

NAME: \_\_\_\_\_

1. Which of the following transformations creates a figure that is similar (but not congruent) to the original figure?

I. translation II. rotation III. dilation

[A] II only [B] I only [C] II and III

[D] I and II [E] III only

[1] \_\_\_\_\_

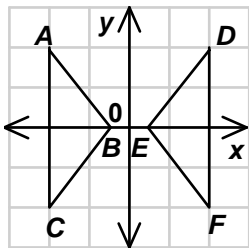
2. Is the following transformation a translation or rotation? Justify your answer.

**F**

**F**

[2] \_\_\_\_\_

3. Describe two different isometries under which  $\triangle DEF$  is an image of  $\triangle ABC$ .



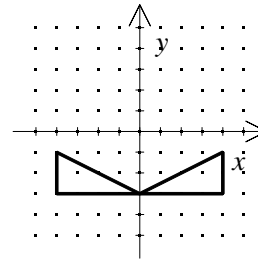
[3] \_\_\_\_\_

4. Draw square  $ABCD$  and draw the diagonal  $\overline{AC}$ . Describe an isometry of  $ABCD$  that produces the same diagram.

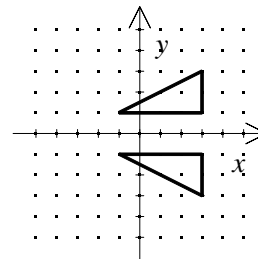
[4] \_\_\_\_\_

5. Which of the following shows a triangle and its translation image?

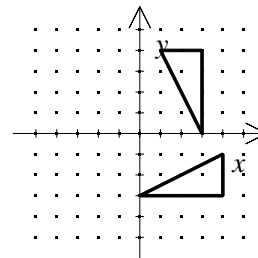
[A]



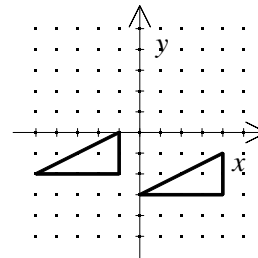
[B]



[C]



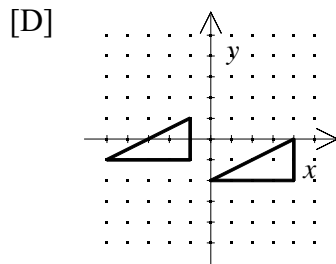
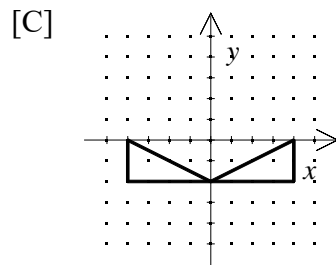
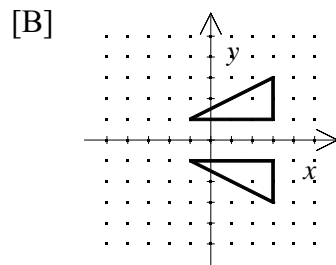
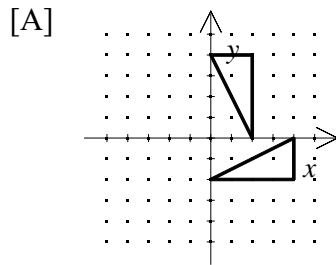
[D]



[5] \_\_\_\_\_

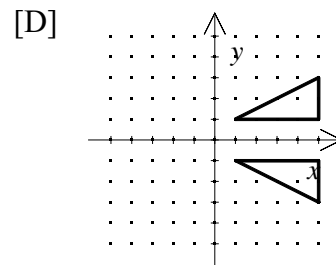
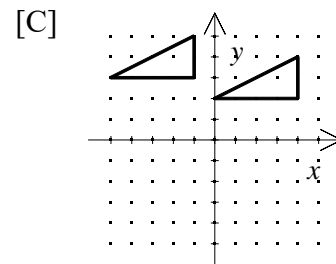
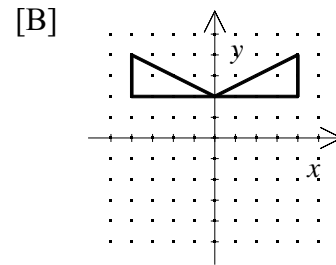
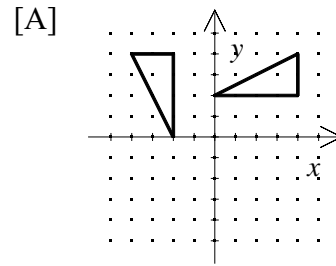
NAME: \_\_\_\_\_

6. Which of the following shows a triangle and its reflection image in the  $y$ -axis?



[6] \_\_\_\_\_

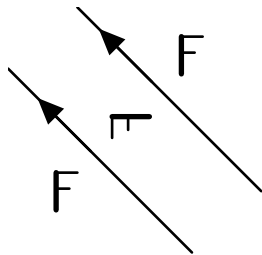
7. Which of the following shows a triangle and its reflection image in the  $x$ -axis?



[7] \_\_\_\_\_

[1] E

Translation, because it is a composition of two reflections in the parallel lines shown.



[2] \_\_\_\_\_

Either a rotation of  $180^\circ$  about the origin or a

[3] reflection in the y-axis.

Answers may vary. Sample: a reflection in

[4]  $\overline{AC}$

[5] D

[6] C

[7] D