

Rotations (Part 1) — ANSWER KEY

Turn the figure about the origin (0, 0). Tip: trace the figure, put your pencil on the origin, and turn the paper.

1. Rotate the figure 90° counterclockwise about the origin.

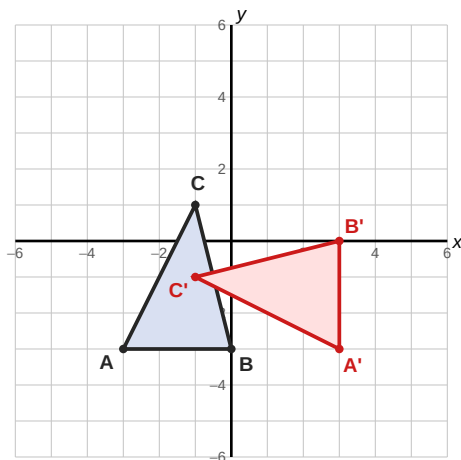


Image coordinates:

A' (3, -3)

B' (3, 0)

C' (-1, -1)

Original:
A (-3, -3)
B (0, -3)
C (-1, 1)

2. Rotate the figure 90° clockwise about the origin.

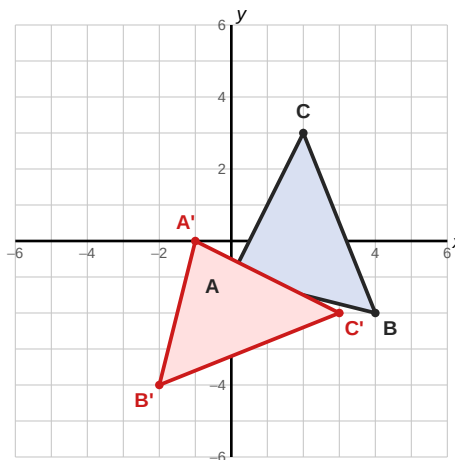


Image coordinates:

A' (-1, 0)

B' (-2, -4)

C' (3, -2)

Original:
A (0, -1)
B (4, -2)
C (2, 3)

3. Rotate the figure 180° about the origin.

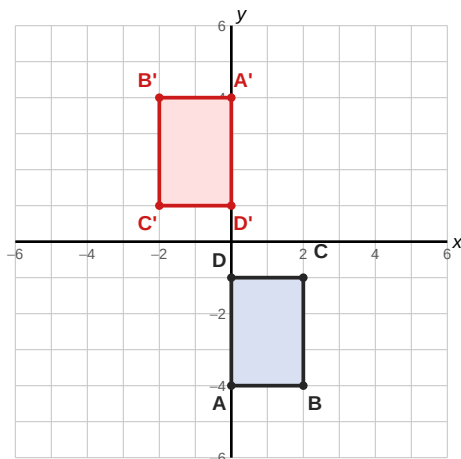


Image coordinates:

A' (0, 4)

B' (-2, 4)

C' (-2, 1)

D' (0, 1)

Original:
A (0, -4)
B (2, -4)
C (2, -1)
D (0, -1)

4. Rotate the figure 270° counterclockwise about the origin.

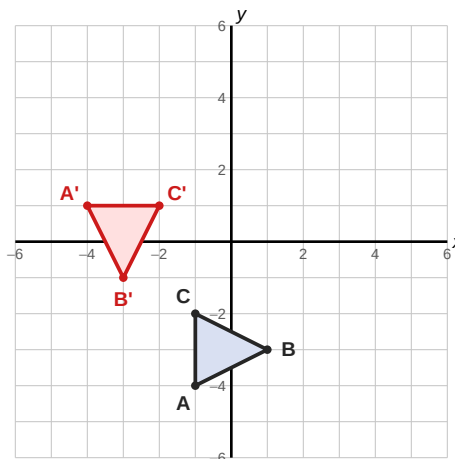


Image coordinates:

A' (-4, 1)

B' (-3, -1)

C' (-2, 1)

Original:
A (-1, -4)
B (1, -3)
C (-1, -2)

5. Rotate the figure 90° counterclockwise about the origin.

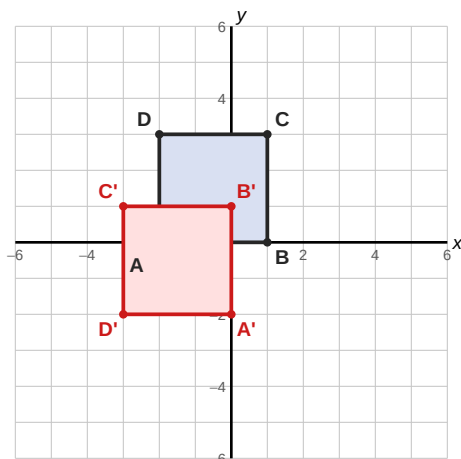


Image coordinates:

A' (0, -2)

B' (0, 1)

C' (-3, 1)

D' (-3, -2)

Original:
A (-2, 0)
B (1, 0)
C (1, 3)
D (-2, 3)

6. Rotate the figure 90° clockwise about the origin.

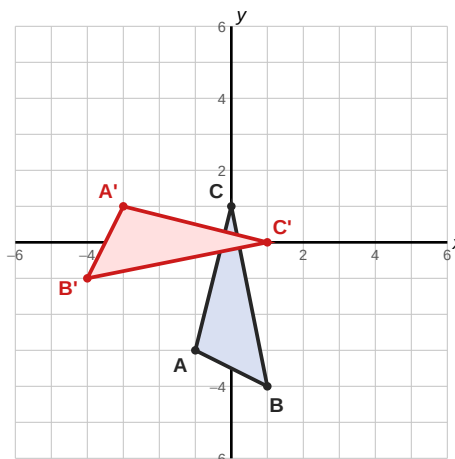


Image coordinates:

A' (-3, 1)

B' (-4, -1)

C' (1, 0)

Original:
A (-1, -3)
B (1, -4)
C (0, 1)

Rotations (Part 2) — ANSWER KEY

Turn the figure about the origin (0, 0). Tip: trace the figure, put your pencil on the origin, and turn the paper.

7. Rotate the figure 180° about the origin.

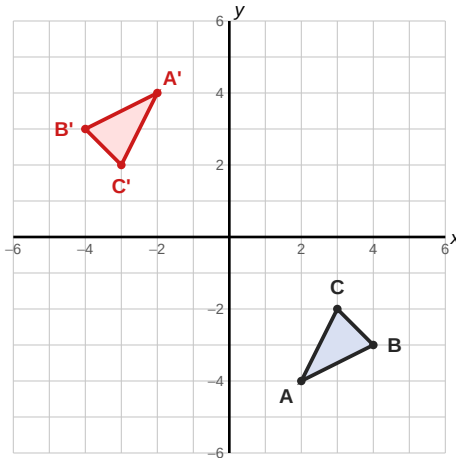


Image coordinates:

A' (-2, 4)

B' (-4, 3)

C' (-3, 2)

Original:

A (2, -4)

B (4, -3)

C (3, -2)

8. Rotate the figure 270° counterclockwise about the origin.

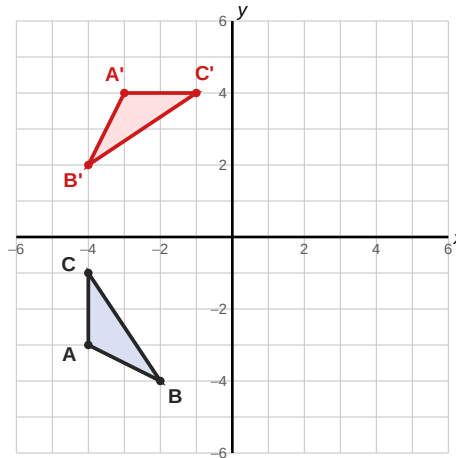


Image coordinates:

A' (-3, 4)

B' (-4, 2)

C' (-1, 4)

Original:

A (-4, -3)

B (-2, -4)

C (-4, -1)

9. Rotate the figure 90° counterclockwise about the origin.

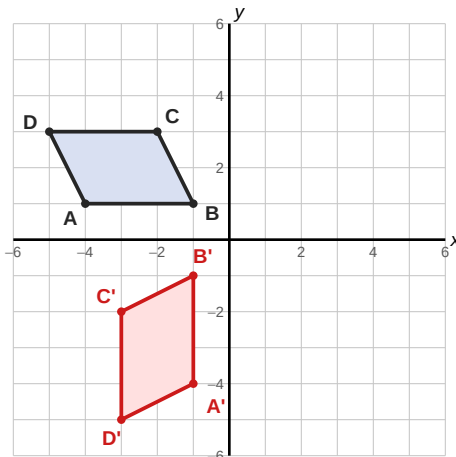


Image coordinates:

A' (-1, -4)

B' (-1, -1)

C' (-3, -2)

D' (-3, -5)

Original:

A (-4, 1)

B (-1, 1)

C (-2, 3)

D (-5, 3)

10. Rotate the figure 90° clockwise about the origin.

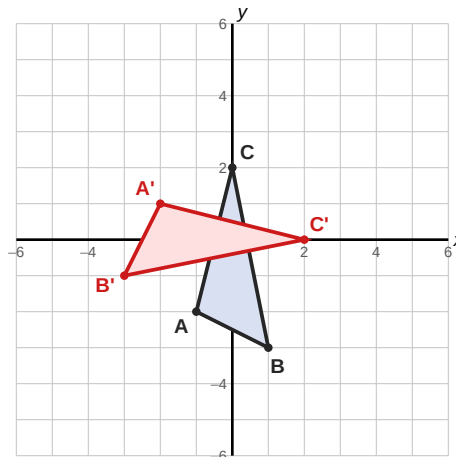


Image coordinates:

A' (-2, 1)

B' (-3, -1)

C' (2, 0)

Original:

A (-1, -2)

B (1, -3)

C (0, 2)

11. Rotate the figure 180° about the origin.

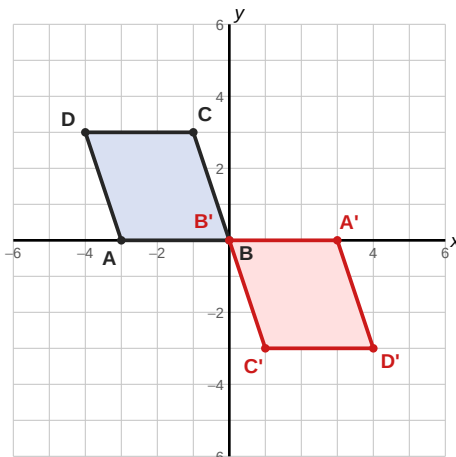


Image coordinates:

A' (3, 0)

B' (0, 0)

C' (1, -3)

D' (4, -3)

Original:

A (-3, 0)

B (0, 0)

C (-1, 3)

D (-4, 3)

12. Rotate the figure 270° counterclockwise about the origin.

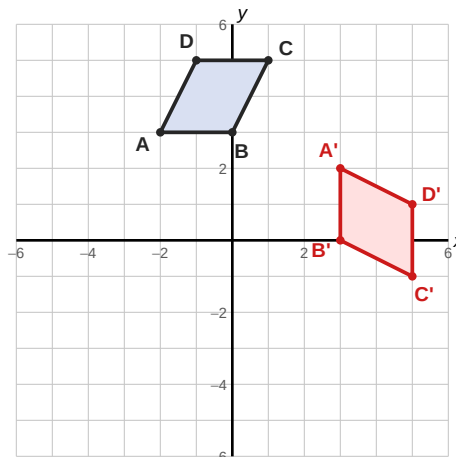


Image coordinates:

A' (3, 2)

B' (3, 0)

C' (5, -1)

D' (5, 1)

Original:

A (-2, 3)

B (0, 3)

C (1, 5)

D (-1, 5)