

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.

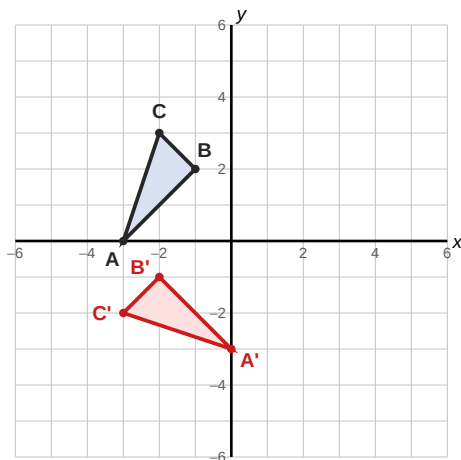


Image coordinates:

A' (0, -3)

B' (-2, -1)

C' (-3, -2)

Original:

A (-3, 0)

B (-1, 2)

C (-2, 3)

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

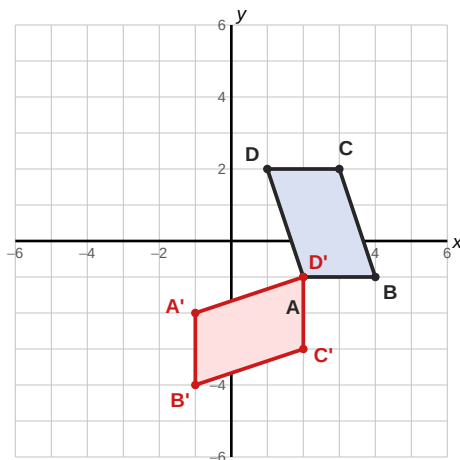


Image coordinates:

A' (-1, -2)

B' (-1, -4)

C' (2, -3)

D' (2, -1)

Original:

A (2, -1)

B (4, -1)

C (3, 2)

D (1, 2)

3. Rotate the figure 180° about the origin.

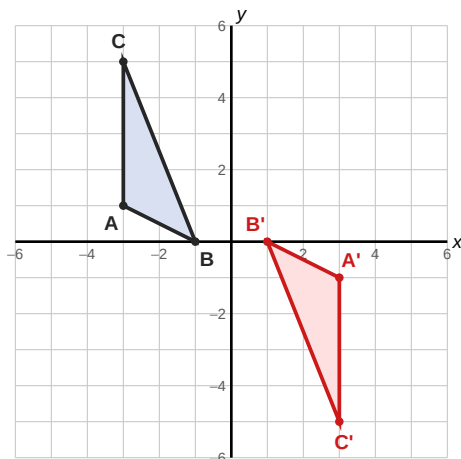


Image coordinates:

A' (3, -1)

B' (1, 0)

C' (3, -5)

Original:

A (-3, 1)

B (-1, 0)

C (-3, 5)

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

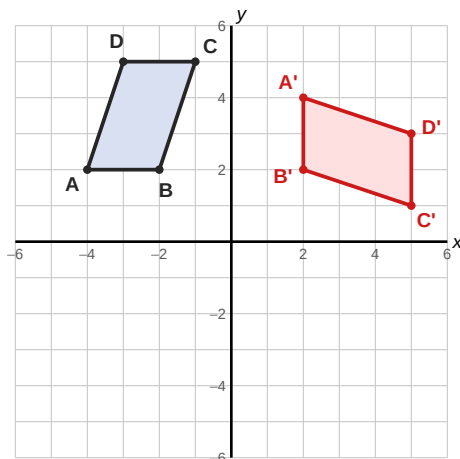


Image coordinates:

A' (2, 4)

B' (2, 2)

C' (5, 1)

D' (5, 3)

Original:

A (-4, 2)

B (-2, 2)

C (-1, 5)

D (-3, 5)

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

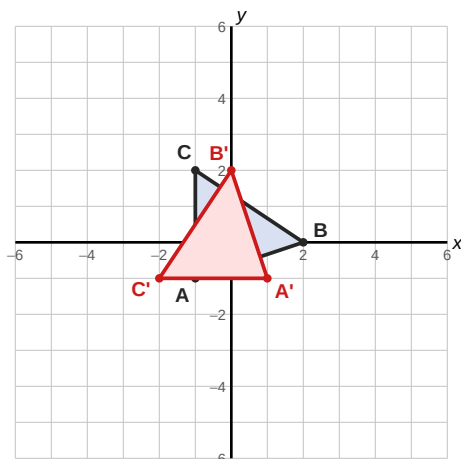


Image coordinates:

A' (1, -1)

B' (0, 2)

C' (-2, -1)

Original:

A (-1, -1)

B (2, 0)

C (-1, 2)

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

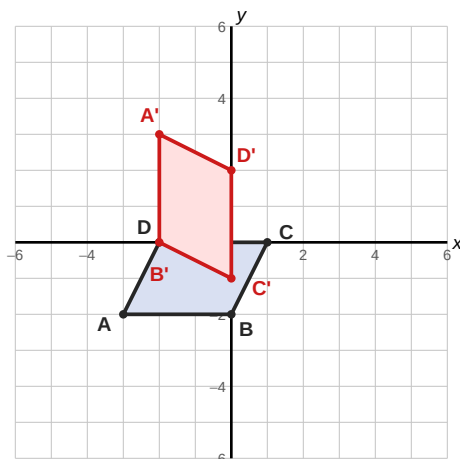


Image coordinates:

A' (-2, 3)

B' (-2, 0)

C' (0, -1)

D' (0, 2)

Original:

A (-3, -2)

B (0, -2)

C (1, 0)

D (-2, 0)

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.

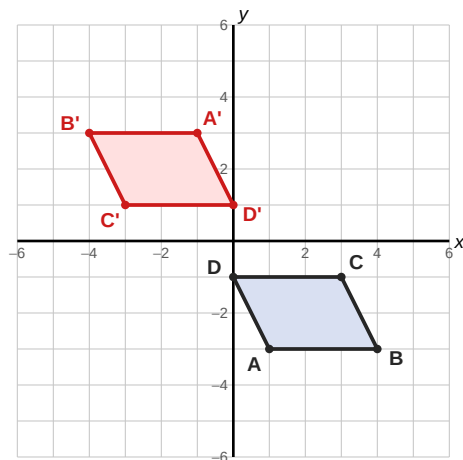


Image coordinates:

A' **(-1, 3)**

B' **(-4, 3)**

C' **(-3, 1)**

D' **(0, 1)**

Original:

A (1, -3)

B (4, -3)

C (3, -1)

D (0, -1)

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

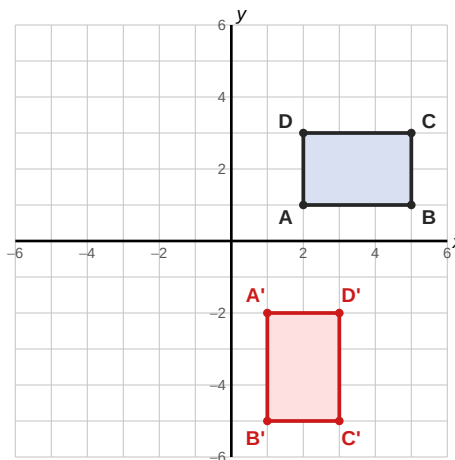


Image coordinates:

A' **(1, -2)**

B' **(5, -5)**

C' **(3, -5)**

D' **(3, -2)**

Original:

A (2, 1)

B (5, 1)

C (5, 3)

D (2, 3)

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

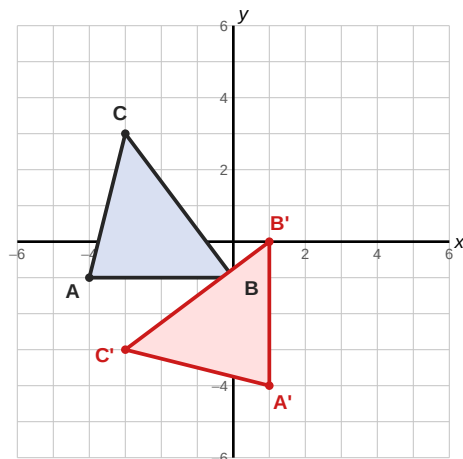


Image coordinates:

A' **(1, -4)**

B' **(1, 0)**

C' **(-3, -3)**

Original:

A (-4, -1)

B (0, -1)

C (-3, 3)

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

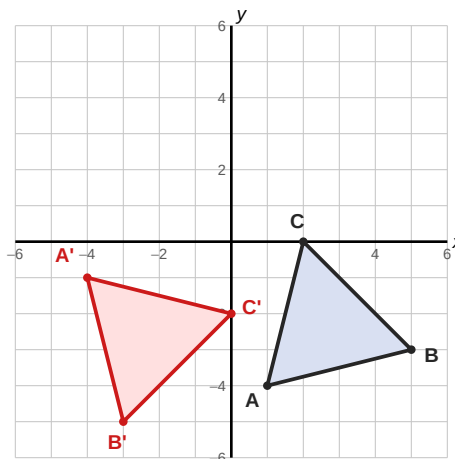


Image coordinates:

A' **(-4, -1)**

B' **(-3, -5)**

C' **(0, -2)**

Original:

A (1, -4)

B (5, -5)

C (0, -2)

11. Rotate the figure 180° about the origin.

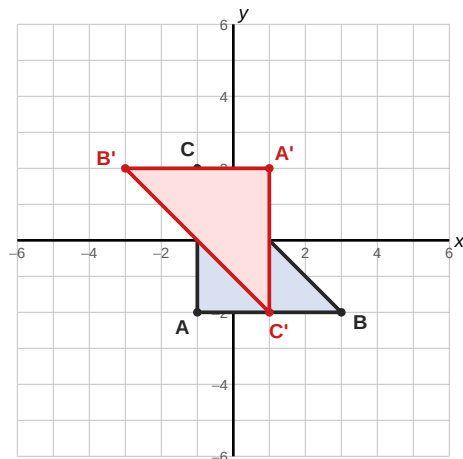


Image coordinates:

A' **(1, 2)**

B' **(-3, 2)**

C' **(1, -2)**

Original:

A (-1, -2)

B (3, -2)

C (-1, 2)

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

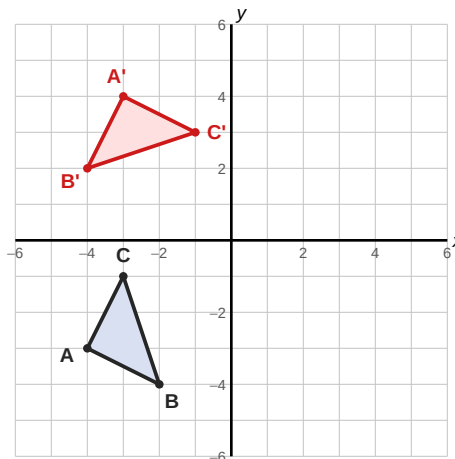


Image coordinates:

A' **(-3, 4)**

B' **(-4, 2)**

C' **(-1, 3)**

Original:

A (-4, -3)

B (-2, -4)

C (-3, -1)