

Mixed Review (Two-Step) — ANSWER KEY

Do the first transformation, then apply the second one to that result. Graph only the final image.

1. Translate 2 units down, then reflect over the line $y = x$.

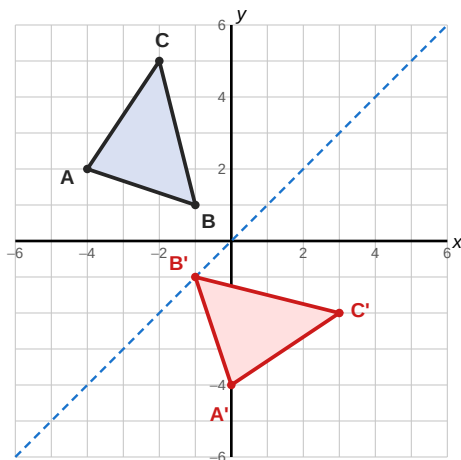


Image coordinates:

A' (0, -4)

B' (-1, -1)

C' (3, -2)

Original:

A (-4, 2)

B (-1, 1)

C (-2, 5)

2. Reflect over the x-axis, then rotate 90° clockwise about the origin.

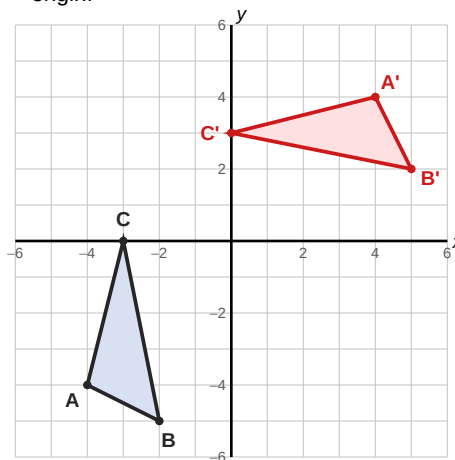


Image coordinates:

A' (4, 4)

B' (5, 2)

C' (0, 3)

Original:

A (-4, -4)

B (-2, -5)

C (-3, 0)

3. Rotate 270° counterclockwise about the origin, then translate 2 units down.

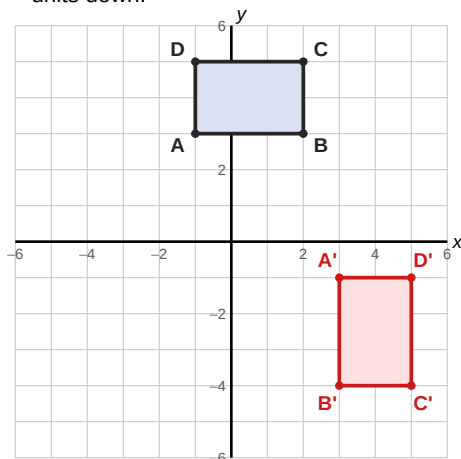


Image coordinates:

A' (3, -1)

B' (3, -4)

C' (5, -4)

D' (5, -1)

Original:

A (-1, 3)

B (2, 3)

C (2, 5)

D (-1, 5)

4. Translate 2 units down, then reflect over the line $y = -x$.

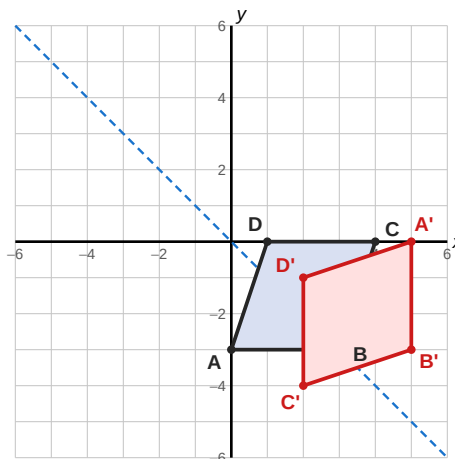


Image coordinates:

A' (5, 0)

B' (5, -3)

C' (2, -4)

D' (2, -1)

Original:

A (0, -3)

B (3, -3)

C (4, 0)

D (1, 0)

5. Reflect over the line $y = x$, then rotate 90° clockwise about the origin.

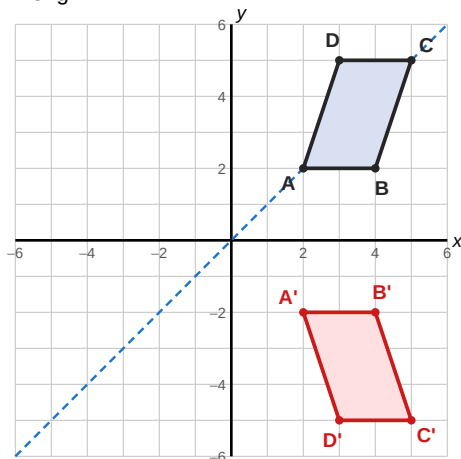


Image coordinates:

A' (2, -2)

B' (4, -2)

C' (5, -5)

D' (3, -5)

Original:

A (2, 2)

B (4, 2)

C (5, 5)

D (3, 5)

6. Rotate 180° about the origin, then translate 1 unit right and 3 units down.

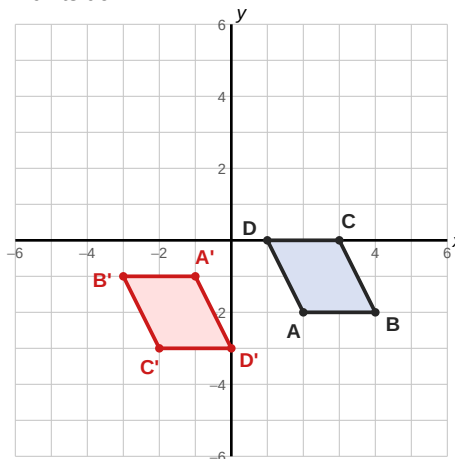


Image coordinates:

A' (-1, -1)

B' (-3, -1)

C' (-2, -3)

D' (0, -3)

Original:

A (2, -2)

B (4, -2)

C (3, 0)

D (1, 0)