

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 4 units left and 3 units up.

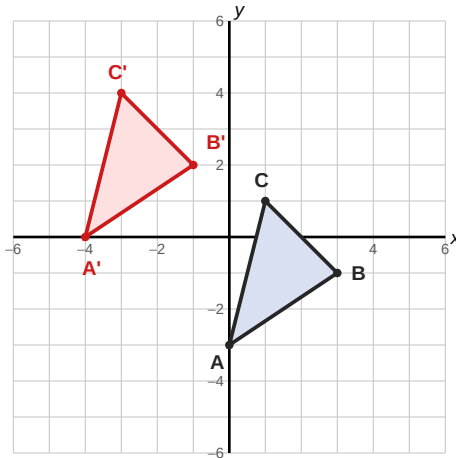


Image coordinates:

$A' (-4, 0)$

$B' (-1, 2)$

$C' (-3, 4)$

Original:

$A (0, -3)$

$B (3, -1)$

$C (1, 1)$

2. Translate using the rule $(x, y) \rightarrow (x, y + 6)$.

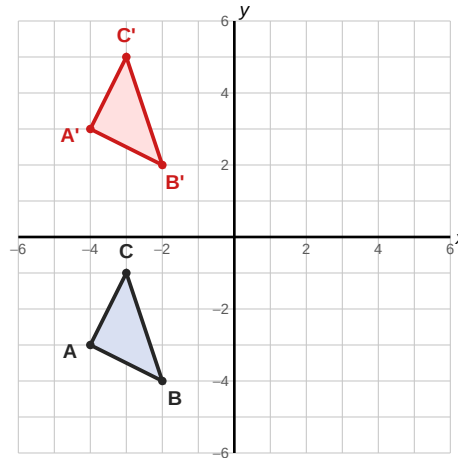


Image coordinates:

$A' (-4, 3)$

$B' (-2, 2)$

$C' (-3, 5)$

Original:

$A (-4, -3)$

$B (-2, -4)$

$C (-3, -1)$

3. Translate the figure 6 units right and 6 units up.

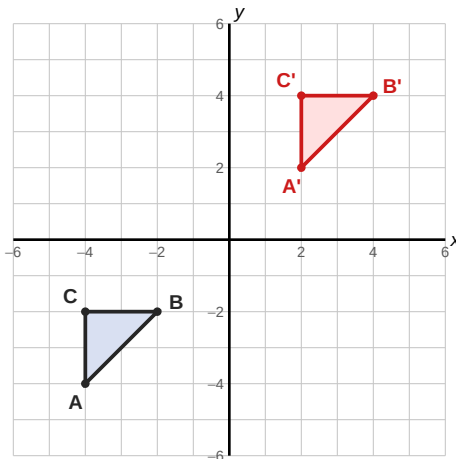


Image coordinates:

$A' (2, 2)$

$B' (4, 4)$

$C' (2, 4)$

Original:

$A (-4, -4)$

$B (-2, -2)$

$C (-4, -2)$

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

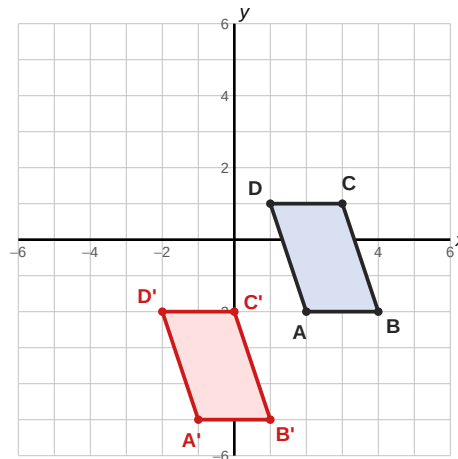


Image coordinates:

$A' (-1, -5)$

$B' (1, -5)$

$C' (0, -2)$

$D' (-2, -2)$

Original:

$A (2, -2)$

$B (4, -2)$

$C (3, 1)$

$D (1, 1)$

5. Translate the figure 4 units right and 3 units down.

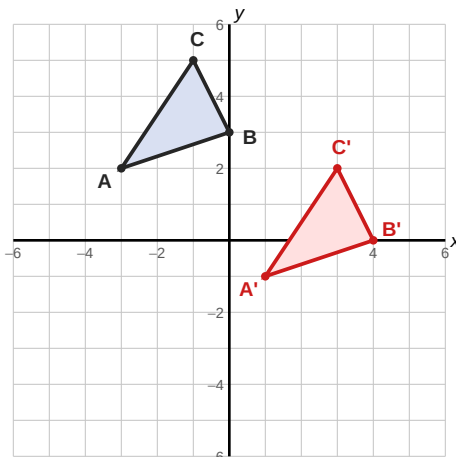


Image coordinates:

$A' (1, -1)$

$B' (4, 0)$

$C' (3, 2)$

Original:

$A (-3, 2)$

$B (0, 3)$

$C (-1, 5)$

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

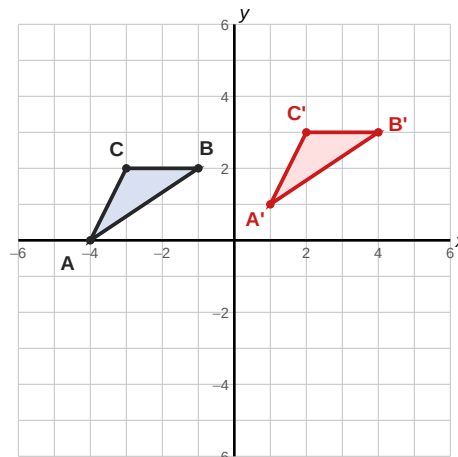


Image coordinates:

$A' (1, 1)$

$B' (4, 3)$

$C' (2, 3)$

Original:

$A (-4, 0)$

$B (-1, 2)$

$C (-3, 2)$

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 left and 2 units up.

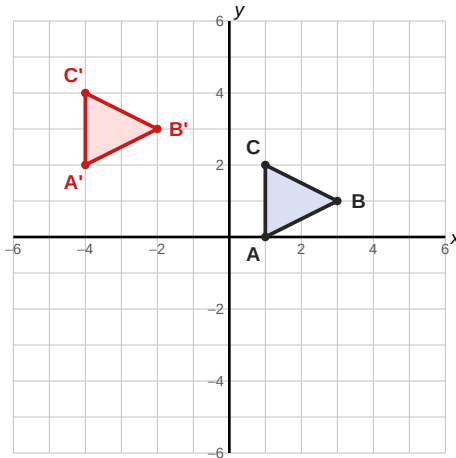


Image coordinates:

$A' (-4, 2)$

$B' (-2, 3)$

$C' (-4, 4)$

Original:

$A (1, 0)$

$B (3, 1)$

$C (1, 2)$

8. Translate using the rule $(x, y) \rightarrow (x - 4, y + 2)$.

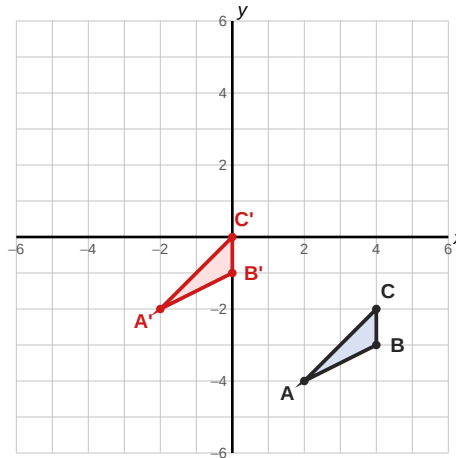


Image coordinates:

$A' (-2, -2)$

$B' (0, -1)$

$C' (0, 0)$

Original:

$A (2, -4)$

$B (4, -3)$

$C (4, -2)$

9. Translate the figure 3 units right and 4 units down.

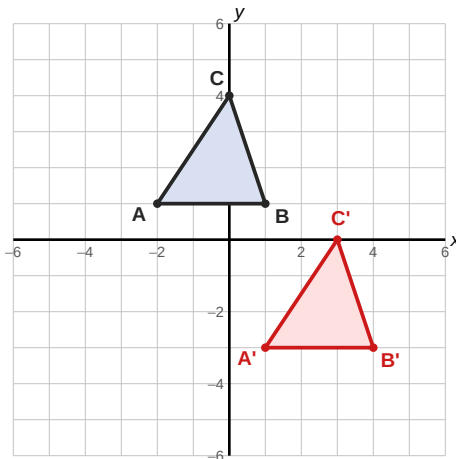


Image coordinates:

$A' (1, -3)$

$B' (4, -3)$

$C' (3, 0)$

Original:

$A (-2, 1)$

$B (1, 1)$

$C (0, 4)$

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

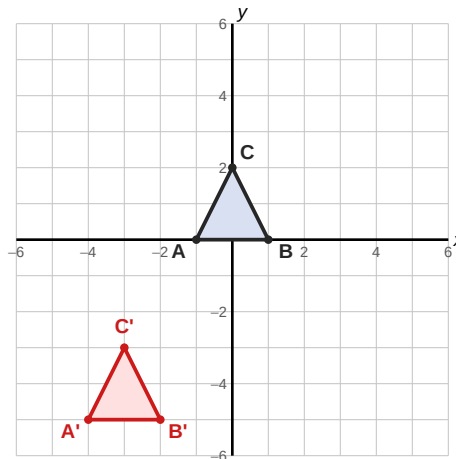


Image coordinates:

$A' (-4, -5)$

$B' (-2, -5)$

$C' (-3, -3)$

Original:

$A (-1, 0)$

$B (1, 0)$

$C (0, 2)$

11. Translate the figure 2 units right and 3 units down.

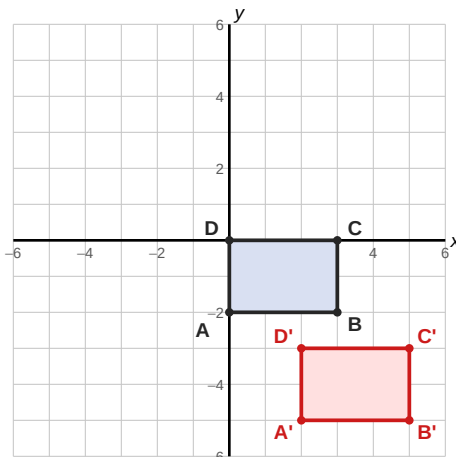


Image coordinates:

$A' (2, -5)$

$B' (5, -5)$

$C' (5, -3)$

$D' (2, -3)$

Original:

$A (0, -2)$

$B (3, -2)$

$C (3, 0)$

$D (0, 0)$

12. Translate using the rule $(x, y) \rightarrow (x + 2, y - 6)$.

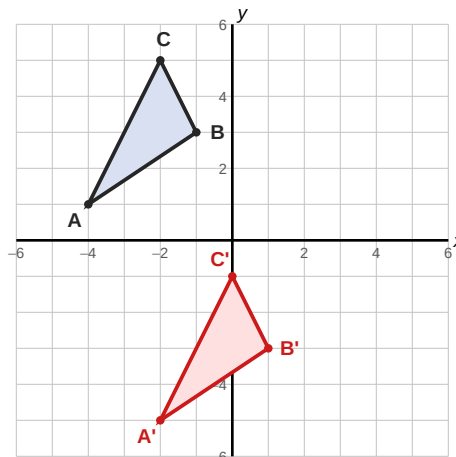


Image coordinates:

$A' (-2, -5)$

$B' (1, -3)$

$C' (0, -1)$

Original:

$A (-4, 1)$

$B (-1, 3)$

$C (-2, 5)$