

line of reflection = line of symmetry
 center of rotation = center of shape

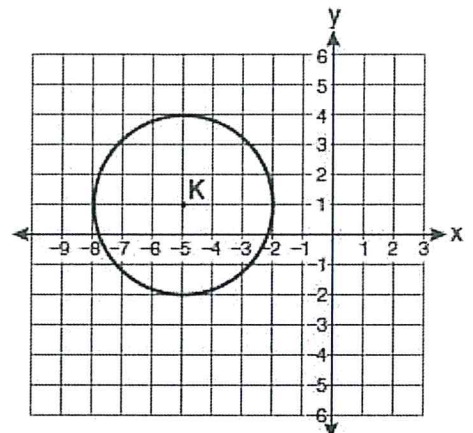


Name Schlansky
 Mr. Schlansky

Date _____
 Geometry

Mapping Shapes Onto Themselves

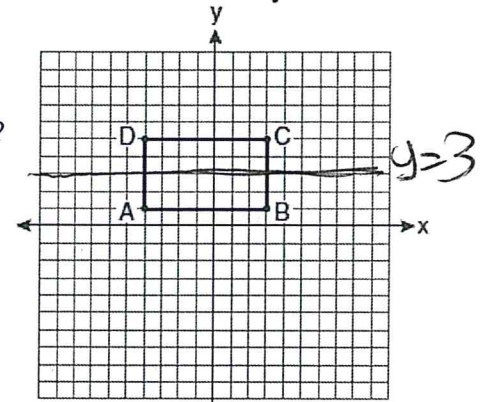
1. Circle K is shown in the graph below.
 Which of the following transformations map circle K onto itself?



- 1) Reflection over the line x -axis
- 2) Reflection over the y -axis
- 3) Rotation of 90 centered at the origin
- ④ Rotation of 90 centered at K
 center of rotation = center of shape

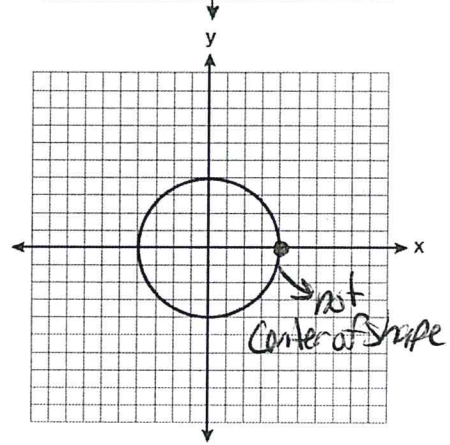
2. On the set of axes below, Geoff drew rectangle ABCD.

What of the following transformations would map the rectangle onto itself?



- 1) Reflection over the y axis
- ② Reflection over the line $y = 3$ ~~IV~~ XV
- 3) Rotation of 180 centered at the origin
- 4) Translation one unit to the right

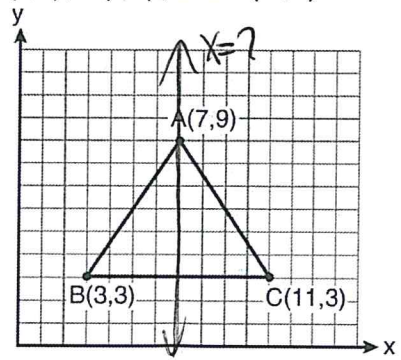
3. In the diagram below, which transformation does *not* map the circle onto itself?



- 1) Rotation of 80 centered at the origin
- 2) Reflection over the line $y = x$
- ③ Rotation of 180 centered at (4,0) center of rotation = center of shape
- 4) Reflection over the line $x = 0$

4. The vertices of the triangle in the diagram below are $A(7, 9)$, $B(3, 3)$, and $C(11, 3)$.

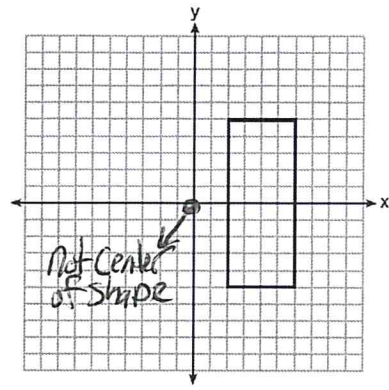
Which transformation will map $\triangle ABC$ onto itself?



- 1) Rotation of 60 centered at (3,3)
- 2) Reflection over the line $y = 5$
- ③ Reflection over the line $x = 7$ ~~IV~~ XV
- 4) Translation 3 units up

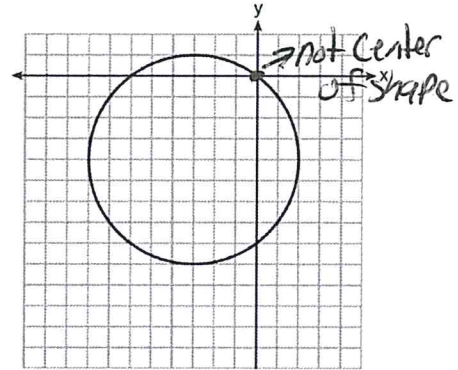
5. As shown in the graph below, the quadrilateral is a rectangle. Which transformation would *not* map the rectangle onto itself?

- 1) a reflection over the x -axis
- 2) a reflection over the line $x = 4$
- 3) a rotation of 180° about the origin
- 4) a rotation of 180° about the point $(4, 0)$



6. Which transformation does not map the circle in the diagram below onto itself?

- 1) Rotation of 90° centered at the origin
- 2) Reflection over the line $x = -3$
- 3) Rotation of 90° centered at $(-3, -4)$
- 4) Reflection over the line $y = -4$



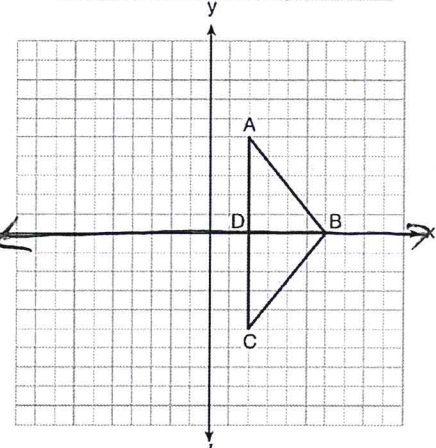
7. In the diagram below, quadrilateral ABCD is graphed.

Which transformation will map ABCD onto itself?

- 1) Reflection over the y -axis
- 2) Rotation of 180° centered at the origin
- 3) Reflection over the line $y = 0$ (the x -axis)
- 4) Rotation of 180° centered at $(4, 0)$

line of reflection = line of symmetry

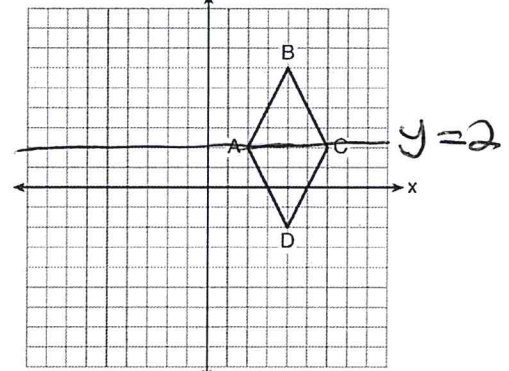
$y = 0$



8. Quadrilateral ABCD is graphed on the set of axes below.

Which transformation maps quadrilateral ABCD onto itself?

- 1) Reflection over the x -axis
- 2) Reflection over the y -axis
- 3) Reflection over $x = 2$
- 4) Reflection over $y = 2$ line of reflection = line of symmetry



9. Triangle ABC is graphed on the set of axes below.

Which transformation maps $\triangle ABC$ onto itself?

- 1) Reflection over the x -axis
- 2) Reflection over $x = 2$
- 3) Reflection over $y = 2$
- 4) Reflection over $x = -2$

