SECTION 4.1: TRANSLATIONS

Homework: _____

Learning Targets:

4a. Understanding of how to preform translations, rotations, reflections, and dilations on a coordinate plane.
4b. Understanding of how to read and write transformation rules.
4c. Understanding of how to preform compositions of translations, rotations, and reflections.
4d. Understanding of how to read and write composition transformation rules.
4e. Understanding of which transformations maintain congruency.
4f. Understanding of how to find missing measures or solve equations given different transformations.

Vocabulary:

Composition	Pre-Image	Translation
Horizontal Component	Rigid Motion	Vector
Image	Terminal Point	Vertical Component
Initial Point	Transformation	

Describe each translation. Also, given the vertices of ΔABC, A(-2, 5), B(5, -3), and C(1, 4), complete each translation.

1. $\langle 3, 2 \rangle$

2. $\langle -4, 1 \rangle$

3. $(x, y) \rightarrow (x - 4, y)$

4. $(x, y) \rightarrow (x + 5, y - 2)$

5. Translation: $(x, y) \rightarrow (x + 3, y - 2)$
   Translation: $(x, y) \rightarrow (x - 4, y + 5)$