

UNIT 2 NOTES: TRANSFORMATIONS (TRANSLATIONS)

A transformation is a mapping, or movement, of all the points of a figure in a plane according to a common operation.

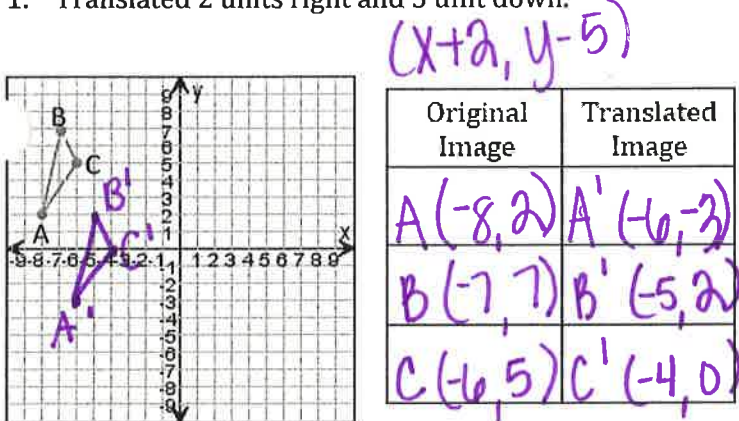
- The pre-image is the original image before the transformation.
- The image is the new image after the transformation.
- A translation is a transformation that slides each point of a figure the same distance and same direction.

Horizontal Translation Rules	Vertical Translation Rules
Right: $x + a$	Up: $y + b$
Left: $x - a$	Down: $y - b$

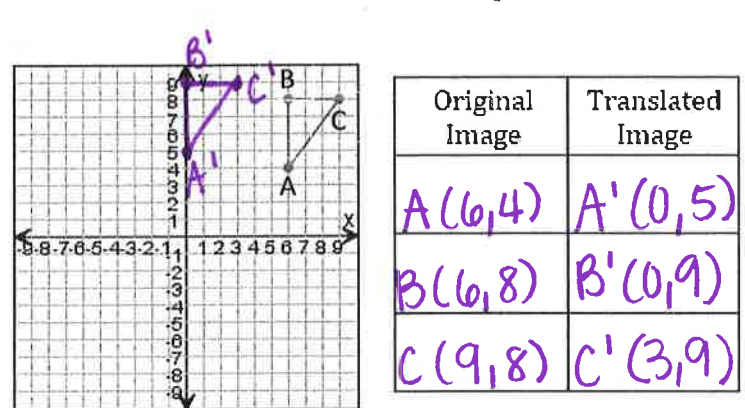
$a + b$: any values of real numbers

For each image, list the original coordinates of each vertex and then the coordinates of the transformed image after each indicated translation. Graph the transformed image.

1. Translated 2 units right and 5 unit down.

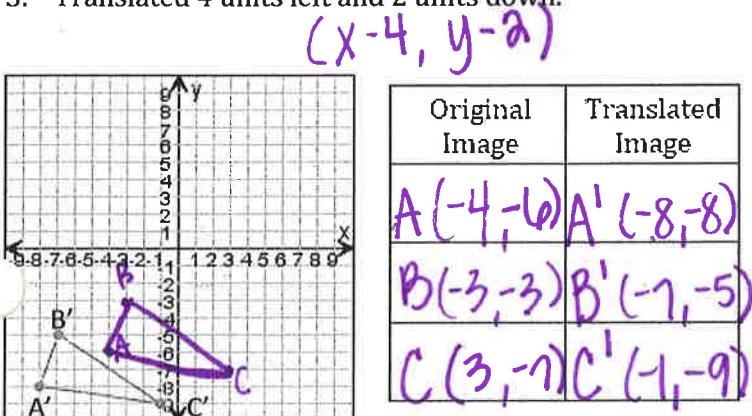


2. Translated 6 units left and 1 unit up.



For each transformed image, list the coordinates of each translated vertex and then the coordinates of the original image before each indicated translation was performed. Graph the original image.

3. Translated 4 units left and 2 units down.



4. Translated 5 units right and 2 units up.

