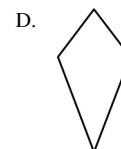
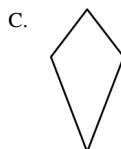
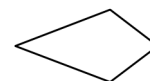
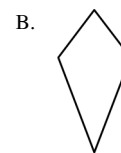
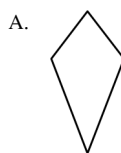


1. Which diagram shows the letter F transformed by only a slide?

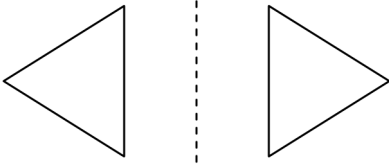


2. Which of the following best represents only a translation (slide) up?

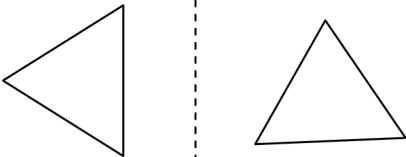


3. Which of the following best shows a reflection (flip) of the shaded shape across the dashed line?

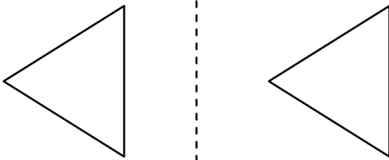
A.



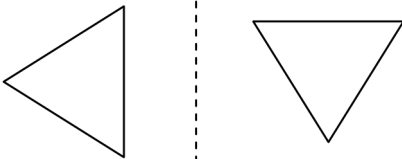
B.



C.

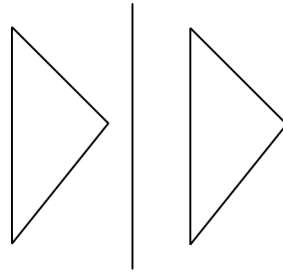


D.

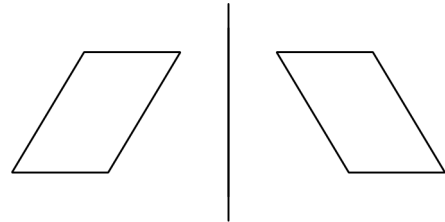


4. Which pair of figures below shows a reflection across the line?

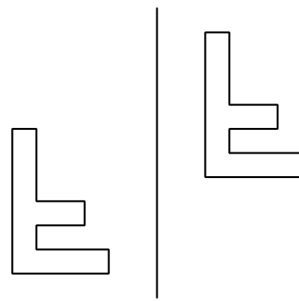
A.



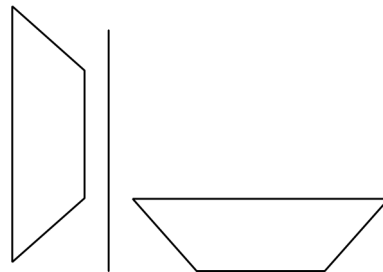
B.



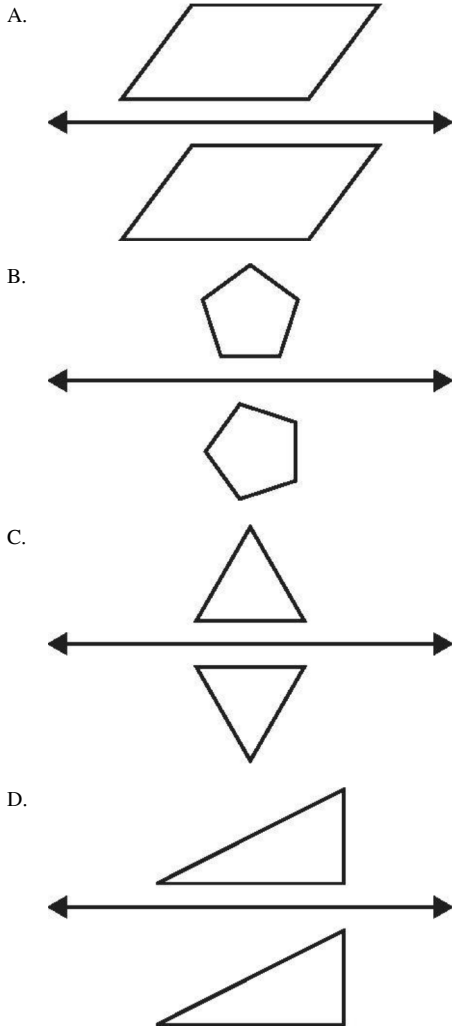
C.



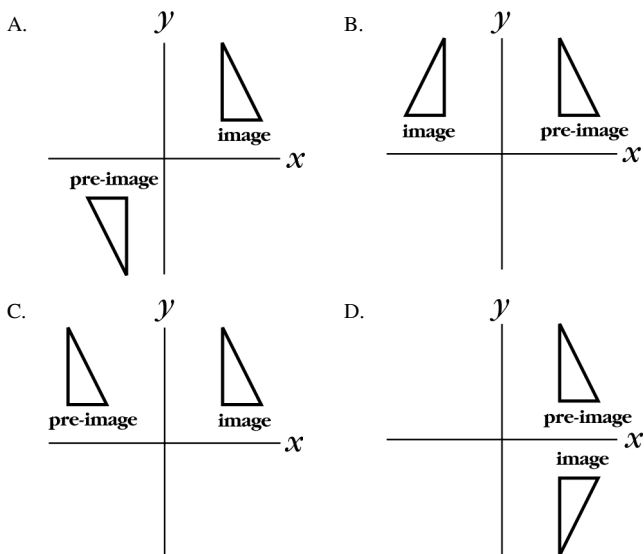
D.



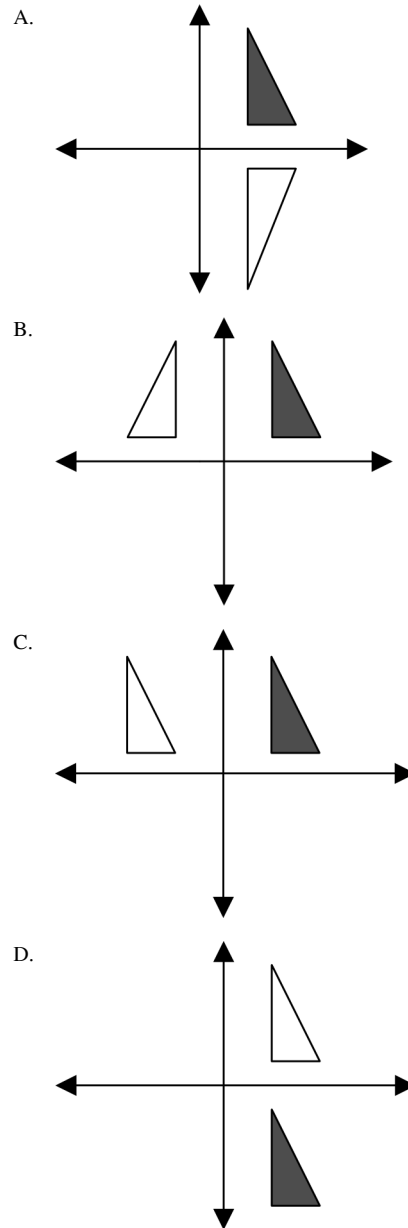
5. Which of the following shapes is flipped across the line?



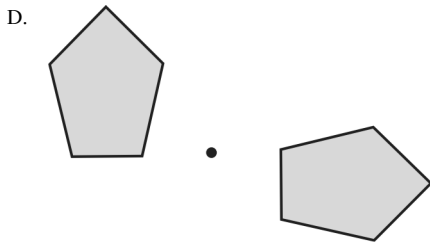
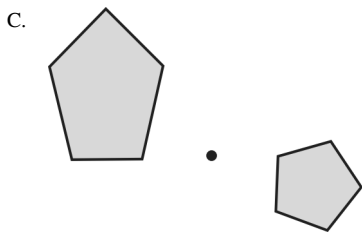
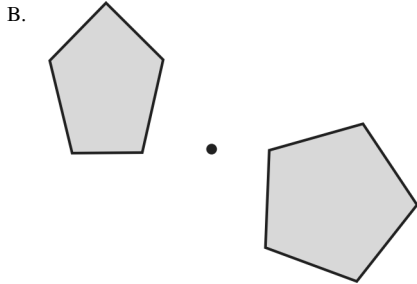
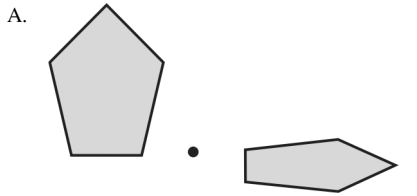
6. Which diagram below best shows a *rotation* of the pre-image to the image?



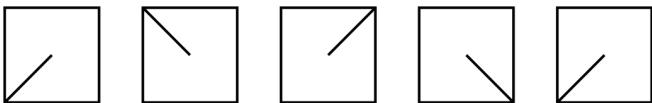
7. Which of the diagrams below best shows a translation of (-4) units of the dark triangle?



8. Which shows a transformation of the pentagon?



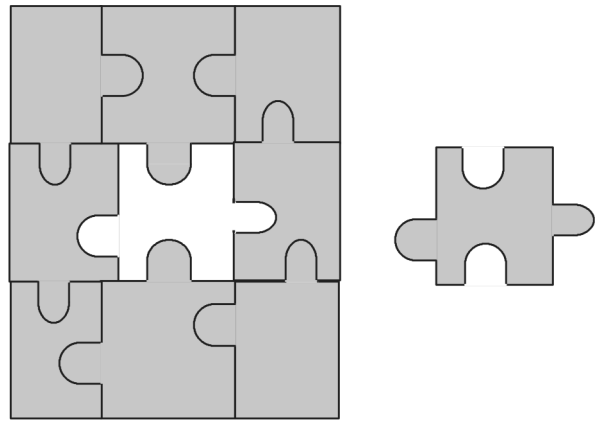
9. The diagram below shows a floor tile that is moved in different positions.



Which of these describes the movement of the tile?

- A. flipped vertically
- B. flipped horizontally
- C. turned clockwise 90°
- D. turned counterclockwise 90°

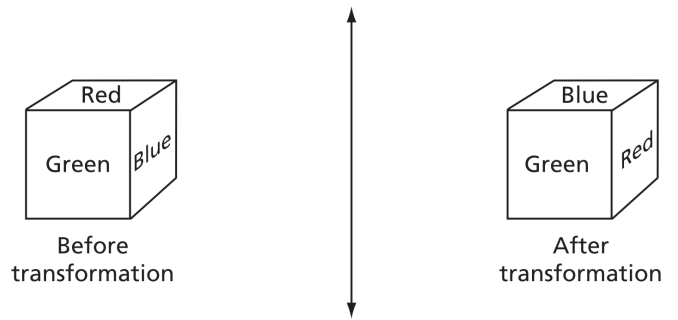
10. Use the figure below to answer the following question.



Tyler needs to place the last piece into the puzzle. What transformation does Tyler need to do so the piece will fit?

- A. Scale
- B. Reflection
- C. Rotation
- D. Translation

11. Use the figures below to answer the following question.



The colors on the opposite sides of the cube are the same. A single transformation of the cube is shown. Which of the following describes the transformation?

- A. Translation
- B. Clockwise rotation
- C. Reflection
- D. Dilation

12. Inspector Ivan Aklue stumbled across a mysterious machine. When he pressed a button on the machine, he was suddenly turned upside down. When he pressed the button again, the machine turned him right-side up again, as shown.



Which term best describes what the mysterious machine did to the Inspector?

- A. translated
- B. rotated
- C. transference
- D. slid

13. Kayla designed this “MC” logo for the Math Club’s T-shirts:



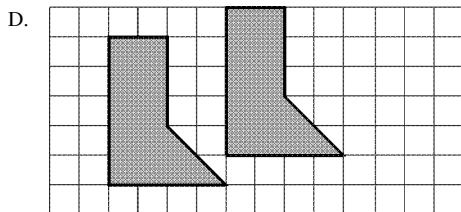
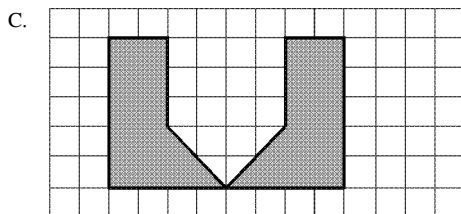
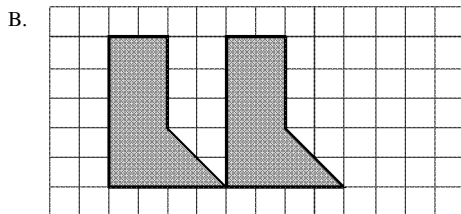
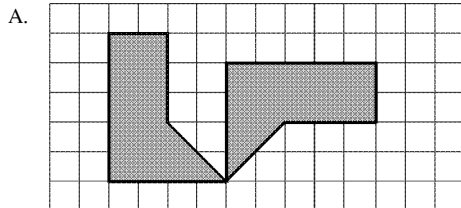
Kayla had drawn the logo on a transparency sheet to show it to her class, but the image that the overhead projector showed on the screen was:



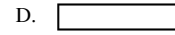
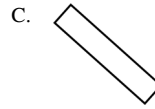
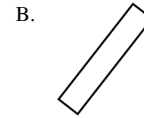
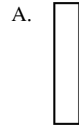
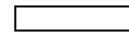
Which transformation occurred in the logo’s image?

- A. reflection B. translation C. rotation D. transference

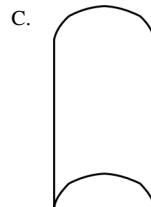
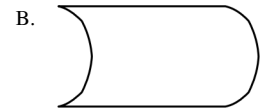
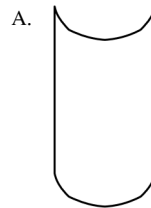
14. Which of the following shows a rotation (turn)?



15. Which change shows a “slide?” Circle your choice.



16. Which of the following would show a “flip” of this shape?



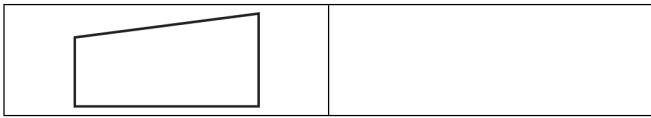
17. Ruby is making a calendar.



Which shows a slide of the word “March” over the line?



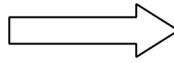
18. Nancy places a game piece on one space on a board as shown below.



Nancy slides the game piece to the next space on the board. Which shows Nancy's game piece after the slide?

- A. B. C. D.

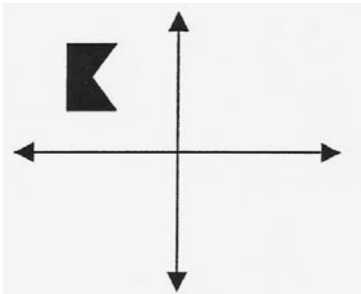
19. Tara will rotate (turn) the figure below a half turn.



Which of the following shows how the figure will look after half a turn?

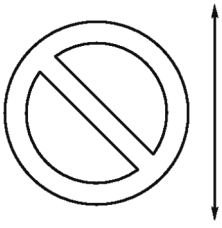
- A. B. C. D.

20. Which of the following represents a translation of the figure?



- A. B. C. D.

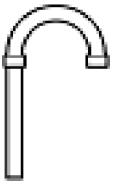
21. Ana noticed the following sign on the wall.



Which shows the sign after it has been flipped across the line?

- A.
- B.
- C.
- D.

22. Larry used pieces of pipe to build this shape.



Which picture shows Larry's shape turned 90° *counterclockwise*?

- A.
- B.
- C.
- D.

23. Figure 1 has been transformed into Image 1 as shown below.

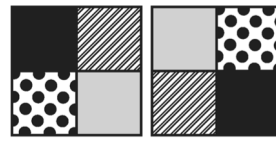


Figure 1 Image 1

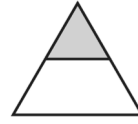


Figure 2

If Figure 2 is transformed in the same manner, how should Image 2 appear?

- A.
- B.
- C.
- D.

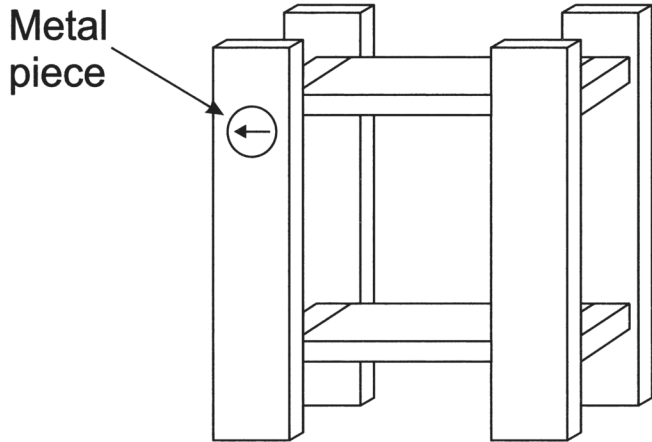
24. The following figure is to be rotated 90° clockwise.



What will the figure look like after the rotation?

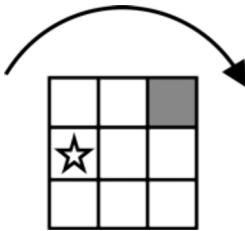
- A.
- B.
- C.
- D.

25. Kayla is assembling a bookcase. She has put a metal piece into a hole in a shelf as shown below. The instructions say to rotate the piece 90° *counterclockwise*. How will the piece look *after* the rotation?



- A. B. C. D.

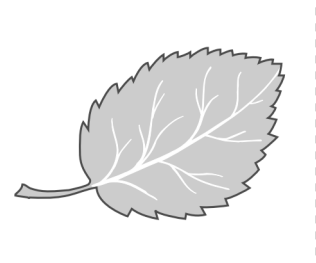
26.



Which is the result of rotating this figure 90° ?

- A. B. C. D.

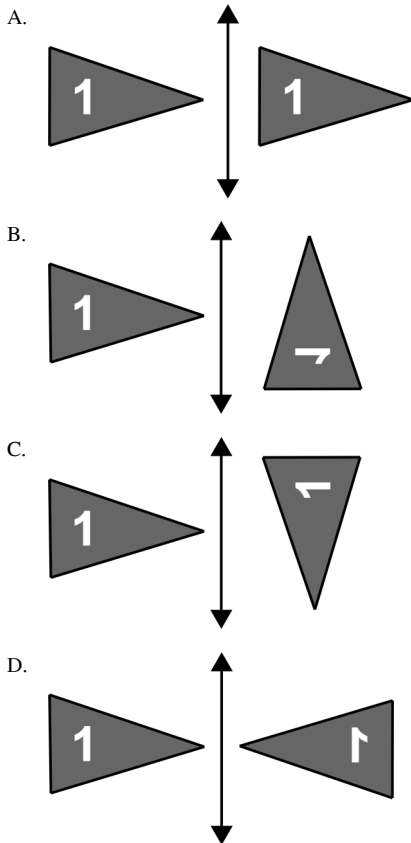
27. Look at the picture of the leaf below.



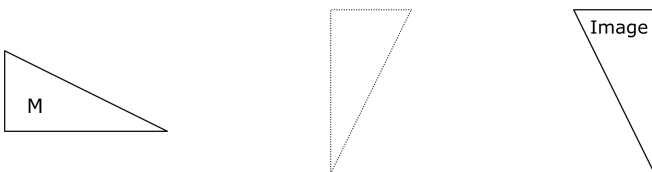
Which of these shows this leaf flipped over the line?

- A. B. C. D.

28. Which figure shows the flag on the left after it has been flipped across the line and then rotated 90° ?



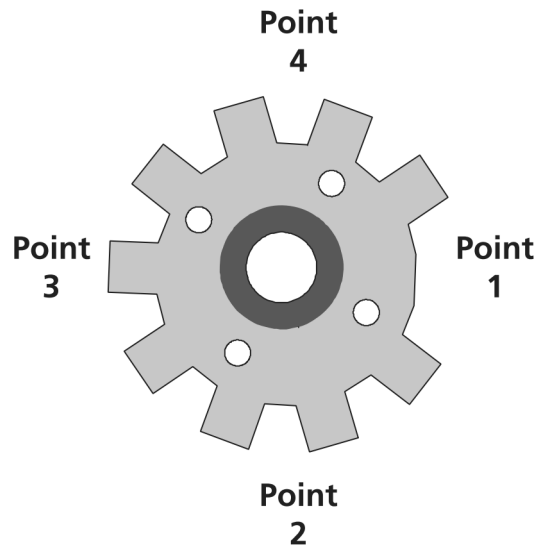
29. Figure M was transformed two times. The result is the image shown.



Which statement *best* describes the transformations of figure M?

- A. Figure M was rotated 90° clockwise, then translated right.
- B. Figure M was rotated 90° clockwise, then reflected across a vertical line.
- C. Figure M was rotated 90° clockwise, then reflected across a horizontal line.
- D. Figure M was rotated 90° counterclockwise, then reflected across a vertical line.

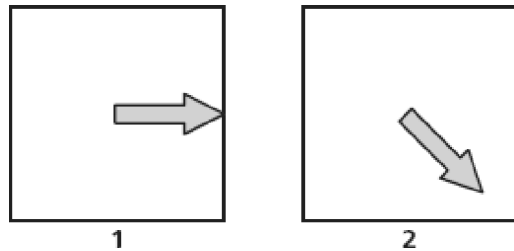
30. Use the figure below to answer the following question.



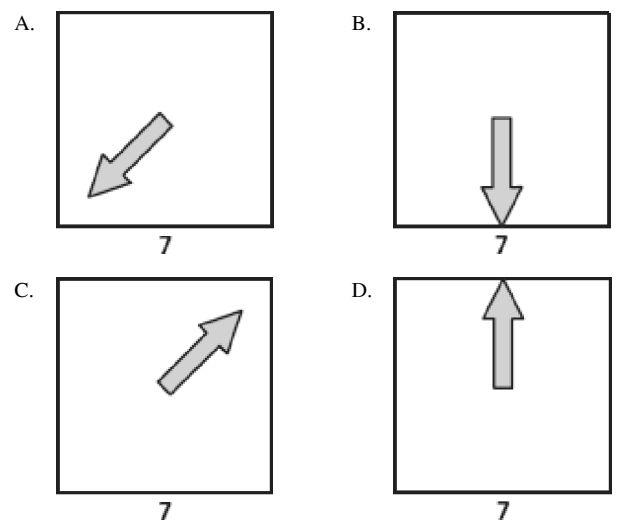
The space in the gear above is facing Point 1. The gear rotates clockwise $6\frac{3}{4}$ times and then stops. At which point will the space be facing when the gear stops?

- A. Point 1
- B. Point 2
- C. Point 3
- D. Point 4

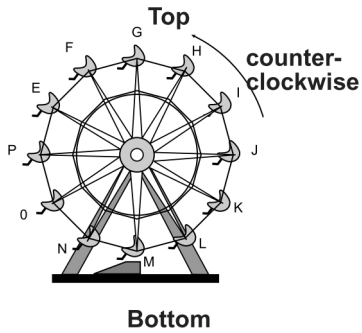
31. The first two terms in a sequence are shown below. Each term after the first is found by rotating the arrow 45° clockwise.



What will be the 7th term in the sequence?

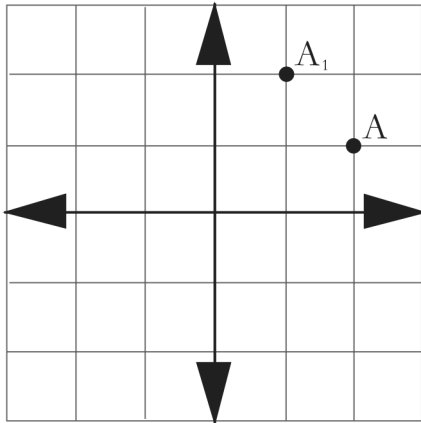


32. The spokes on the Ferris wheel are evenly spaced. After $2\frac{1}{4}$ complete turns how many degrees will car M have traveled?



- A. 90° B. 225° C. 450° D. 810°

33. Use the illustration below to answer the following question.



As a result of a transformation, the image of the point $A(2, 1)$ is $A_1(1, 2)$. This transformation is described as a reflection across the

- A. line $y = x$. B. line $y = -x$.
C. x -axis. D. y -axis.

34. The coordinates of four points are given below.

$$A(3, 3) \quad A'(-3, 3) \quad B(4, -4) \quad B'(4, 4)$$

Which of the following transformations maps \overline{AB} to $\overline{A'B'}$?

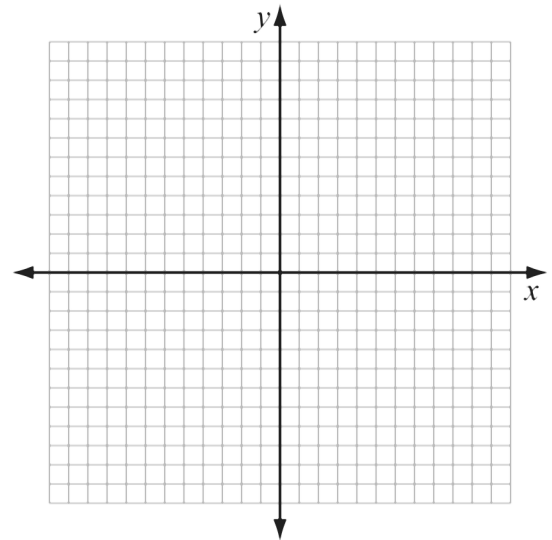
- A. reflection across the x -axis
B. reflection across the y -axis
C. 90° counterclockwise rotation about the origin
D. 180° counterclockwise rotation about the origin

35. Point P has coordinates $(2, 5)$. After a translation, the coordinates of its image P' are $(4, -1)$.

Which of the following best describes the translation?

- A. right 1 unit, down 4 units B. right 2 units, down 4 units
C. right 2 units, down 6 units D. right 4 units, down 1 unit

36. You may use this blank grid to help you answer this question.



This list shows the coordinates of $\triangle RST$ and its image $\triangle R'S'T'$.

- $R(-4, 6), S(-4, 9), T(-9, 6)$
- $R'(2, 6), S'(2, 9), T'(7, 6)$

Which transformation maps $\triangle RST$ to $\triangle R'S'T'$?

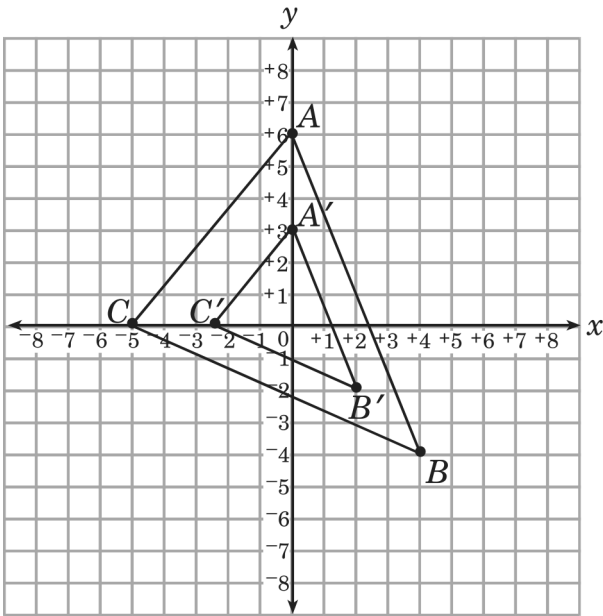
- A. a reflection over the line $x = -1$
B. a reflection over the line $y = -1$
C. a 90° clockwise rotation about the origin
D. a 180° clockwise rotation about the origin

37. Miss Alvarado asked her students to create reflections of various shapes.

Which description explains the motion that the students should perform?

- A. Rotate the shapes around a point
B. Slide the shapes along a straight line
C. Turn the shapes around a point
D. Flip the shapes over a line

38. In the figure shown below, $\triangle A'B'C'$ is the image produced by applying a dilation to $\triangle ABC$.



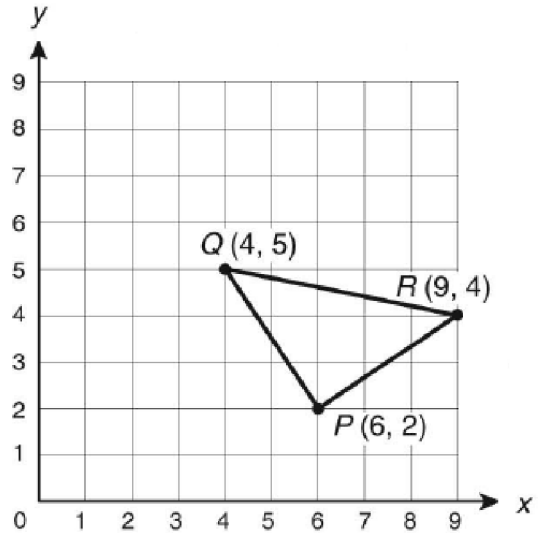
What is the scale factor for this dilation?

- A. $\frac{1}{3}$ B. $\frac{2}{5}$ C. $\frac{1}{2}$ D. $\frac{5}{2}$

39. Which explanation correctly describes the process for making a reflection of rectangle $KMPQ$?

- A. Flip rectangle $KMPQ$ across the line of reflection
 B. Turn rectangle $KMPQ$ about point K .
 C. Slide rectangle $KMPQ$ across the line of reflection
 D. Dilate rectangle $KMPQ$ about point K .

40. Triangle PQR is shown.

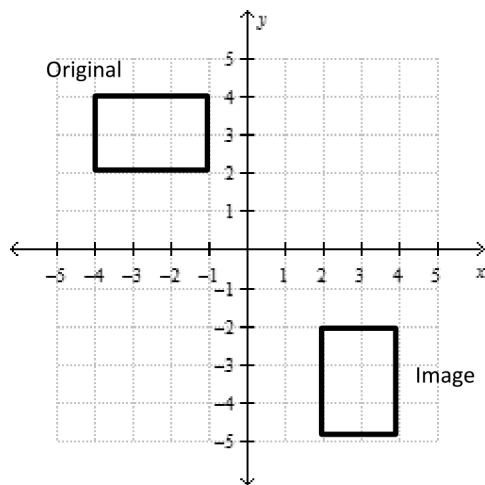


What are the coordinates of P' when $\triangle PQR$ is dilated by a scale factor of 3 using the origin as the center?

- A. (6, 18) B. $(3, \frac{2}{3})$ C. $(\frac{2}{3}, 3)$ D. (18, 6)

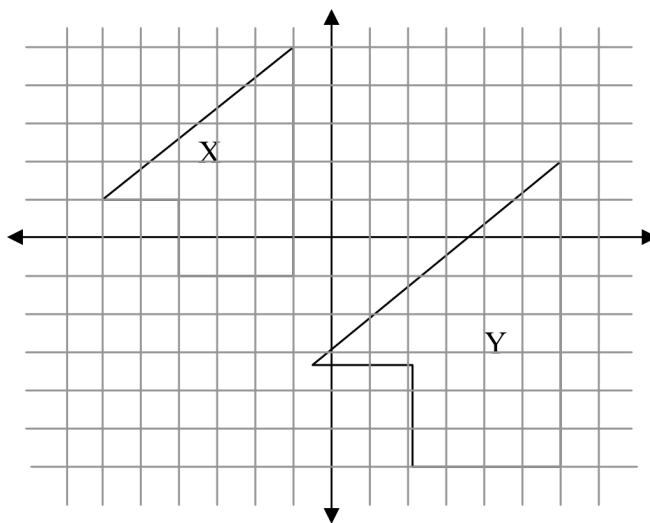
41. Which of the following statements correctly explains how to perform a rotation, then a reflection of a figure on the coordinate plane?
- A. Turn the figure clockwise by the specified number of degrees and then flip the figure over the specified line of reflection or symmetry.
 B. Slide the figure the specified number of units and then flip the figure over the specified line of reflection or symmetry.
 C. Turn the figure clockwise by the specified number of degrees and then slide the figure the specified number of units.
 D. Flip the figure over the specified line of reflection or symmetry and then turn the figure clockwise by the specified number of degrees.

42. Select all transformations from the list below that could transform the original to the image in the coordinate grid below?



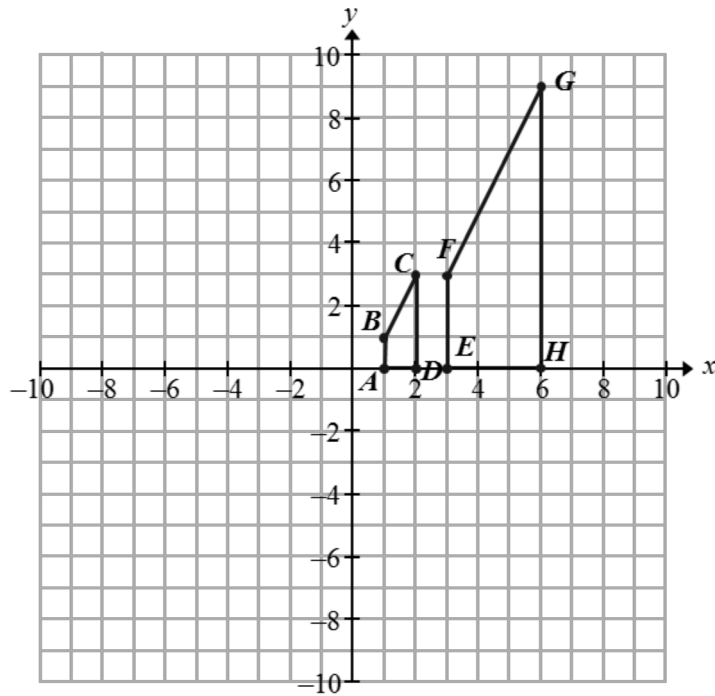
- A. Rotate 180° about the origin.
- B. Rotate 90° clockwise about the origin, translate down 6 units
- C. Rotate 90° counterclockwise about the origin, translate down 6 units
- D. Rotate 90° counterclockwise about the origin, translate down 1 unit and right 6 units
- E. Rotate 90° counterclockwise about the origin, translate down 6 units and left 1 unit
- F. Rotate 90° counterclockwise about the origin, translate down 1 unit, reflect over the y -axis
- G. Rotate 90° clockwise about the origin, translate down 1 unit, reflect over the y -axis

43. In order for Figure Y to be similar to Figure X, the scale factor would be



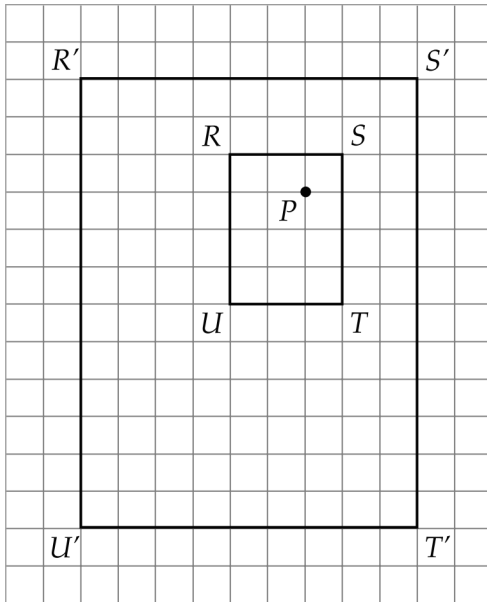
- A. $\frac{1}{2}$
- B. $\frac{2}{3}$
- C. 1
- D. $\frac{4}{3}$

44. Quadrilateral $ABCD$, shown in the coordinate plane below, is dilated with the center at the origin to form quadrilateral $EFGH$. What is the scale factor of the dilation?



- A. $\frac{1}{4}$ B. $\frac{1}{3}$ C. 3 D. 4

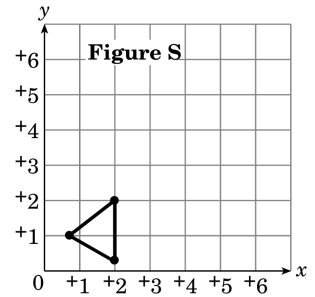
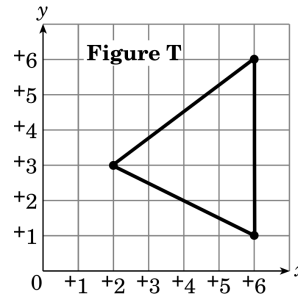
45. A dilation with center P maps the rectangle $RSTU$ to the rectangle $R'S'T'U'$ as shown below.



What is the scale factor of this dilation?

- A. 2 B. 3 C. 4 D. 9

46. Figure S is the result of a dilation of Figure T .



What is the scale factor of the dilation?

- A. $\frac{1}{3}$ B. $\frac{1}{2}$ C. 2 D. 3

Transformations (unit 1) EOC Review XXXX-XX-XX

- | | | | |
|---------|---|---------|---|
| 1. | | 21. | |
| Answer: | D | Answer: | B |
| 2. | | 22. | |
| Answer: | A | Answer: | A |
| 3. | | 23. | |
| Answer: | A | Answer: | C |
| 4. | | 24. | |
| Answer: | B | Answer: | D |
| 5. | | 25. | |
| Answer: | C | Answer: | C |
| 6. | | 26. | |
| Answer: | A | Answer: | A |
| 7. | | 27. | |
| Answer: | C | Answer: | A |
| 8. | | 28. | |
| Answer: | D | Answer: | B |
| 9. | | 29. | |
| Answer: | C | Answer: | B |
| 10. | | 30. | |
| Answer: | D | Answer: | D |
| 11. | | 31. | |
| Answer: | B | Answer: | D |
| 12. | | 32. | |
| Answer: | B | Answer: | D |
| 13. | | 33. | |
| Answer: | A | Answer: | A |
| 14. | | 34. | |
| Answer: | A | Answer: | C |
| 15. | | 35. | |
| Answer: | D | Answer: | C |
| 16. | | 36. | |
| Answer: | B | Answer: | A |
| 17. | | 37. | |
| Answer: | B | Answer: | D |
| 18. | | 38. | |
| Answer: | A | Answer: | C |
| 19. | | 39. | |
| Answer: | C | Answer: | A |
| 20. | | 40. | |
| Answer: | B | Answer: | D |

41.
Answer: A
42.
Answer: B, D, F
43.
Answer: D
44.
Answer: C
45.
Answer:
46.
Answer: