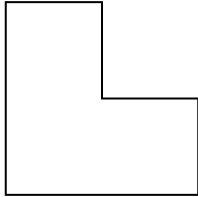


Unit 8 test

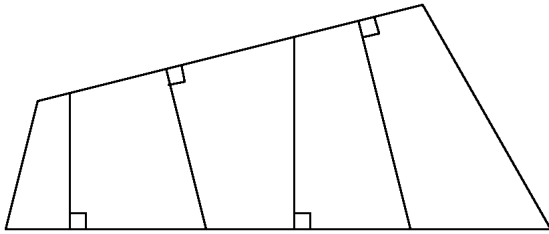
Multiple Choice

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

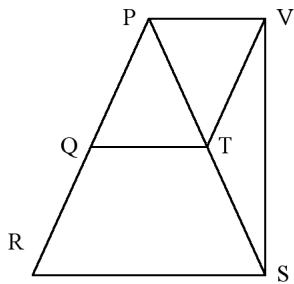
1. How many pairs of parallel line segments are in this diagram?



- a. 5 b. 3 c. 2 d. 6
2. How many pairs of parallel line segments are in this diagram?



- a. 4 b. 3 c. 1 d. 2
3. Which statements are true for the line segments in this diagram?



- i) Line segment PV is parallel to line segment QT.
 - ii) Line segment PQ is parallel to line segment VS.
 - iii) Line segment QR is parallel to line segment VT.
 - iv) Line segment QT is parallel to line segment RS.
- a. i, ii, and iv b. i, ii, and iii c. i, iii, and iv d. all of these

4. Which diagram shows perpendicular line segments?

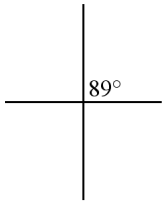


Figure A

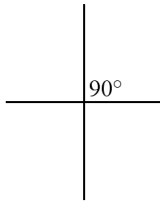


Figure B

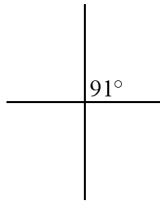


Figure C

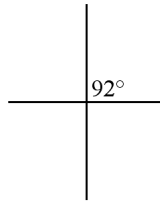


Figure D

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

5. Which diagrams do not have perpendicular line segments?

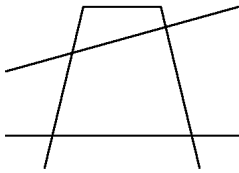


Figure A

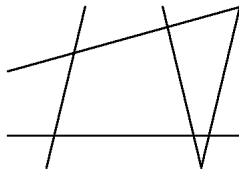


Figure B

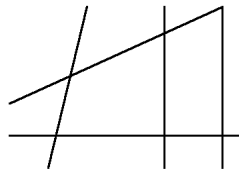


Figure C

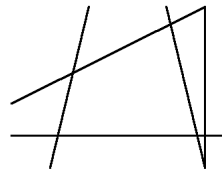


Figure D

- a. Figures A and B c. Figures B, C, and D
b. Figures A, B, and C d. all of these

6. Which diagrams show pairs of perpendicular line segments?

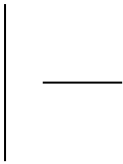


Figure A

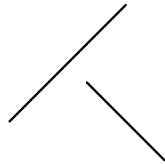


Figure B

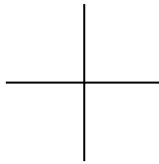


Figure C

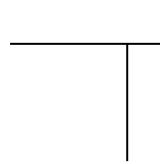
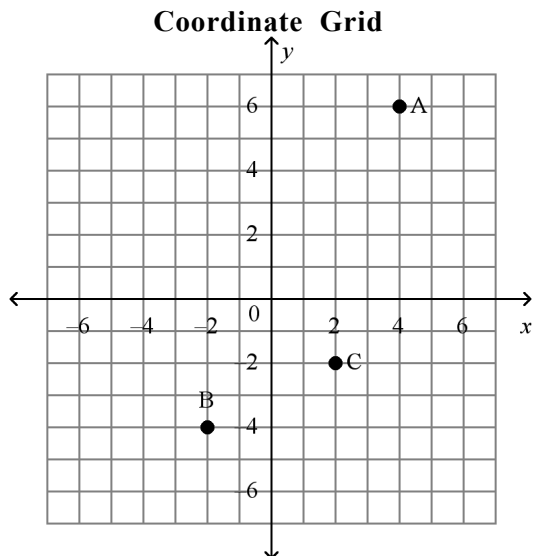
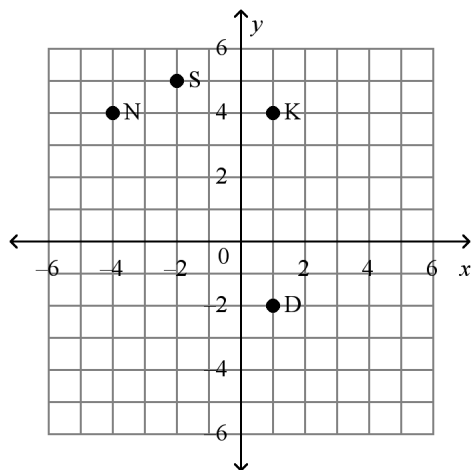


Figure D

- a. Figures A, C, and D c. Figures C and D
b. Figures A and B d. all of these

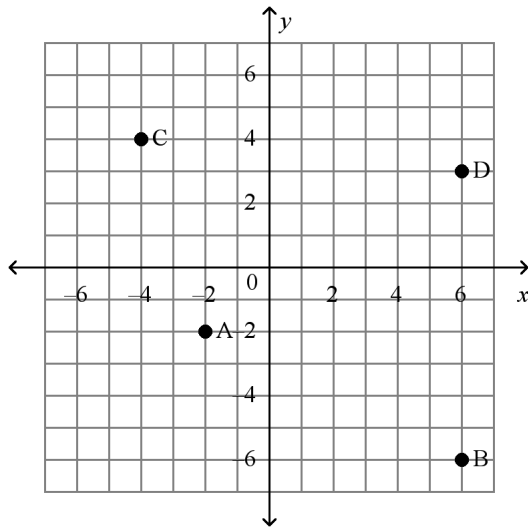


7. Use the Coordinate Grid diagram. In which quadrant is point B?
Write the coordinates of point B.
- a. quadrant 2; $(-2, -4)$ c. quadrant 4; $(-4, -2)$
b. quadrant 3; $(2, 4)$ d. quadrant 3; $(-2, -4)$
8. Name the point with coordinates $(1, -2)$ on this grid.



- a. S b. D c. K d. N

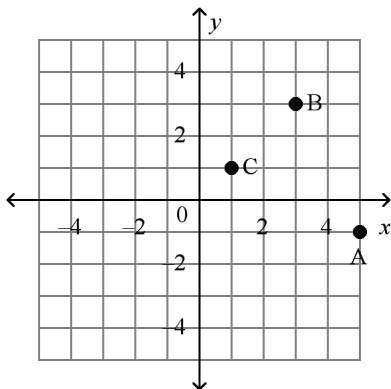
9. Write the coordinates of point D on this grid.



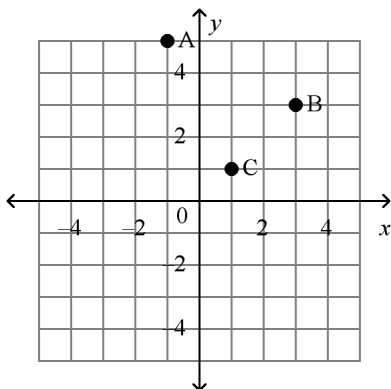
- a. $(-2, -2)$ b. $(-4, 4)$ c. $(6, 3)$ d. $(6, -6)$

10. Plot $A(-1, 5)$, $B(3, 3)$, and $C(1, 1)$ on the same grid.

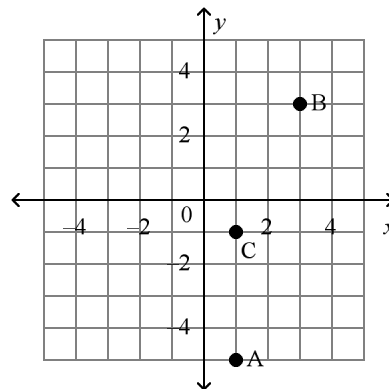
a.



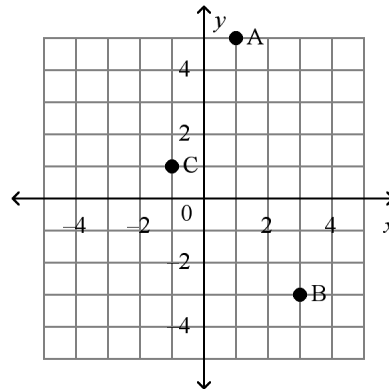
b.



c.



d.



11. In which quadrant or on which axis is the point $(-1, 5)$?

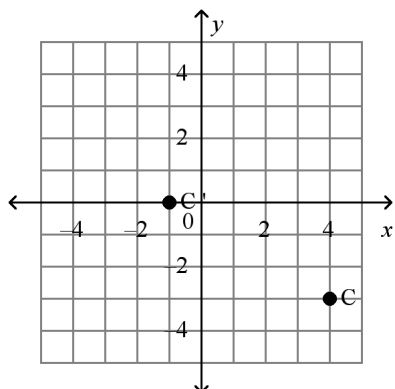
- a. Quadrant 4 b. Quadrant 1 c. Quadrant 2 d. Horizontal axis

Name: _____

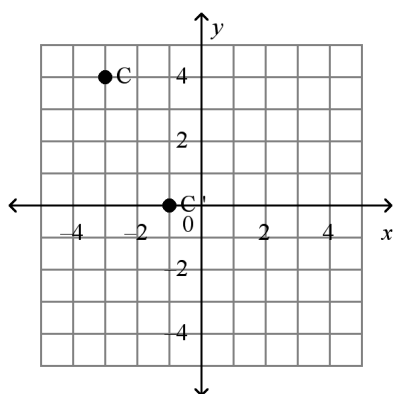
ID: A

12. Plot point $C(-3, 4)$ on the grid. Translate the point 2 units right and 4 units down. Label the image point C' .

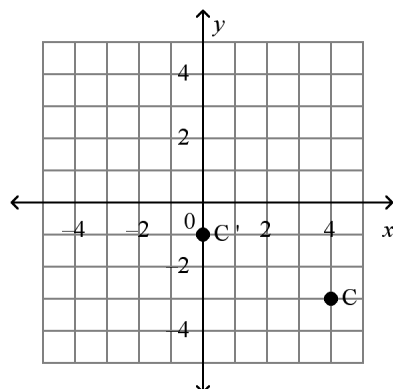
a.



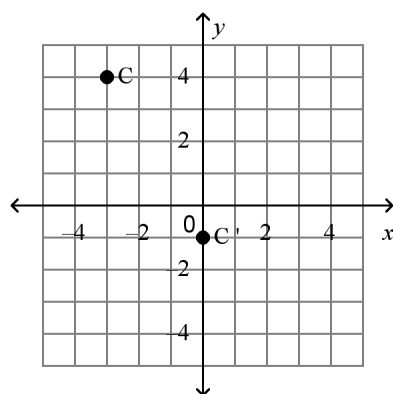
b.



c.



d.



13. Translate point $P(-5, 4)$ 2 units left and 2 units up.

Write the coordinates of the translation image. Draw a coordinate grid to help

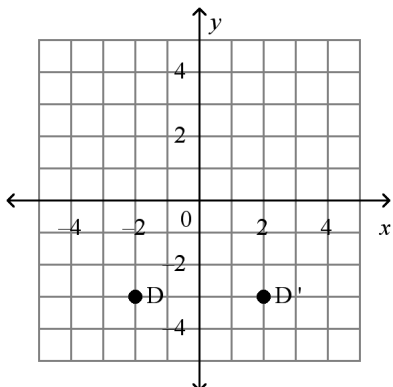
- a. $(6, -7)$ b. $(-7, 6)$ c. $(2, -3)$ d. $(-3, 2)$

Name: _____

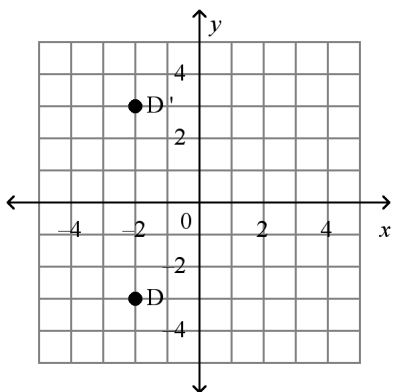
ID: A

14. Plot point $D(-2, -3)$ on the grid. Reflect the point in the y -axis. Label the image point D' .

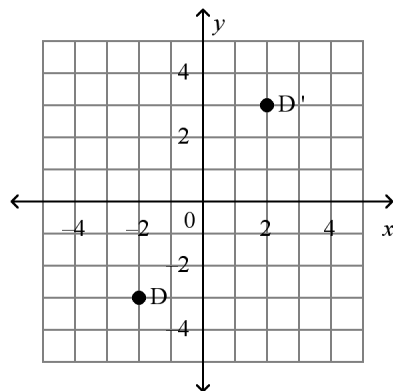
a.



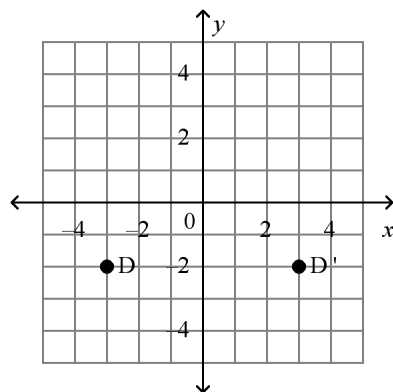
b.



c.



d.

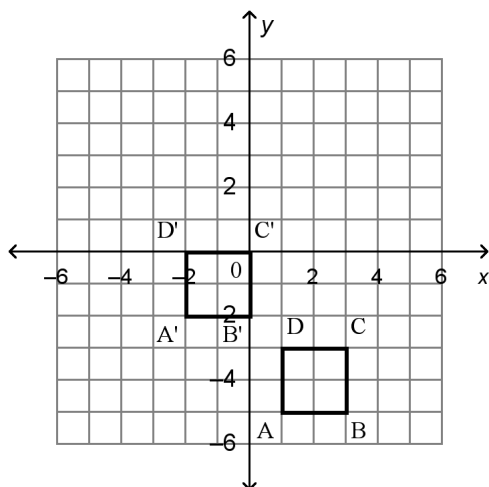


15. Rectangle ABCD has vertices $A(-2, -2)$, $B(-2, 0)$, $C(0, -2)$, and $D(0, 0)$.

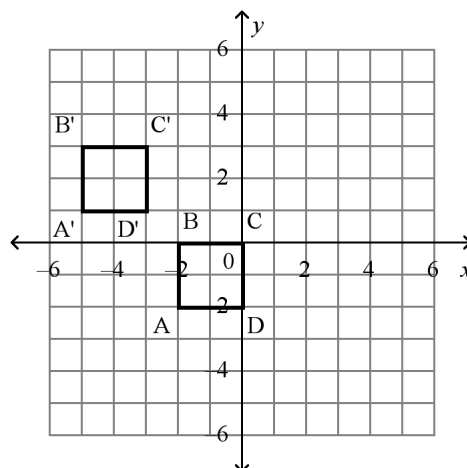
The rectangle is translated 3 units left and 3 units up.

Draw and label rectangle ABCD and its translation image rectangle $A'B'C'D'$.

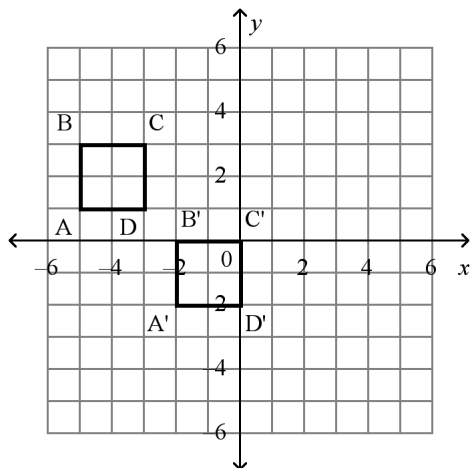
a.



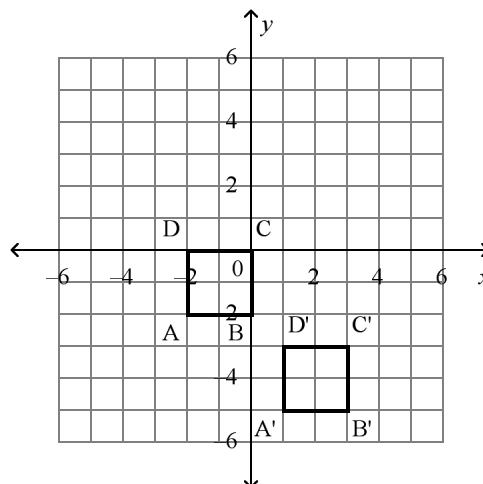
c.



b.



d.



Name: _____

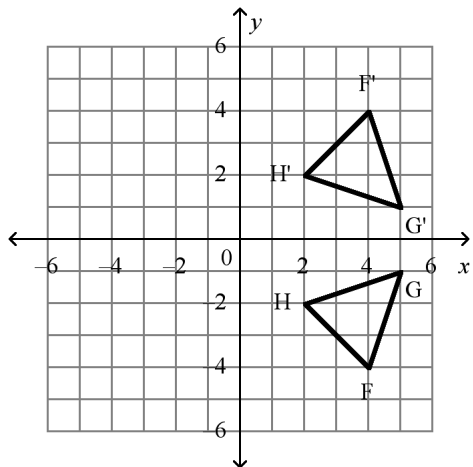
ID: A

16. $\triangle FGH$ has vertices $F(4, -4)$, $G(5, -1)$, and $H(2, -2)$.

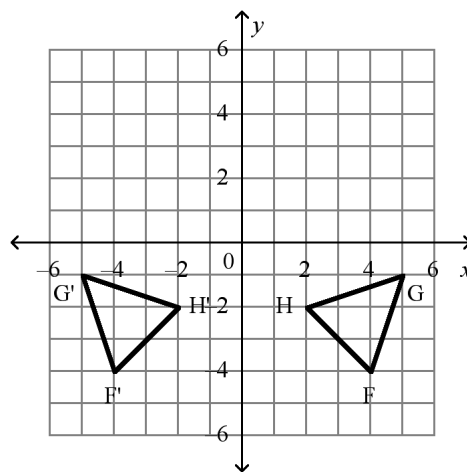
The triangle is reflected in the x -axis.

Which diagram shows $\triangle FGH$ and its reflection image $\triangle F'G'H'$?

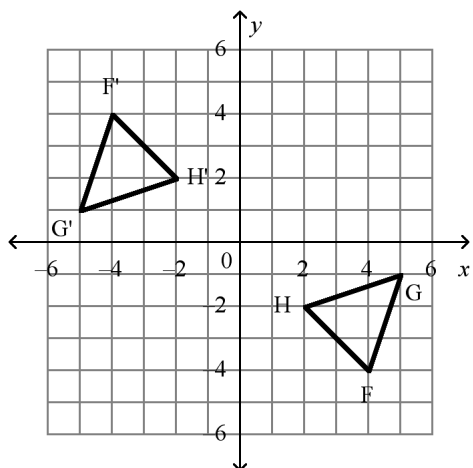
a.



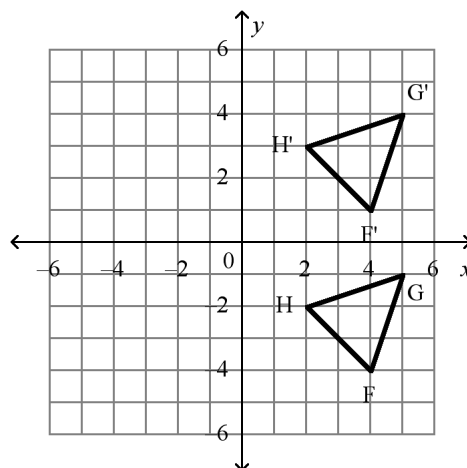
c.



b.



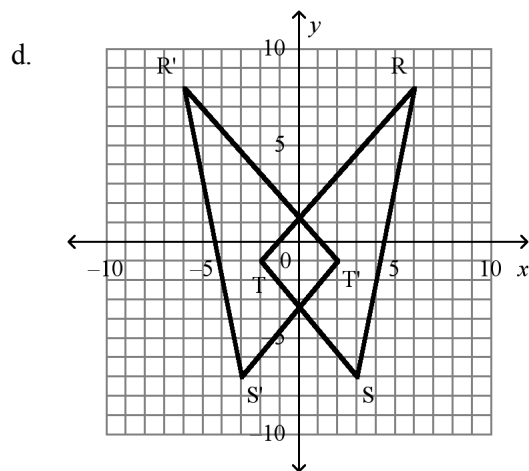
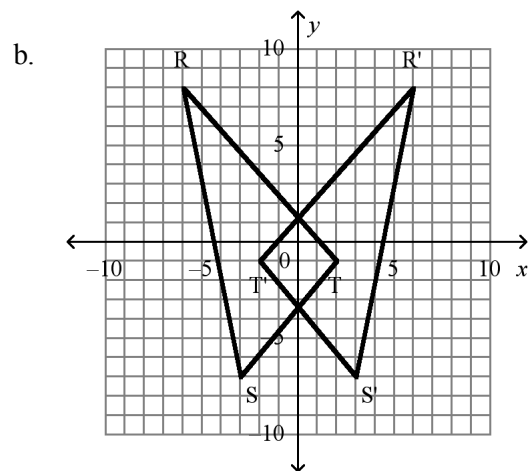
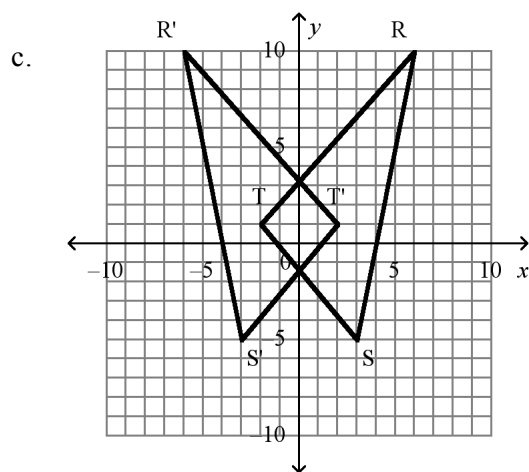
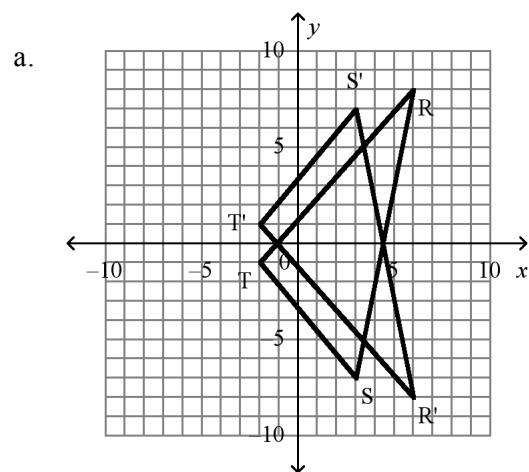
d.



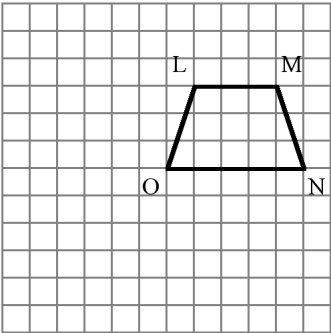
17. $\triangle RST$ has vertices $R(6, 8)$, $S(3, -7)$, and $T(-2, -1)$.

The triangle is reflected in the y -axis.

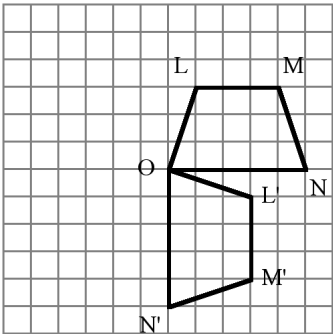
Which diagram shows $\triangle RST$ and its reflection image $\triangle R'S'T'$?



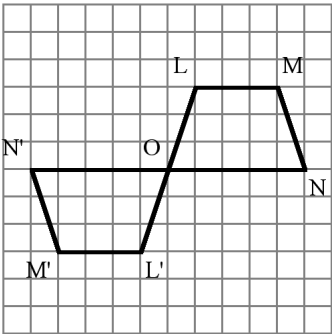
18. Draw the image of this shape after a 180° rotation about point O.



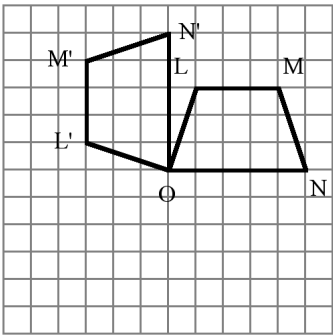
a.



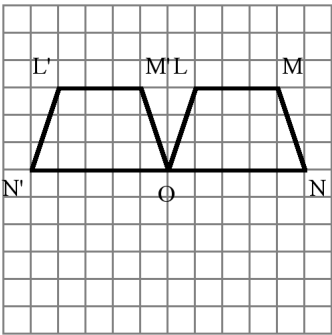
c.



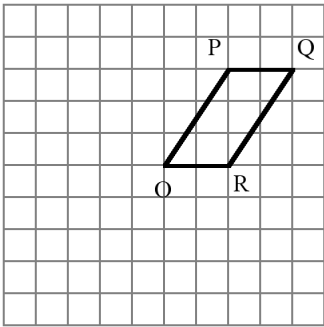
b.



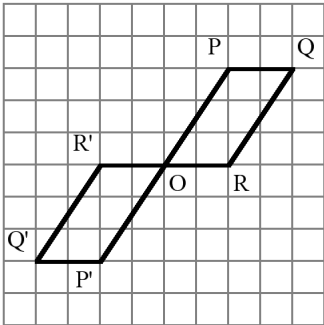
d.



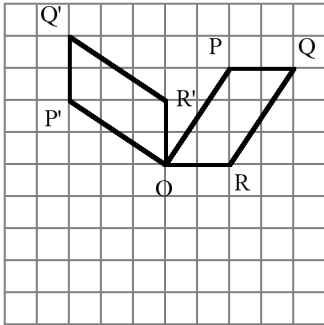
19. Draw the image of this shape after a -90° rotation about point O.



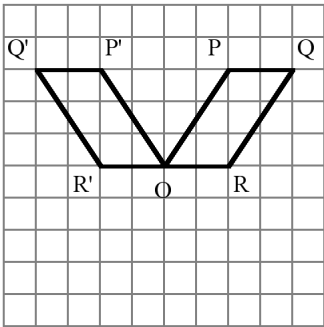
a.



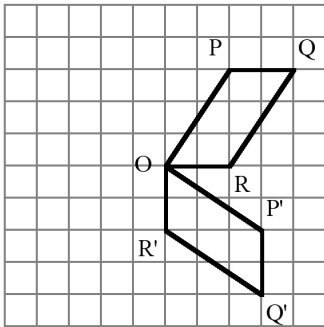
c.



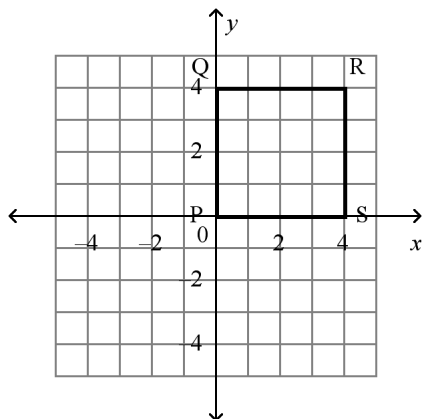
b.



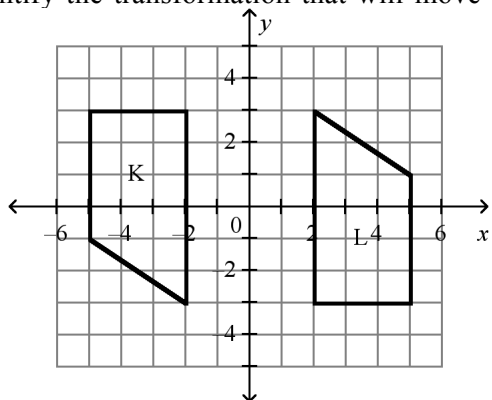
d.



20. Square PQRS is rotated 90° clockwise about the origin.
Write the coordinates of the image of point R.



- a. $(-4, -4)$ b. $(4, -4)$ c. $(4, 0)$ d. $(-4, 4)$
21. Identify the transformation that will move shape K to shape L.



- a. a $+90^\circ$ rotation about the origin c. a 180° rotation about the origin
b. a reflection in the y -axis d. a -90° rotation about the origin

Problem

22.

- a) Label each vertex for pentagon A
Reflect pentagon A in the x -axis to form its image pentagon A' .
- b) Write the new coordinates for image pentagon A' .
- c) Translate image pentagon A' 5 units to the right and 2 units down. .
- d) Write the new coordinates for Pentagon A'' .

