

Translations (Part 1) — ANSWER KEY

Slide every vertex the same direction and distance. Draw the image and label it with prime marks (A' , B' , ...).

1. Translate the figure 3 units left and 3 units up.

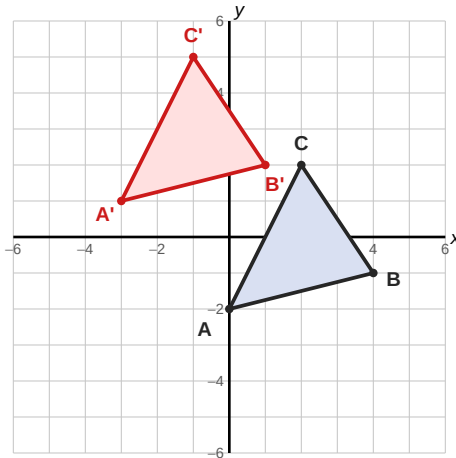


Image coordinates:

$A' (-3, 1)$

$B' (1, 2)$

$C' (-1, 5)$

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

2. Translate using the rule $(x, y) \rightarrow (x + 3, y - 5)$.

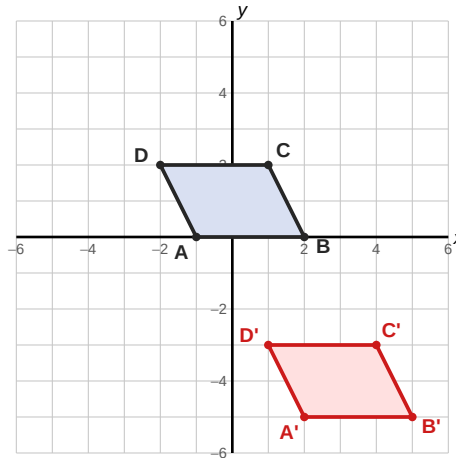


Image coordinates:

$A' (2, -5)$

$B' (5, -5)$

$C' (4, -3)$

$D' (1, -3)$

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

3. Translate the figure 1 unit right and 4 units up.

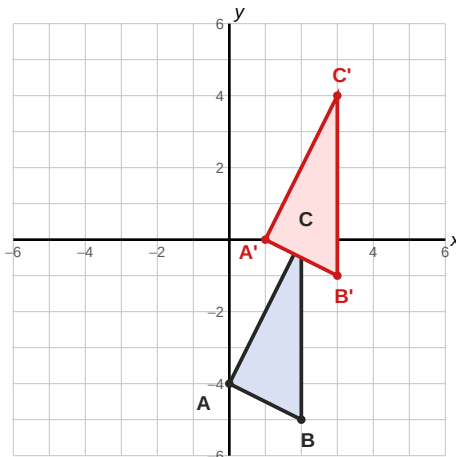


Image coordinates:

$A' (1, 0)$

$B' (3, -1)$

$C' (3, 4)$

Original:
A (0, -4)
B (2, -5)
C (2, 0)

4. Translate using the rule $(x, y) \rightarrow (x - 6, y - 3)$.

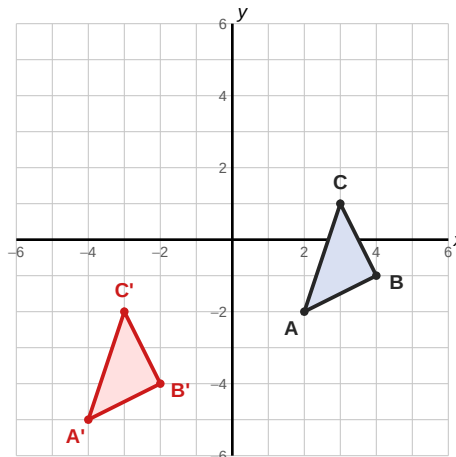


Image coordinates:

$A' (-4, -5)$

$B' (-2, -4)$

$C' (-3, -2)$

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

5. Translate the figure 4 units right and 1 unit down.

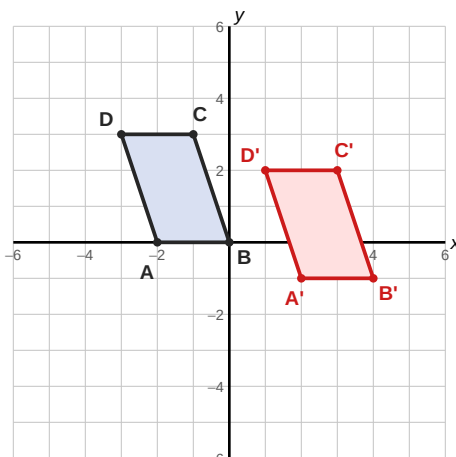


Image coordinates:

$A' (2, -1)$

$B' (4, -1)$

$C' (3, 2)$

$D' (1, 2)$

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

6. Translate using the rule $(x, y) \rightarrow (x - 1, y - 4)$.

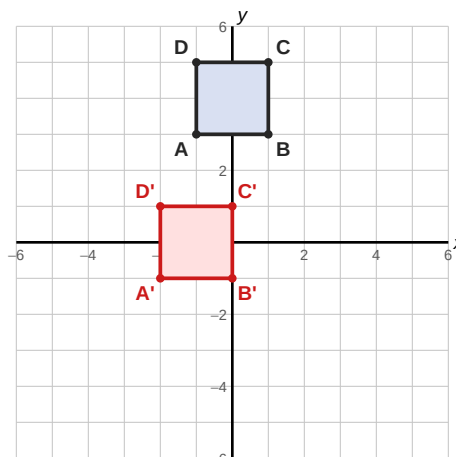


Image coordinates:

$A' (-2, -1)$

$B' (0, -1)$

$C' (0, 1)$

$D' (-2, 1)$

Original:
A (-1, 3)
B (1, 3)
C (1, 5)
D (-1, 5)

Translations (Part 2) — ANSWER KEY

Slide every vertex the same direction and distance. Draw the image and label it with prime marks (A' , B' , ...).

7. Translate the figure 5 units right and 4 units up.

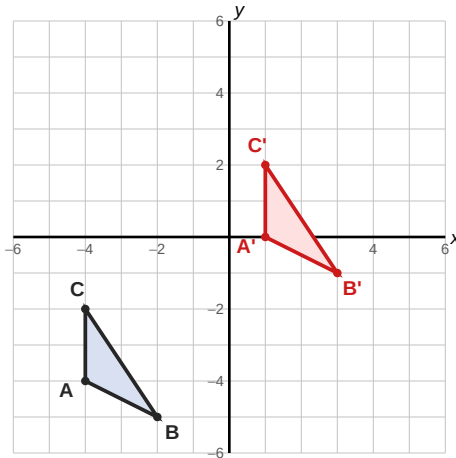


Image coordinates:

A' (1, 0)

B' (3, -1)

C' (1, 2)

Original:

A (-4, -4)

B (-2, -5)

C (-4, -2)

8. Translate using the rule $(x, y) \rightarrow (x - 5, y + 1)$.

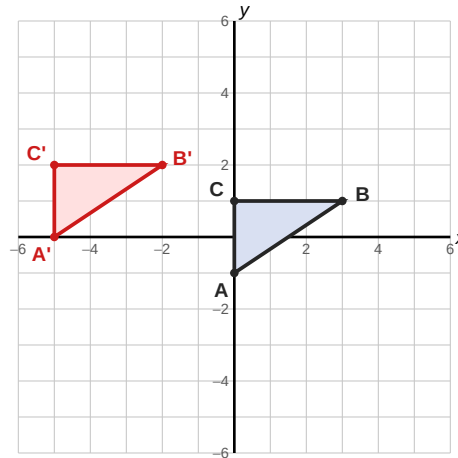


Image coordinates:

A' (-5, 0)

B' (-2, 2)

C' (-5, 2)

Original:

A (0, -1)

B (3, 1)

C (0, 1)

9. Translate the figure 2 units right and 6 units down.

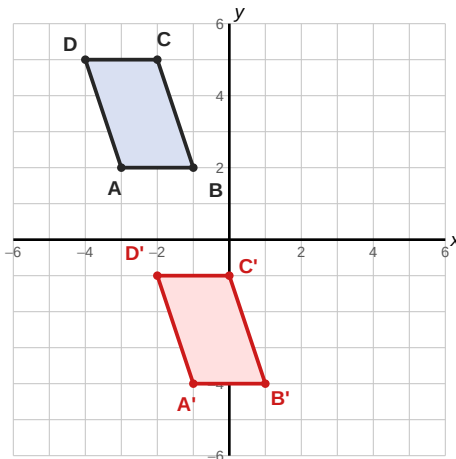


Image coordinates:

A' (-1, -4)

B' (1, -4)

C' (0, -1)

D' (-2, -1)

Original:

A (-3, 2)

B (-1, 2)

C (-3, 5)

D (-1, 5)

10. Translate using the rule $(x, y) \rightarrow (x - 6, y - 1)$.

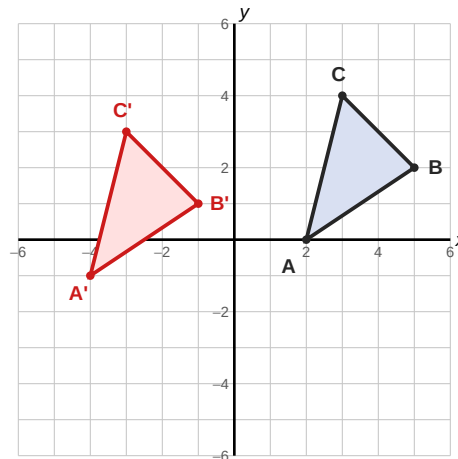


Image coordinates:

A' (-4, -1)

B' (-1, 1)

C' (-3, 3)

Original:

A (2, 0)

B (5, 2)

C (3, 4)

11. Translate the figure 5 units down.

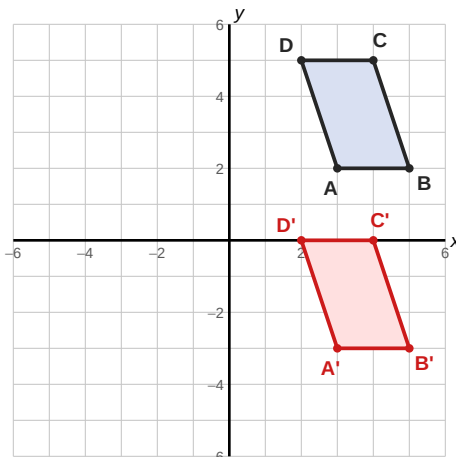


Image coordinates:

A' (3, -3)

B' (5, -3)

C' (4, 0)

D' (2, 0)

Original:

A (3, 2)

B (5, 2)

C (4, 5)

D (2, 5)

12. Translate using the rule $(x, y) \rightarrow (x - 2, y - 5)$.

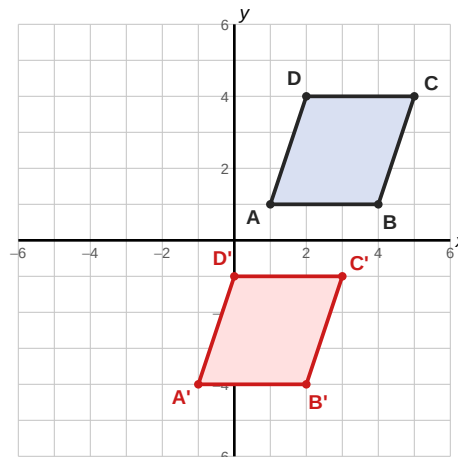


Image coordinates:

A' (-1, -4)

B' (2, -4)

C' (3, -1)

D' (0, -1)

Original:

A (1, 1)

B (4, 1)

C (5, 4)

D (2, 4)