Name: _____   Date: _____

3.6 Transformations of Graphs of Linear Functions PART 1

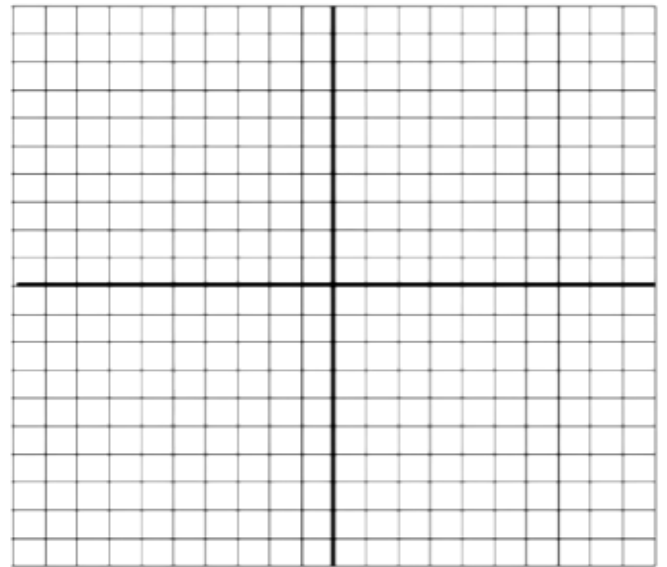**Essential Question**: _____

A translation is a _____.
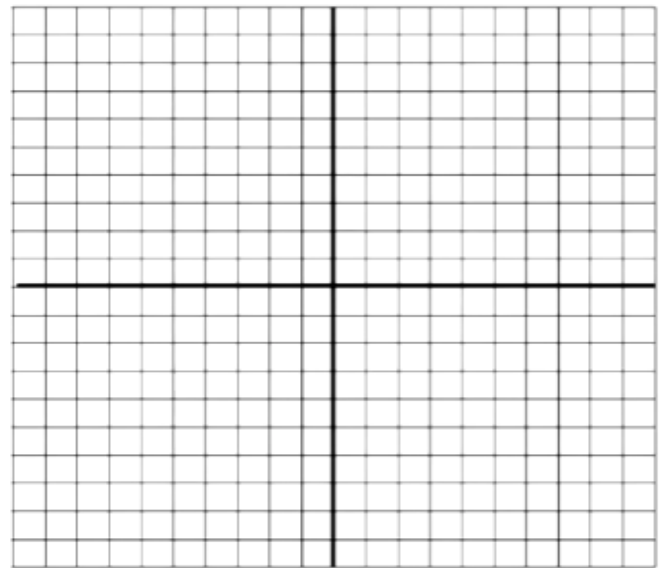
 EXAMPLE 1   **Horizontal and Vertical Translations**

Let $f(x) = 2x - 1$. Graph (a) $g(x) = f(x) + 3$ and (b) $t(x) = f(x + 3)$. Describe the transformations from the graph of f to the graphs of g and t.

Graph (a) $g(x) = f(x) + 3$ in the graph here:

Vertical Translation Rules:

Graph (b) $t(x) = f(x+3)$ in the graph here:

Horizontal Translation Rules: