

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 6 units left and 5 units down.

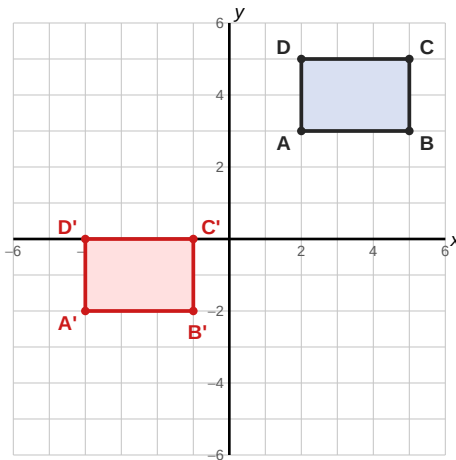


Image coordinates:

$A' (-4, -2)$

$B' (-1, -2)$

$C' (-1, 0)$

$D' (-4, 0)$

Original:

A (2, 3)

B (5, 3)

C (5, 5)

D (2, 5)

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

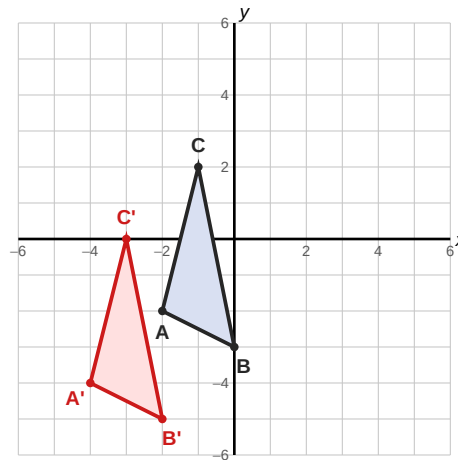


Image coordinates:

$A' (-4, -4)$

$B' (-2, -5)$

$C' (-3, 0)$

Original:

A (-2, -2)

B (0, -3)

C (-1, 2)

3. Translate the figure 3 units left and 2 units up.

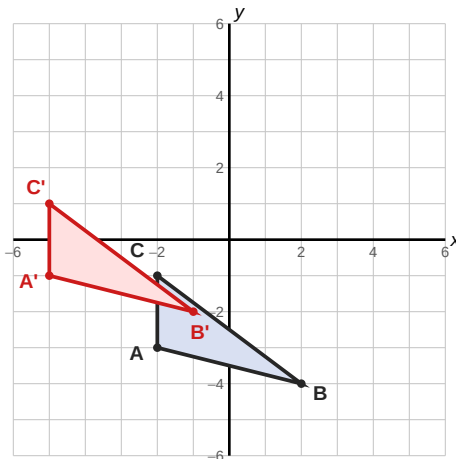


Image coordinates:

$A' (-5, -1)$

$B' (-1, -2)$

$C' (-5, 1)$

Original:

A (-2, -3)

B (2, -4)

C (-2, -1)

4. Translate using the rule $(x, y) \rightarrow (x - 5, y - 6)$.

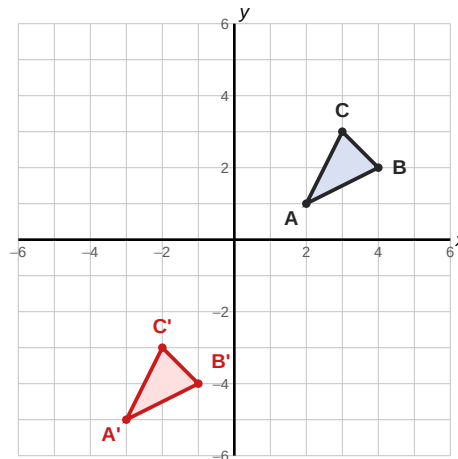


Image coordinates:

$A' (-3, -5)$

$B' (-1, -4)$

$C' (-2, -3)$

Original:

A (2, 1)

B (4, 2)

C (3, 3)

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

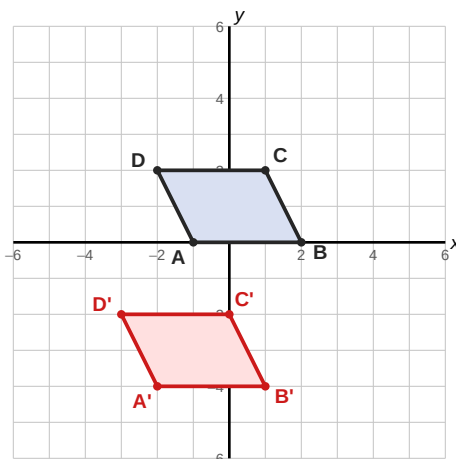


Image coordinates:

$A' (-2, -4)$

$B' (1, -4)$

$C' (0, -2)$

$D' (-3, -2)$

Original:

A (-1, 0)

B (2, 0)

C (1, 2)

D (-2, 2)

6. Translate using the rule $(x, y) \rightarrow (x - 3, y + 1)$.

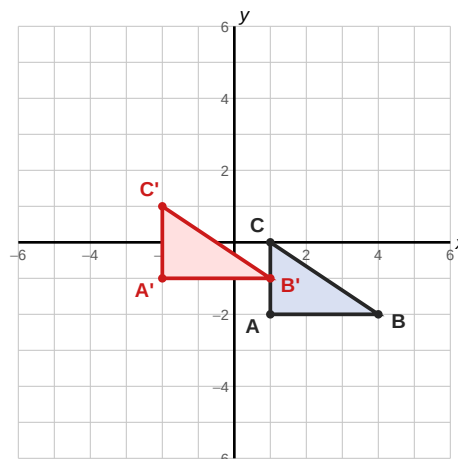


Image coordinates:

$A' (-2, -1)$

$B' (1, -1)$

$C' (-2, 1)$

Original:

A (1, -2)

B (4, -2)

C (1, 0)

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 2 units left and 6 units up.

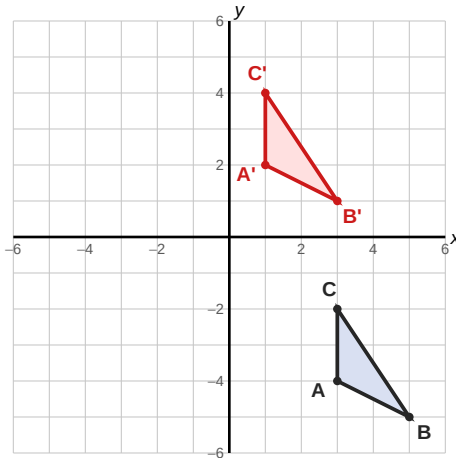


Image coordinates:

A' (1, 2)

B' (3, 1)

C' (1, 4)

Original:

A (3, -4)

B (5, -5)

C (3, -2)

8. Translate using the rule $(x, y) \rightarrow (x + 1, y - 3)$.

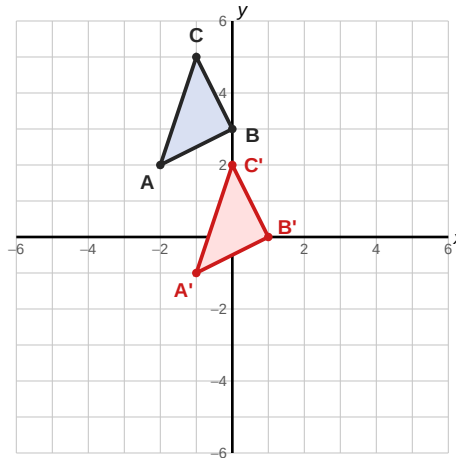


Image coordinates:

A' (-1, -1)

B' (1, 0)

C' (0, 2)

Original:

A (-2, 2)

B (0, 3)

C (-1, 5)

9. Translate the figure 4 units left.

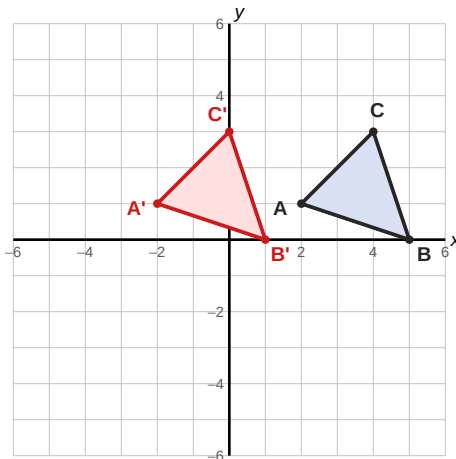


Image coordinates:

A' (-2, 1)

B' (1, 0)

C' (0, 3)

Original:

A (2, 1)

B (5, 0)

C (4, 3)

10. Translate using the rule $(x, y) \rightarrow (x + 1, y - 2)$.

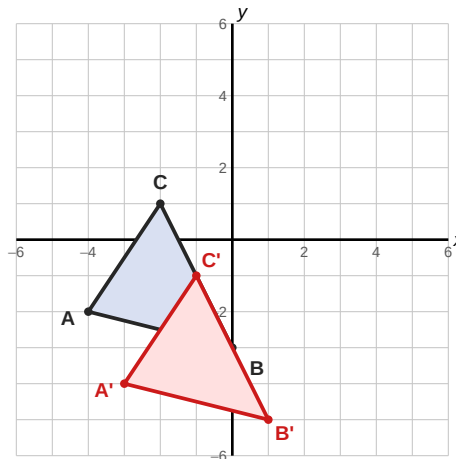


Image coordinates:

A' (-3, -4)

B' (1, -5)

C' (-1, -1)

Original:

A (-4, -2)

B (0, -3)

C (-2, 1)

11. Translate the figure 5 units right and 5 units up.

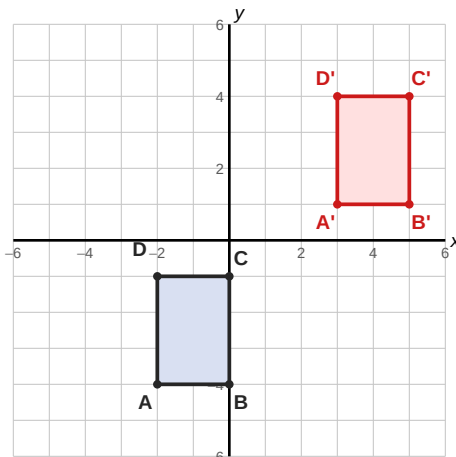


Image coordinates:

A' (3, 1)

B' (5, 1)

C' (5, 4)

D' (3, 4)

Original:

A (-2, -4)

B (0, -4)

C (0, -1)

D (-2, -1)

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

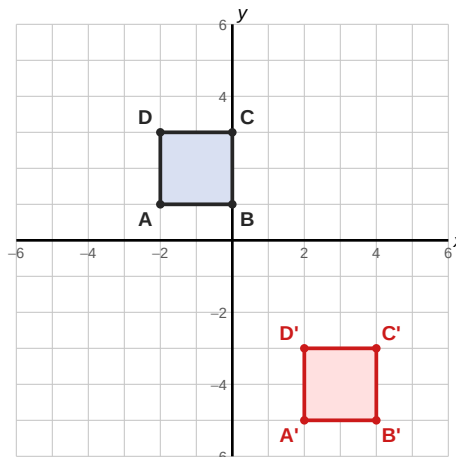


Image coordinates:

A' (2, -5)

B' (4, -5)

C' (4, -3)

D' (2, -3)

Original:

A (-2, 1)

B (0, 1)

C (0, 3)

D (-2, 3)