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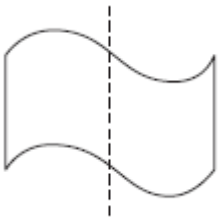
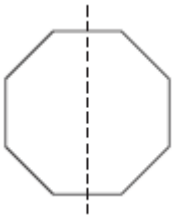
Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Which figure shows a line of symmetry?

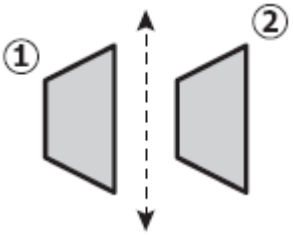
a. 

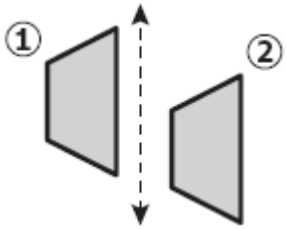
c. 

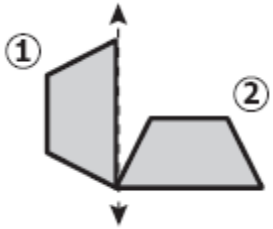
b. 

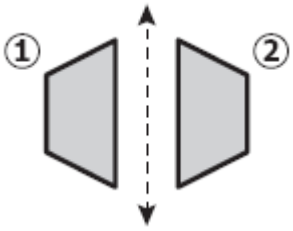
d. 

____ 2. In which picture is Figure 2 a reflection (flip) of Figure 1 across the dashed line?

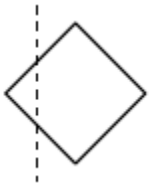
a. 

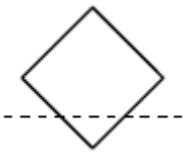
c. 

b. 

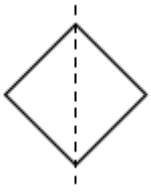
d. 

____ 3. Which figure shows a line of symmetry?

a. 

b. 

c. 

d. 

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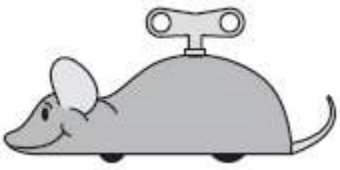
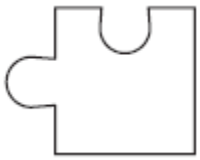
____ 4. Which picture appears to have a line of symmetry?

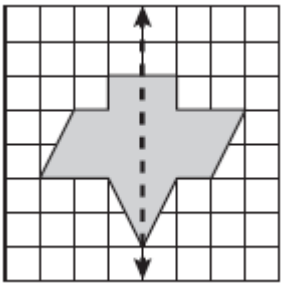
a. 

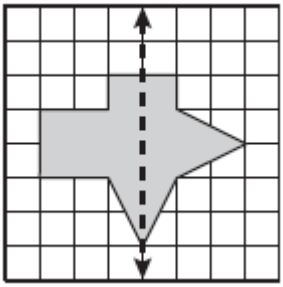
c. 

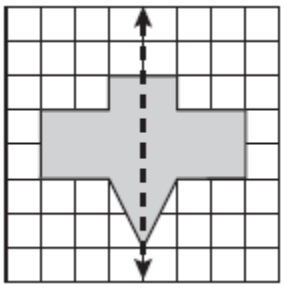
b. 

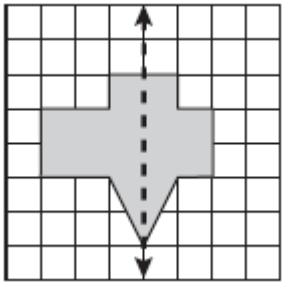
d. 

____ 5. On which of the following does the heavy dotted line appear to be a line of symmetry of the shaded figure?

a. 

c. 

b. 

d. 

____ 6. In which of the figures below is it possible to draw a line of symmetry?

a. 

b. 

c. 

d. 

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____ 7. Look at the figure shown below.

Which of the following would complete the figure so that it has a line of symmetry?

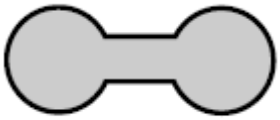
a. 

b. 

c. 

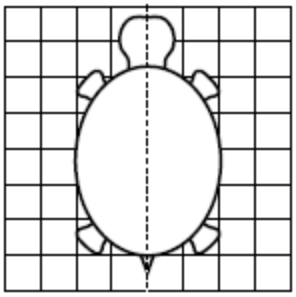
d. 

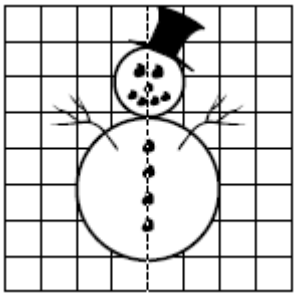
____ 8. How many lines of symmetry does the figure below have?

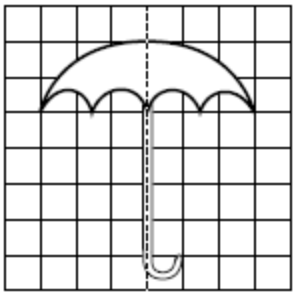


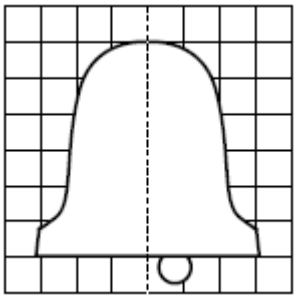
a. 1 b. 2 c. 4 d. 6

____ 9. In which figure is the dotted line a line of symmetry?

a. 

c. 

b. 

d. 

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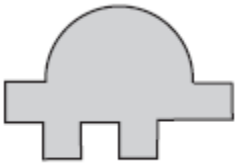
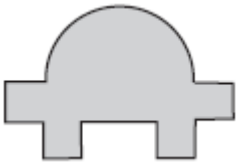
____ 10. Which of the figures below appears to have a line of symmetry?

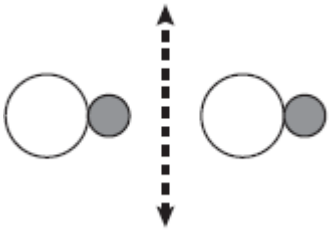
a. 

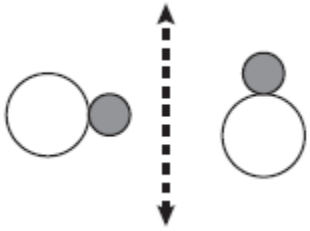
c. 

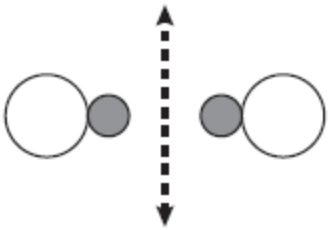
b. 

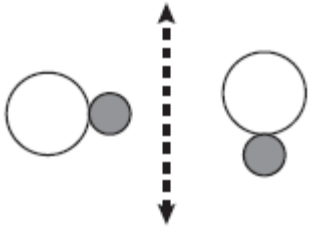
d. 

____ 11. Which shows only a translation (slide) of the figure across the dashed line?

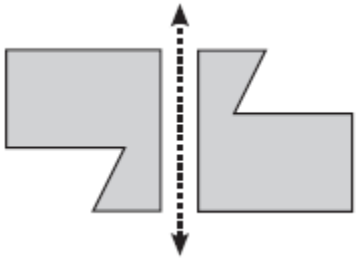
a. 

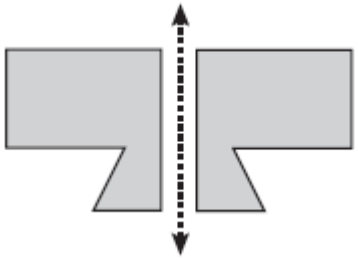
c. 

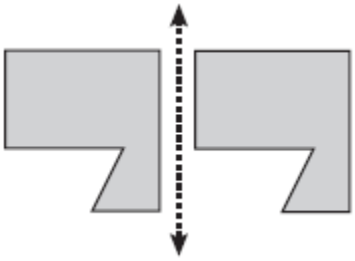
b. 

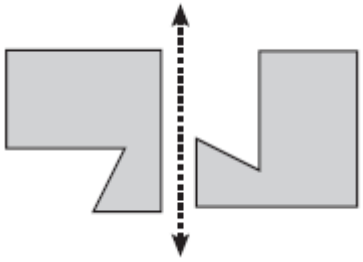
d. 

____ 12. Which of the following shows a reflection (flip) of the shaded shape across the heavy dotted line?

a. 

c. 

b. 

d. 

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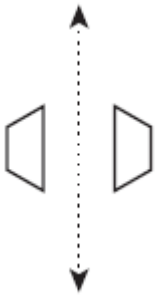
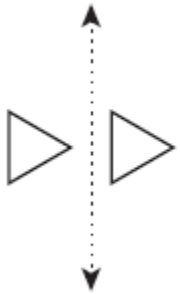
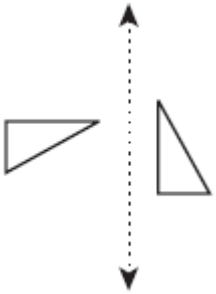
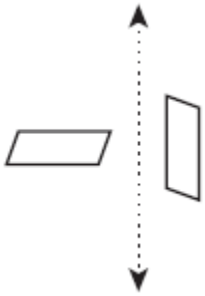
____ 13. Which set of shapes shows a reflection (flip) over the dotted line?

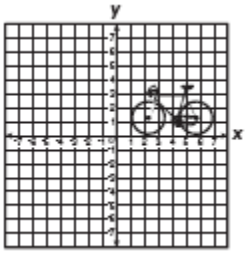
a. 

c. 

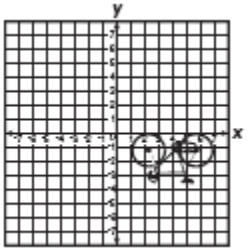
b. 

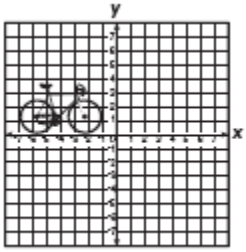
d. 

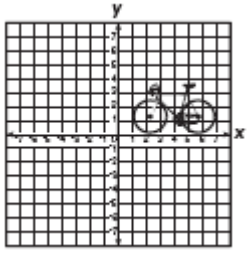
____ 14. Reflect the figure across the y-axis.

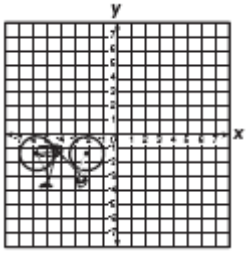


Which is most likely the new figure?

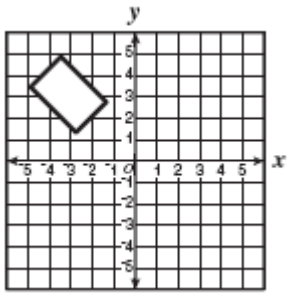
a. 

c. 

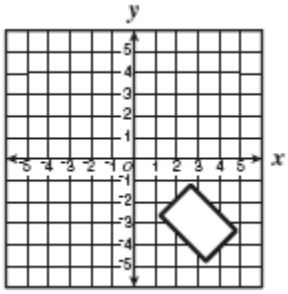
b. 

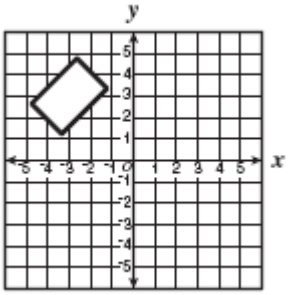
d. 

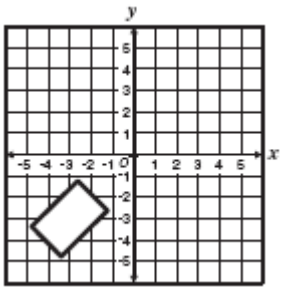
____ 15.

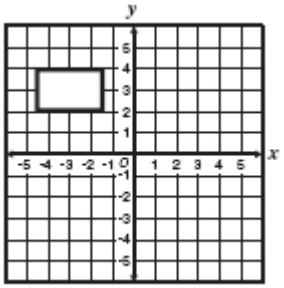


If the figure shown above is rotated 180 clockwise about the origin, which best represents the new figure?

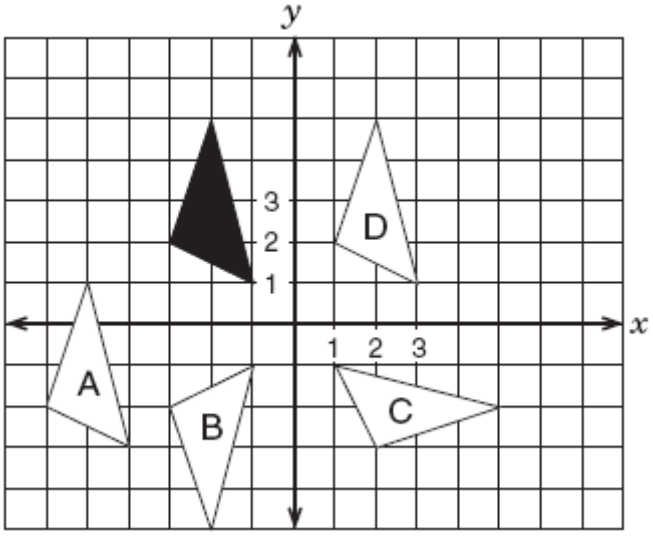
a. 

c. 

b. 

d. 

____ 16. Which white triangle shows where the black triangle would be if reflected across the *x*-axis?



a. A b. B c. C d. D

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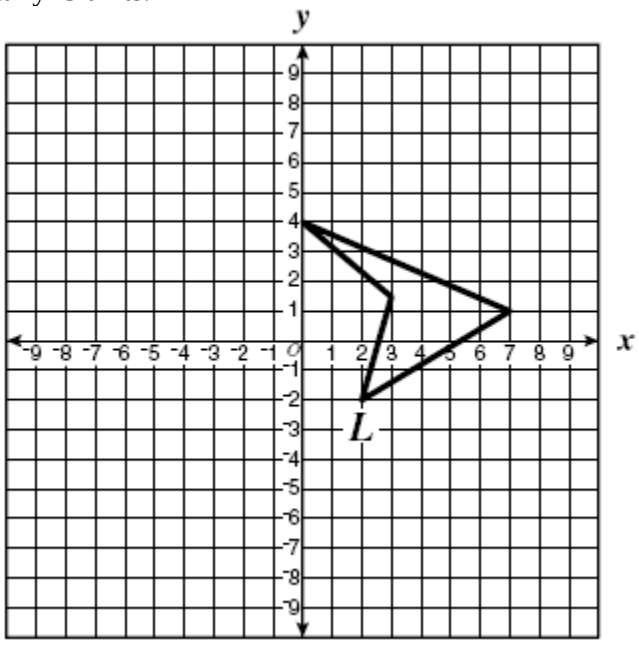
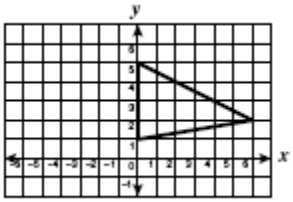
____ 17. Translate the figure horizontally -5 units.



Which best describes the location of the image of vertex *L*?

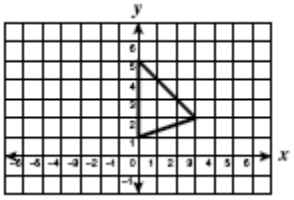
a. (-3, -2) b. (-2, -3) c. (2, -7) d. (-7, 2)

____ 18. The diagram below shows a geometric figure on a coordinate plane.

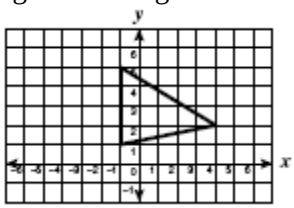


Which of the diagrams below shows a rotation of this geometric figure?

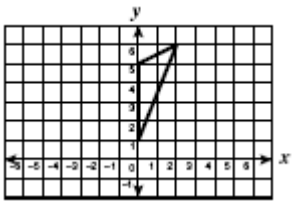
a.



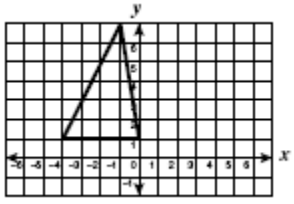
c.



b.



d.



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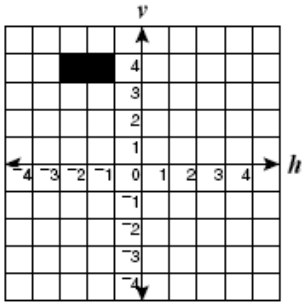
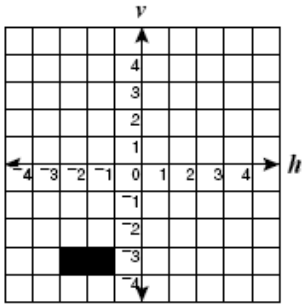
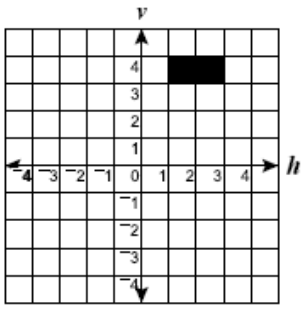
____ 19. The dark rectangle is reflected over line *v*. Which shows this reflection?



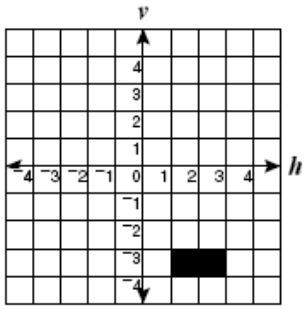
a.



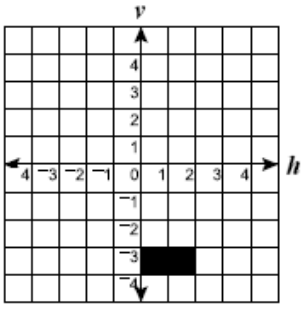
c.



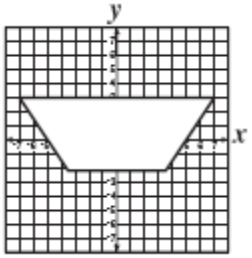
b.



d.

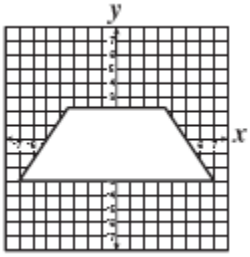


____ 20. Les rotated the figure 90 clockwise about the origin.

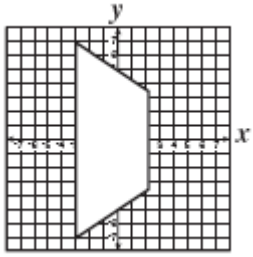


Which is most likely the new image Les made?

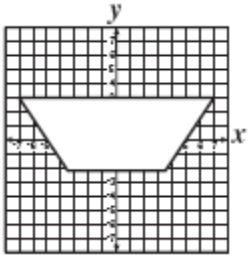
a.



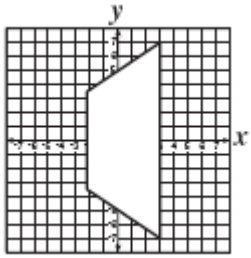
b.



c.



d.



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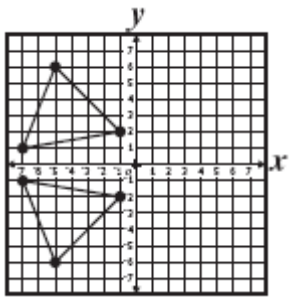
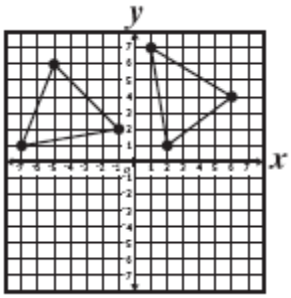
____ 21. Which graph shows only a translation?

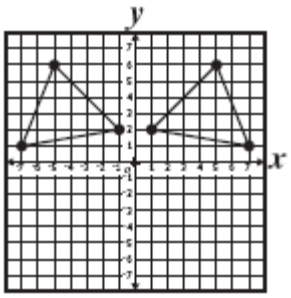
a.



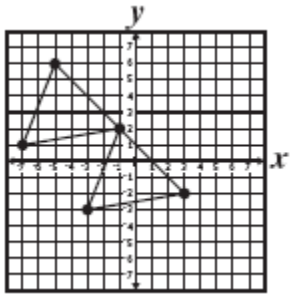
c.



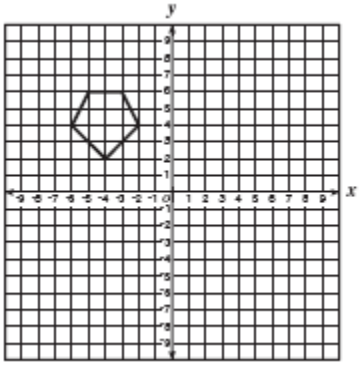
b.



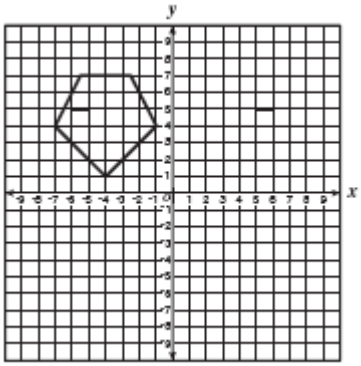
d.



____ 22. A transformation was performed on the following figure.



The result is the figure below.



What type of transformation was performed on the original figure?

a. Dilation b. Reflection c. Rotation d. Translation

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____ 23. In which figure is line L most likely a line of reflection?

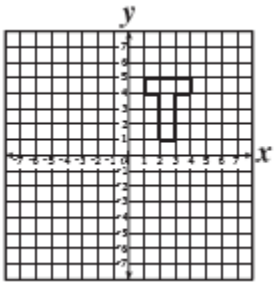
a. 

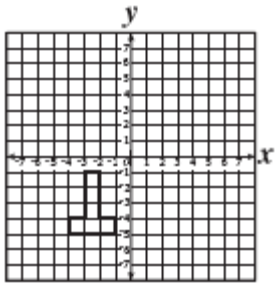
c. 

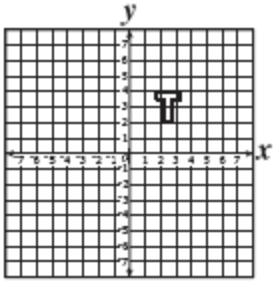
b. 

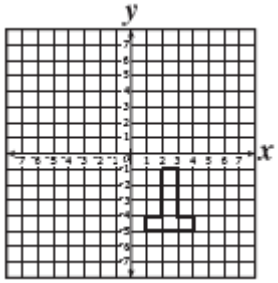
d. 

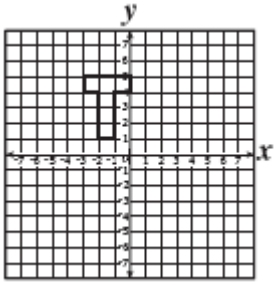
____ 24. Which is a dilation of the figure in the following coordinate grid?



a. 

c. 

b. 

d. 

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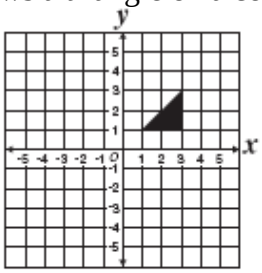
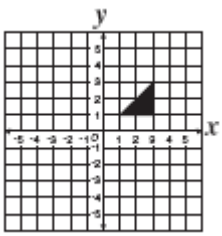
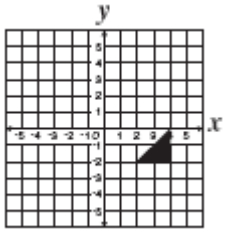
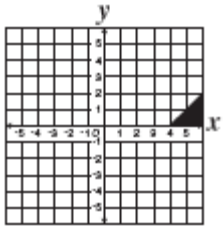
____ 25. The figure shows a triangle on a coordinate plane.

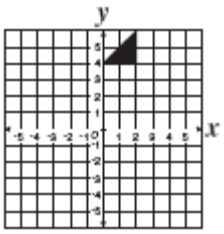


Which of the following shows the triangle translated 3 units to the right and 1 unit down?

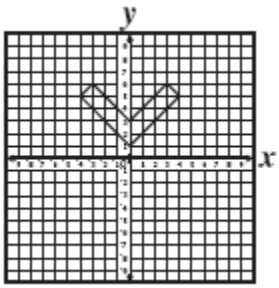
a. 

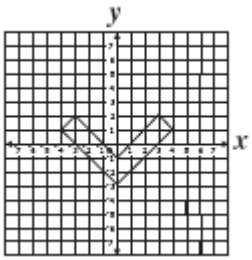
b. 

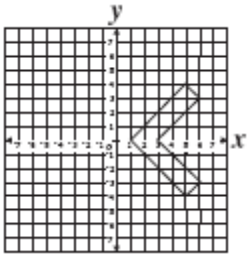
c. 

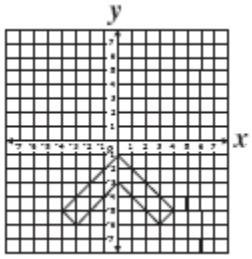
d. 

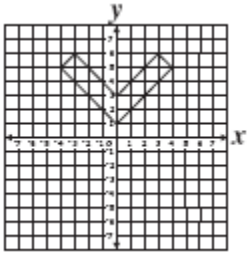
____ 26. Which of the following shows the figure after it has been reflected over the horizontal axis?



a. 

c. 

b. 

d. 

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Ch 4 Student Notes Quiz (SNQ)

	Common reflections in the coordinate plane				
Reflection	*x*-axis	*y*-axis	origin	$y = x$	$y = -x$
Pre-image to image	(a, b) ➔ (a, -b)	(a, b) ➔ (-a, b)	(a, b) ➔ (-a, -b)	(a, b) ➔ (b, a)	(a, b) ➔ (-b, -a)
To find coordinates (Fill in blanks)					

A translation moves all points of a figure the _____ distance in the _____ direction.

A translation can be represented as a composition of _____.

Rotational symmetry – a figure can be rotated less than 360° so that the pre-image and image look the same (_____)

Order – _____ of times figure can be rotated less than 360° in above

Magnitude – angle of rotation (_____ / _____)

Tessellation – a pattern that covers a plan by transforming the same figure or set of figures so that there are no _____ or _____ spaces

Name the three *regular polygons* that tessellate a plane:

1) _____
2) _____
3) _____

Only _____-sided regular polygons have point symmetry.

A regular polygon has lines of symmetry equal to the number of _____ the polygon has.

Dilation – a transformation that may change the _____ of a figure

The scaling factor, k, is used below:

If $|k| > 1$, then the dilation is an _____

If $0 < |k| < 1$, then the dilation is a _____

If $|k| = 1$, then the dilation is a _____ _____