



1)
a) $(-2,2)$ because the x -axis coordinate will change from 3 to -2 and the y -axis coordinate will remain as 2.

b) $(1,2)$ because the x -axis coordinate will remain as 1, but the y -axis coordinate will change from -1 to 2.

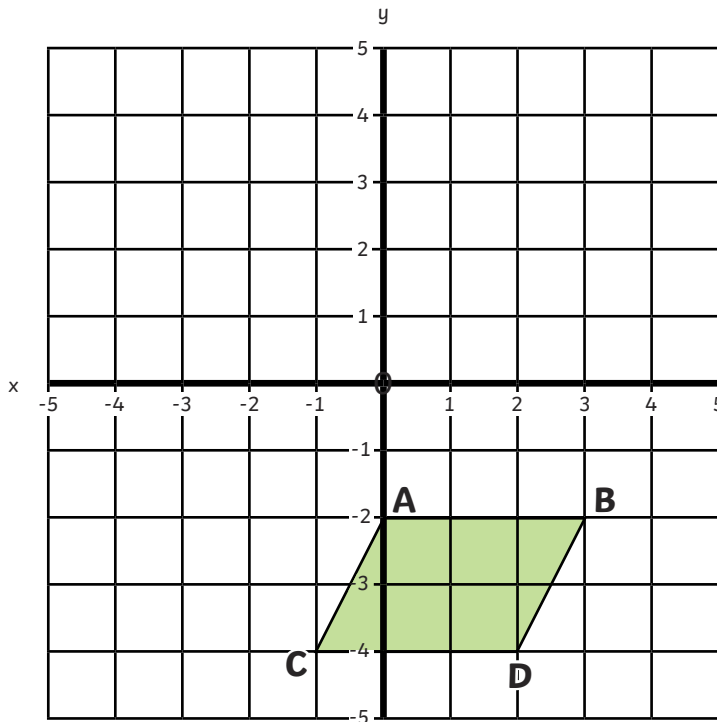
c) $(0,2)$ because the x -axis coordinate will change from 5 to 0 and the y -axis coordinate will change from -1 to 2.

2) The new coordinate position of vertex A is $(0,-2)$.

The new coordinate position of vertex B is $(3,-2)$.

The new coordinate position of vertex C is $(-1,-4)$.

The new coordinate position of vertex D is $(2,-4)$.



1)

a) False. The new coordinates of the rectangle would be $(-2,2)$, $(-2,-1)$, $(0,2)$ and $(0,-1)$.

b) False. The translation could also be described as 3 squares left and 2 squares down, or 2 squares left and 4 squares down, or 5 squares left and 2 squares down.

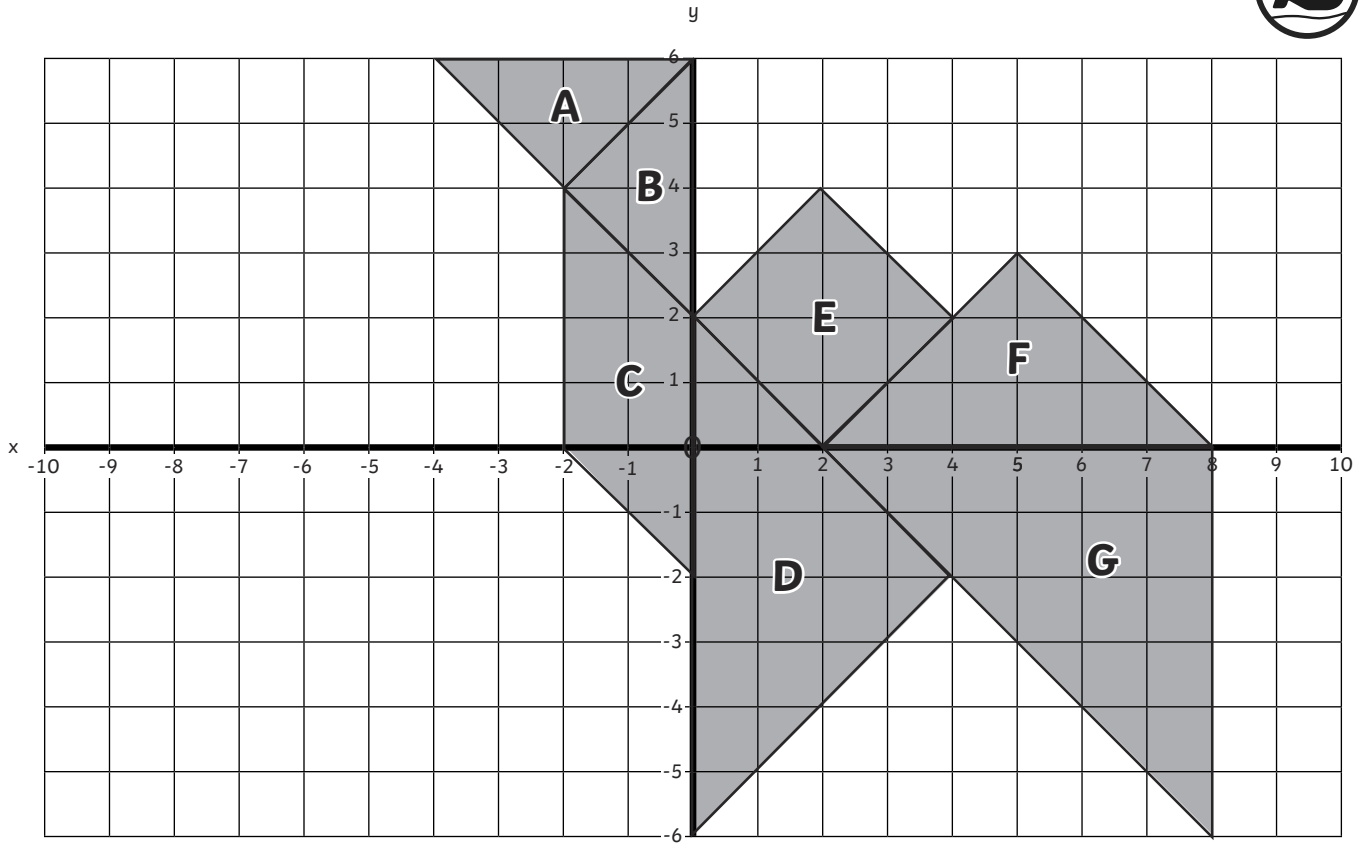
c) False. The new coordinate of one of the vertices would be $(1,-3)$ which is still in quadrant 4.

2) Children should have written two true statements and one false statement about the shapes on the grid and checked with their partner.





1)



Shape	Starting Coordinates	Translation	Finishing Coordinates
A	$(-9, -2)$ $(-5, -2)$ $(-7, -4)$	Right 5, Up 8	$(-4, 6)$ $(0, 6)$ $(-2, 4)$
B	$(9, -2)$ $(9, -6)$ $(7, -4)$	Left 9, Up 8	$(0, 6)$, $(0, 2)$ $(-2, 4)$
C	$(-3, 0)$ $(-3, -4)$ $(-1, -6)$ $(-1, -2)$	Right 1, Up 4	$(-2, 4)$ $(-2, 0)$ $(0, -2)$ $(0, 2)$
D	$(3, 2)$ $(7, -2)$ $(3, -6)$	Left 3	$(0, 2)$ $(4, -2)$ $(0, -6)$
E	$(0, 6)$ $(-2, 4)$ $(0, 2)$ $(2, 4)$	Right 2, Down 2	$(2, 4)$ $(0, 2)$ $(2, 0)$ $(4, 2)$
F	$(4, 3)$ $(10, 3)$ $(7, 6)$	Left 2, Down 3	$(2, 0)$ $(8, 0)$ $(5, 3)$
G	$(-10, 6)$ $(-4, 6)$ $(-4, 0)$	Right 12, Down 6	$(2, 0)$ $(8, 0)$ $(8, -6)$