

Name: _____ Date: _____

Translations and Reflections Homework

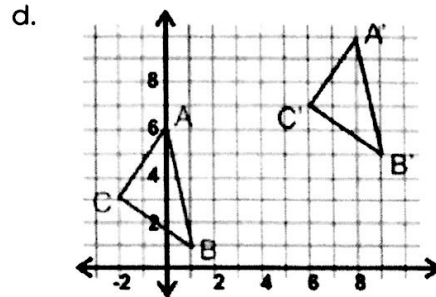
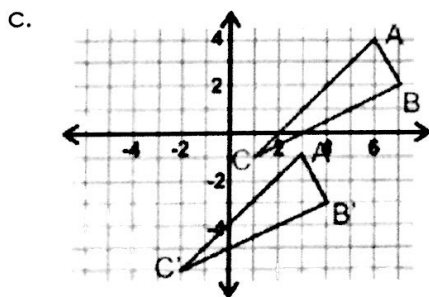
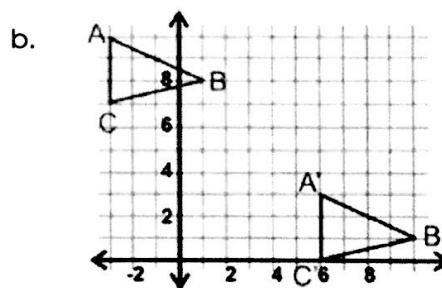
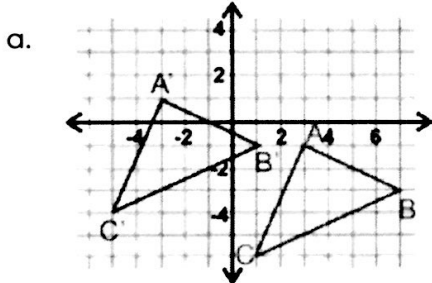
1. Use the translation $(x, y) \rightarrow (x + 5, y - 9)$ for questions a-e.

- a. What is the image of A $(-6, 3)$?
- b. What is the image of $(4, 8)$?
- c. What is the image of $(5, -3)$?
- d. What is the image of A' from #1, which would be called A''?
- e. What is the pre-image of D' $(12, 7)$?

2. The vertices of $\triangle ABC$ are $A(-6, -7)$, $B(-3, -1)$, and $C(-5, 2)$. Find the vertices of $\triangle A'B'C'$, given the translation rules below.

- a. $(x, y) \rightarrow (x - 2, y - 7)$
- b. $(x, y) \rightarrow (x + 11, y + 4)$
- c. $(x, y) \rightarrow (x, y - 3)$
- d. $(x, y) \rightarrow (x - 5, y + 8)$

3. $\triangle A'B'C'$ is the image of $\triangle ABC$. Write the translation rule.



Adapted from: Mathematics Vision Project