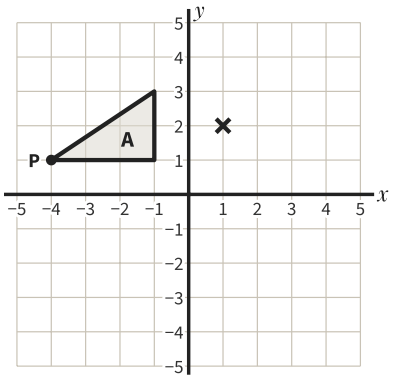
Translating shapes

1

Translate A by the vector $\begin{pmatrix} 5 \\ 1 \end{pmatrix}$.

Label the image B. The cross shows where P lands.

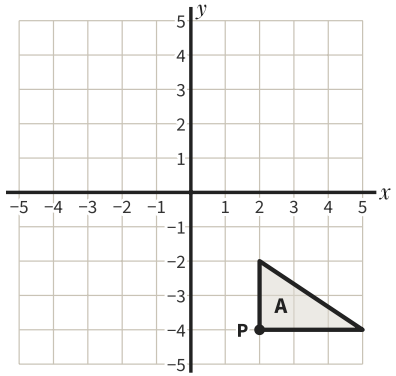


P′ _____

2

Translate A by the vector $\begin{pmatrix} -6 \\ 3 \end{pmatrix}$.

Label the image B.

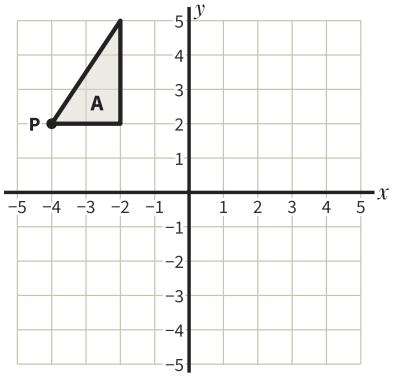


P′ _____

3

Translate A by the vector $\begin{pmatrix} 5 \\ -6 \end{pmatrix}$.

Label the image B.

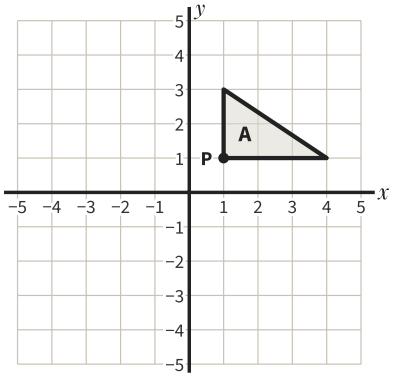


P′ _____

4

Translate A by the vector $\begin{pmatrix} -5 \\ -5 \end{pmatrix}$.

Label the image B.

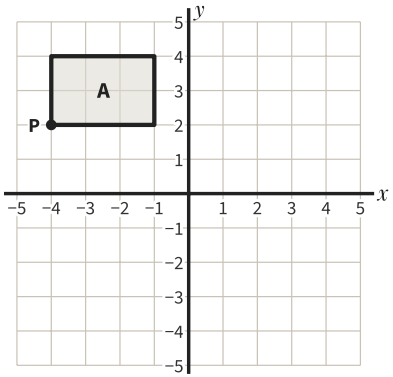


P′ _____

5

Translate A by the vector $\begin{pmatrix} 0 \\ -5 \end{pmatrix}$.

Label the image B.

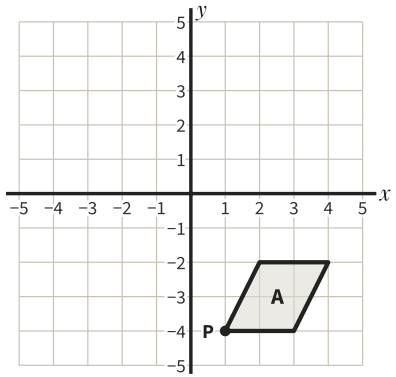


P′ _____

6

Translate A by the vector $\begin{pmatrix} -5 \\ 6 \end{pmatrix}$.

Label the image B.

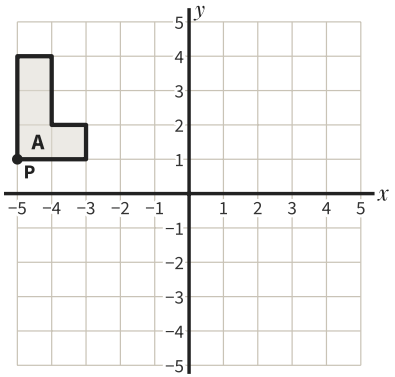


P′ _____

7

Translate A by the vector $\begin{pmatrix} 7 \\ -5 \end{pmatrix}$.

Label the image B.

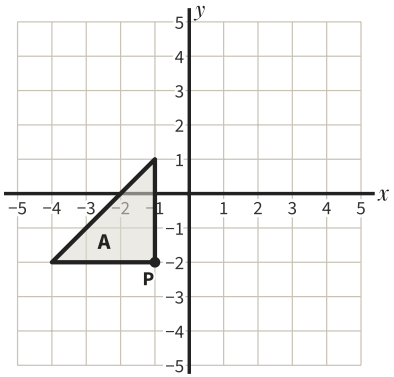


P′ _____

8

Translate A by the vector $\begin{pmatrix} 2 \\ 1 \end{pmatrix}$.

Label the image B.



P′ _____

Translating shapes *further practice*

9

The point (4, −1) is translated by the vector $\begin{pmatrix} -6 \\ 3 \end{pmatrix}$. Write down the coordinates of its image.

Answer _____

10

A shape moves 2 squares left and 7 squares down. Write this as a column vector.

Answer _____

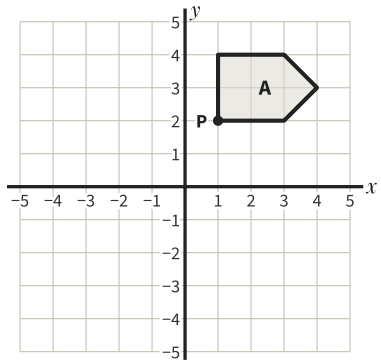
11

Describe the movement given by the column vector $\begin{pmatrix} 0 \\ -4 \end{pmatrix}$.

Answer _____

12

Translate A by the vector $\begin{pmatrix} -6 \\ -5 \end{pmatrix}$.
Label the image B.



P′ _____

13

A counter on a board game grid starts at (−3, 2). It moves by $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$, then by $\begin{pmatrix} -1 \\ 6 \end{pmatrix}$. Where does it finish?

Answer _____

14

Shape A is 2 squares wide.
Ana translates it by $\begin{pmatrix} 6 \\ 0 \end{pmatrix}$. She leaves a gap of 6 squares between A and her image. Explain her mistake.
How big should the gap be?

Answer _____

15

Leo translates the point (3, −2) by the vector $\begin{pmatrix} -5 \\ 1 \end{pmatrix}$. He gets (8, −1).
What did he do wrong? Write down the correct image.

Answer _____

16

Mia says a translated shape always faces the same way as the shape it came from. Is she right? Explain.

Answer _____