

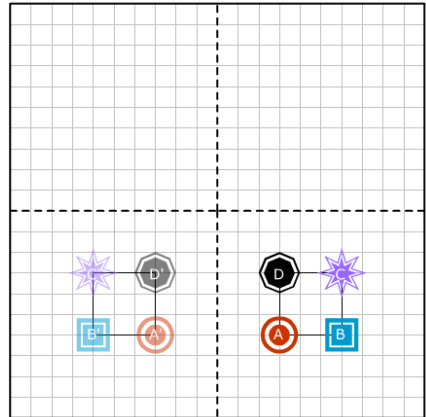
**Geometry – Unit 2 Practice**  
**Recognizing Transformations**

G.CO.A.2, G.CO.A.4

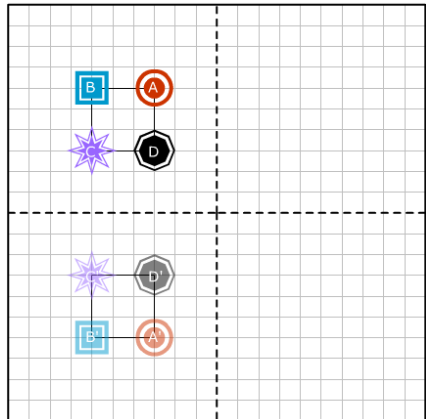
Name: \_\_\_\_\_!

Date: \_\_\_\_\_ Pd: \_\_\_\_\_

1) This shape has been reflected over the \_\_\_\_\_ axis.



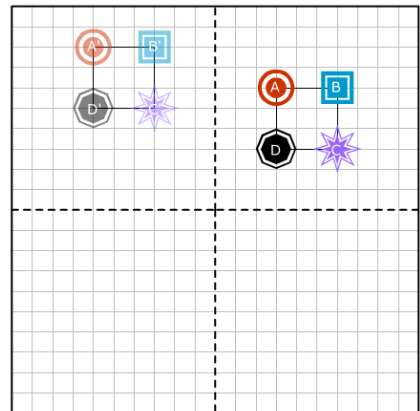
2) This shape has been reflected over the \_\_\_\_\_ axis.



3) This shape has been translated \_\_\_\_\_ units \_\_\_\_\_, and \_\_\_\_\_ units \_\_\_\_\_.

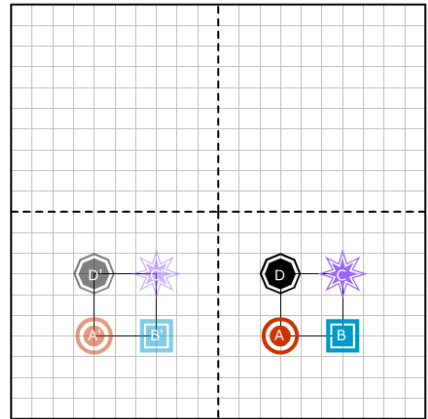
(Left/Right)

(Up/Down)





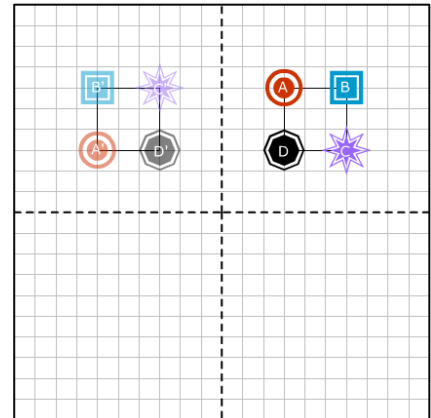
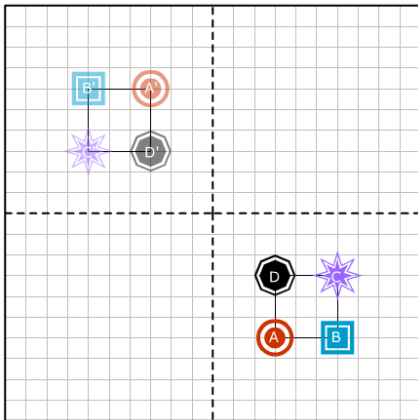
4) This shape has been translated \_\_\_\_ units \_\_\_\_\_, and \_\_\_\_ units \_\_\_\_\_.  
 (Left/Right) (Up/Down)



5) Choose a matching rotation for the following:

- a) What is the same as a  $90^\circ$  clockwise rotation? \_\_\_\_\_
- b) What is the same as a  $180^\circ$  clockwise rotation? \_\_\_\_\_
- c) What is the same as a  $270^\circ$  clockwise rotation? \_\_\_\_\_

6) a) This shape has been rotated \_\_\_\_ degrees clockwise or \_\_\_\_ degrees counterclockwise.



b) This shape has been rotated \_\_\_\_ degrees clockwise or \_\_\_\_ degrees counterclockwise.

7) State the coordinates of the image given the following transformation of point  $P(-5, 4)$ :

- a) reflected over the x-axis \_\_\_\_\_.
- b) translated  $\langle -3, 5 \rangle$  \_\_\_\_\_.
- c) rotated  $180^\circ$  about the origin \_\_\_\_\_.

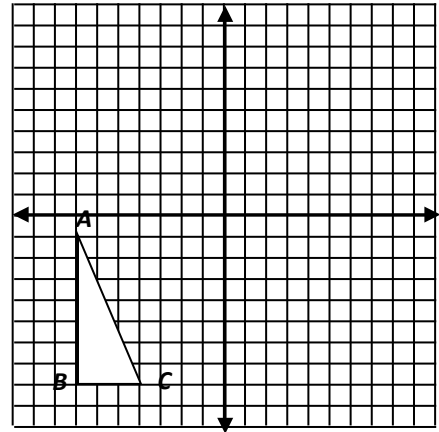
8) Find some patterns in your environment that were created using glide reflections. Make a sketch of the pattern.

OR

9) Use glide reflections to create your own patterns.



- 10) Translate  $\triangle ABC$ , 7 units up and 2 units right. Reflect the translated image over the  $y$ -axis. Draw  $\triangle A'B'C'$



**SAT Multiple Choice Problems:**

- 11) Which figure could be a translation of R?

A.  $\sphericalangle$                       B.  $\sphericalangle$                       C. R                      D. Я

- 12) What are the coordinates of the image of (5, 0) under a rotation of  $90^\circ$  clockwise about the origin?

A. (-5, 0)                      B. (0, 5)                      C. (0, -5)                      D. (5, -5)

- 13) If  $\triangle ABC$  with vertices  $A(-2, 0)$ ,  $B(-2, -2)$ ,  $C(-4, -2)$  is reflected over the  $x$ -axis and then the image is reflected over the  $y$ -axis, which coordinates would represent the final image of A?

A. (-2, 0)                      B. (2, 0)                      C. (0, 2)                      D. (0, -2)