Shape I
- (9) Rotate Shape A a half turn clockwise about (0,0) and label it Shape J
- (10) Rotate Shape A 45° anticlockwise about (0,0) and label it Shape K

Question 3 – Carry out each reflection below – Copy the shape in your book such that the grid doesn't get too congested. Do 3-4 questions per grid



- (1) Reflect Shape A in the x axis and label it Shape B
- (2) Reflect Shape A in the y axis and label it Shape C
- (3) Reflect Shape A in the line with equation $x = 3$ and label it Shape D
- (4) Reflect Shape A in the line with equation $y = 1$ and label it Shape E
- (5) Reflect Shape A in the line with equation $x = -1$ and label it Shape F
- (6) Reflect Shape A in the line with equation $y = 4$ and label it Shape G
- (7) Reflect Shape A in the line with equation $y = -1$ and label it Shape H
- (8) Reflect Shape A in the line with equation $y = -2$ and label it Shape I
- (9) Reflect Shape A in the line with equation $y = -x$ and label it Shape J
- (10) Reflect Shape A in the line with equation $x = 4$ and label it Shape K

Question 4 – Carry out each enlargement below – Copy the shape in your book such that the grid doesn't get too congested. Do 3-4 questions per grid



- (1) Enlarge Shape A **ANYWHERE ON THE GRID** by a SF 2 and label it Shape B
- (2) Enlarge Shape A **ANYWHERE ON THE GRID** by a SF 3 and label it Shape C
- (3) Enlarge Shape A **ANYWHERE ON THE GRID** by a SF 4 and label it Shape D
- (4) Enlarge Shape A **ANYWHERE ON THE GRID** by a SF $\frac{1}{2}$ and label it Shape E

- (5)* Enlarge Shape A, centre (0,0) by a SF 2 and label it Shape F
- (6)* Enlarge Shape A, centre (0,0) by a SF 3 and label it Shape G
- (7)* Enlarge Shape A, centre (5,3) by a SF 2 and label it Shape H
- (8)* Enlarge Shape A, centre (1,2) by a SF 3 and label it Shape I