

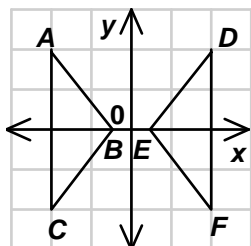
P.I. G.G.56: Identify specific isometries by observing orientation, numbers of invariant points, and/or parallelism

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

F

F

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

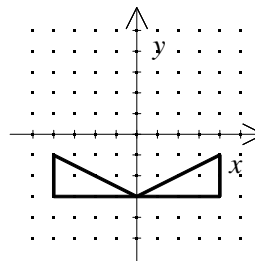


3. Draw square $ABCD$ and draw the diagonal \overline{AC} . Describe an isometry of $ABCD$ that produces the same diagram.

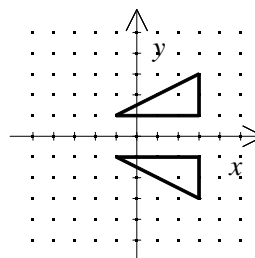
NAME: _____

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

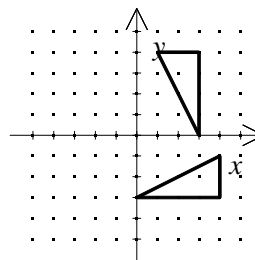
[A]



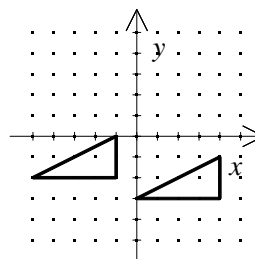
[B]



[C]

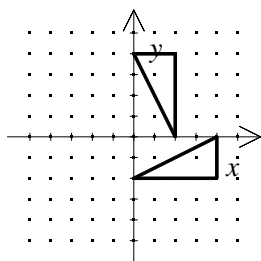


[D]

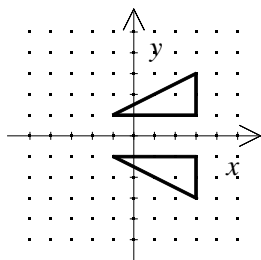


5. Which of the following shows a triangle and its reflection image in the y -axis?

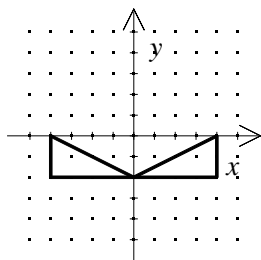
[A]



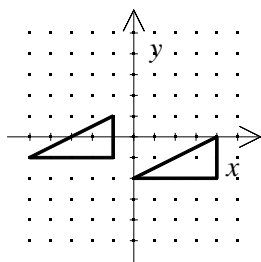
[B]



[C]

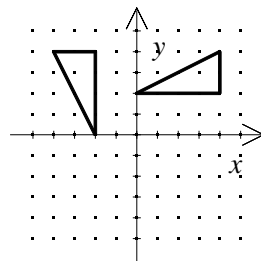


[D]

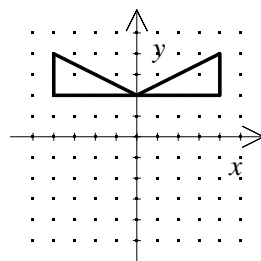


6. Which of the following shows a triangle and its reflection image in the x -axis?

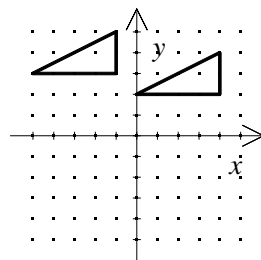
[A]



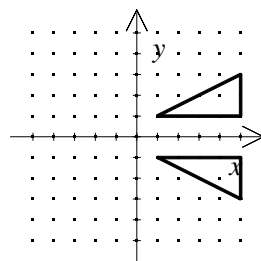
[B]



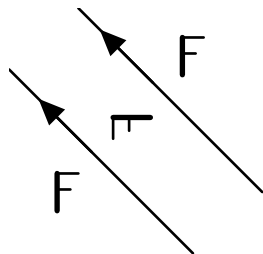
[C]



[D]



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



[1] _____

Either a rotation of 180° about the origin or a reflection in the y-axis.

[2] _____

Answers may vary. Sample: a reflection in

[3] \overline{AC}

[4] D

[5] C

[6] D