

More
4.1-4.3 Practice

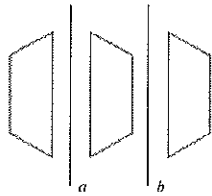
GT GEOMETRY – Bernhard

Name _____ 2nd 3rd 4th

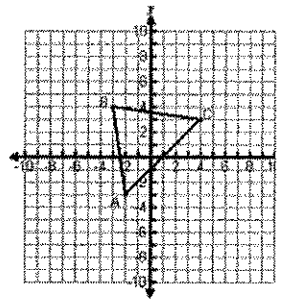
Due at the end of class 11/4

x-axis Reflection	$(x,y) \rightarrow (\quad , \quad)$
y-axis Reflection	$(x,y) \rightarrow (\quad , \quad)$
y=x Reflection	$(x,y) \rightarrow (\quad , \quad)$
y=-x Reflection	$(x,y) \rightarrow (\quad , \quad)$
90 degree rotation	$(x,y) \rightarrow (\quad , \quad)$
180 degree rotation	$(x,y) \rightarrow (\quad , \quad)$
270 degree rotation	$(x,y) \rightarrow (\quad , \quad)$
Identity/360 degree rotation	$(x,y) \rightarrow (\quad , \quad)$

1. In the figure below, $a \parallel b$. Determine whether the third figure is a translation image of the first figure. Write yes or no. Explain your answer.



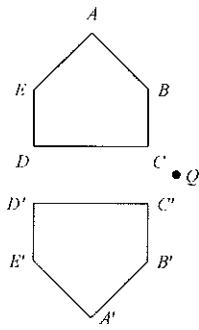
- Yes; it is one reflection after another with respect to the two parallel lines.
 - No; it is a reflection followed by a translation.
 - No; it is a reflection followed by a rotation.
 - No; it is one reflection after another with respect to the two parallel lines.
2. $\triangle ABC$ is reflected across the line $y = x$. What are the coordinates of B' in the new triangle?



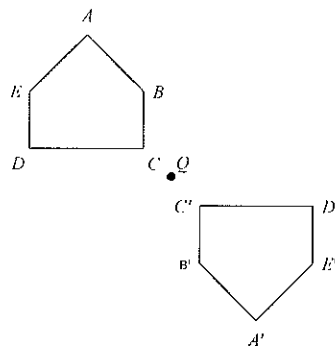
- $(-3, 4)$
- $(4, -3)$
- $(4, 3)$
- $(-2, -3)$

3. Which picture shows a 180° clockwise rotation about point Q ?

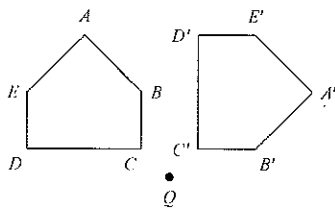
a.



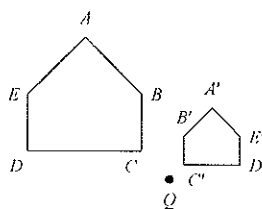
c.



b.

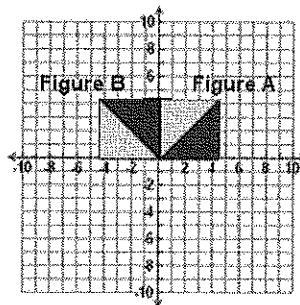


d.



4. Maria is creating a quilt pattern on the grid below.

She started by creating Figure A. What type of transformation did she perform to create Figure B?

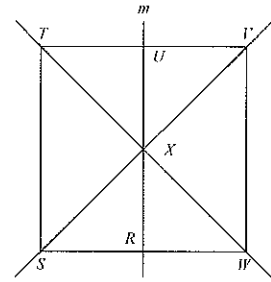


transformation did she

- a. 90° rotation
- b. reflection across the y -axis
- c. 45° rotation
- d. translation 4 units to the left

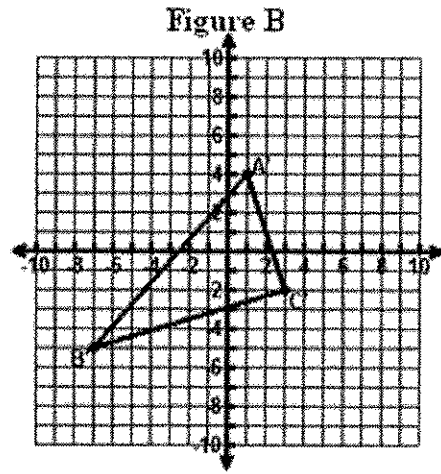
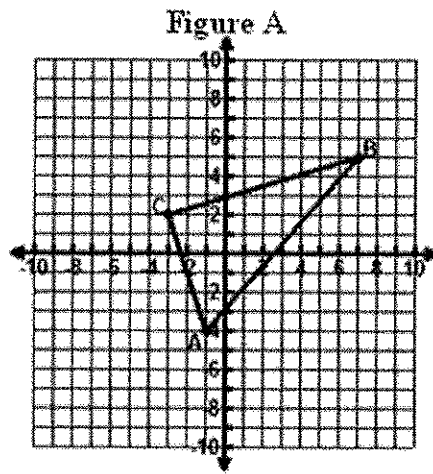
_____ 5. Name the image of S reflected over line m .

- a. T
- b. V
- c. S
- d. W



_____ 6. Figure A shows a triangle on a coordinate grid.

Figure B shows a transformation of that triangle.



Which of the following transformation rules was used to create Figure B?

- a. $(x, y) \rightarrow (x, -y)$
- b. $(x, y) \rightarrow (-x, y)$
- c. $(x, y) \rightarrow (x + 2, y + 8)$
- d. $(x, y) \rightarrow (-x, -y)$

_____ 7. How many lines of symmetry does the figure at the right have?

- a. 0
- b. 8
- c. 2
- d. 4

