

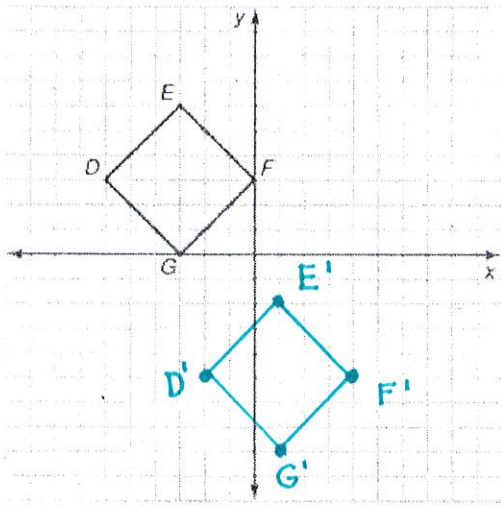
Translations of shapes on a coordinate grid

Big Ideas:

- *A TRANSLATION is a transformation that slides each point of a figure the same distance and direction.
- *A left or right translation is known as a Horizontal translation.
- *An up or down translation is known as a Vertical translation.

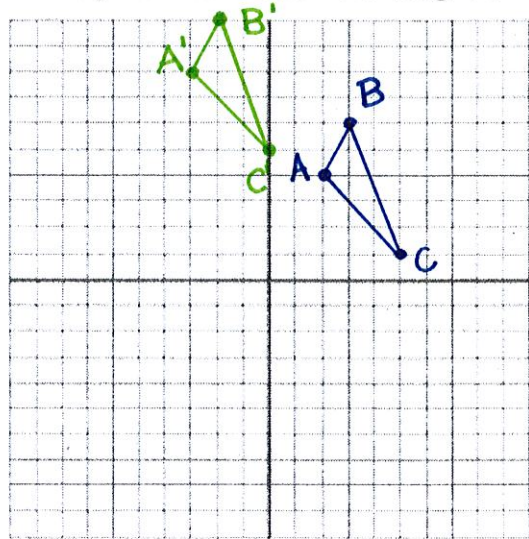
Examples:

1. Translate quadrilateral DEFG $(x, y) \rightarrow (x + 4, y - 8)$



- $D'(-2, -5)$
- $E'(1, -2)$
- $F'(4, -5)$
- $G'(1, -8)$

2. Triangle ABC with coordinates A(2, 4), B(3, 6) and C(5,1) is translated 4 units vertically and -5 units horizontally. Find the coordinates of triangle A'B'C'.



- $A'(-3, 8)$
- $B'(-2, 10)$
- $C'(0, 5)$