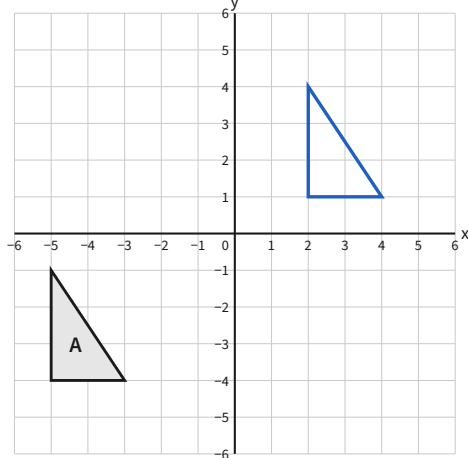


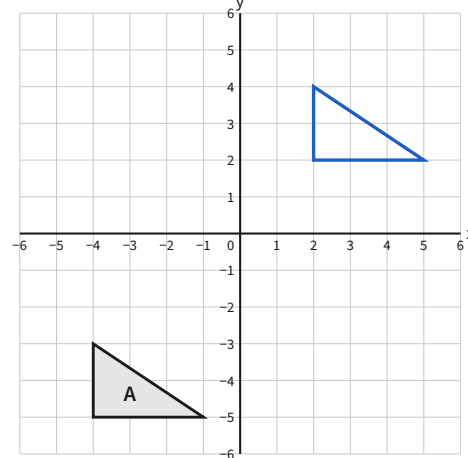
Translating shapes *answers*

1 Translate A by $\begin{pmatrix} 7 \\ 5 \end{pmatrix}$



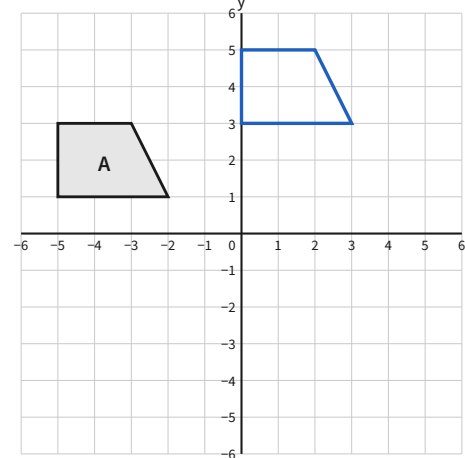
7 right / 5 up / down

2 Translate A by $\begin{pmatrix} 6 \\ 7 \end{pmatrix}$



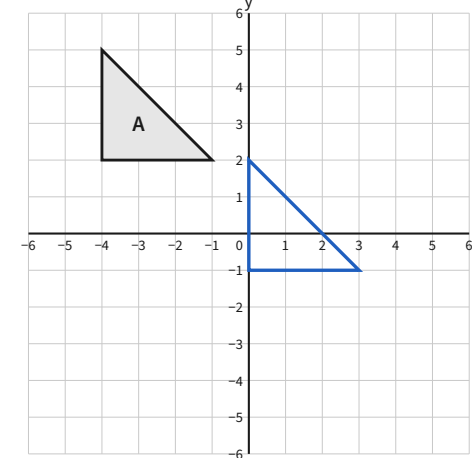
6 right / 7 up / down

3 Translate A by $\begin{pmatrix} 5 \\ 2 \end{pmatrix}$



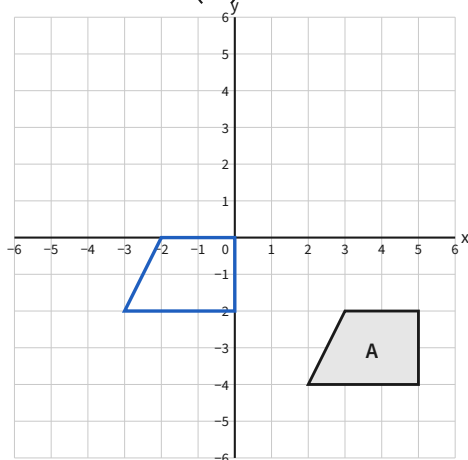
5 right / 2 up / down

4 Translate A by $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$

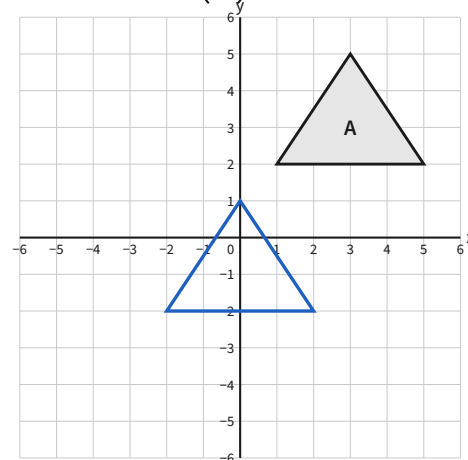


4 right / 3 up / down

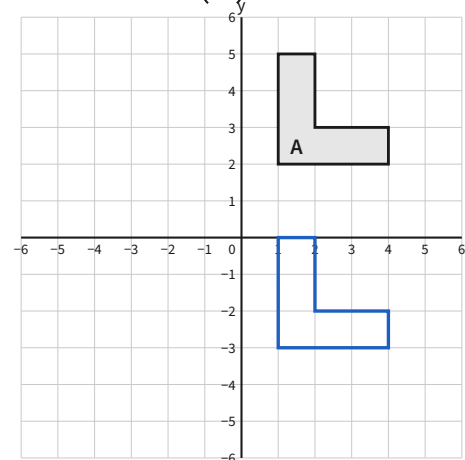
5 Translate A by $\begin{pmatrix} -5 \\ 2 \end{pmatrix}$



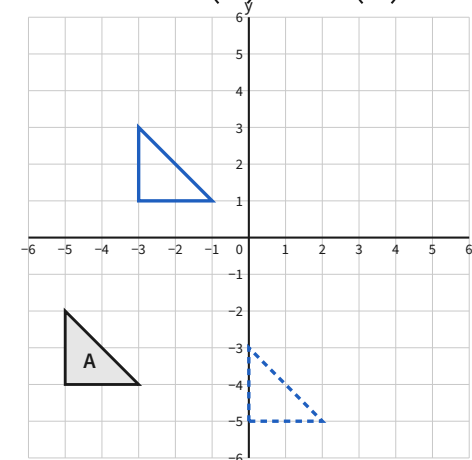
6 Translate A by $\begin{pmatrix} -3 \\ -4 \end{pmatrix}$



7 Translate A by $\begin{pmatrix} 0 \\ -5 \end{pmatrix}$



8 Translate A by $\begin{pmatrix} 5 \\ -1 \end{pmatrix}$ then by $\begin{pmatrix} -3 \\ 6 \end{pmatrix}$

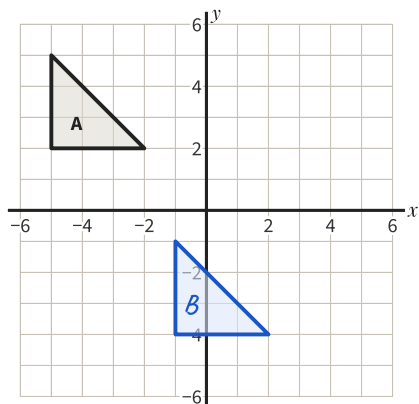


Translating shapes *further practice*

ANSWERS

9

Translate shape A by $\begin{pmatrix} 4 \\ -6 \end{pmatrix}$.
Label the image B.



10

Translate the point P by $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$.
Write the coordinates of its image.

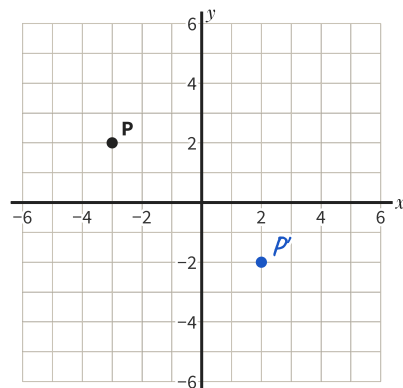
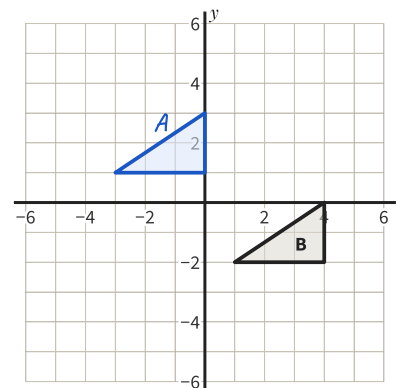


Image (2, -2)

11

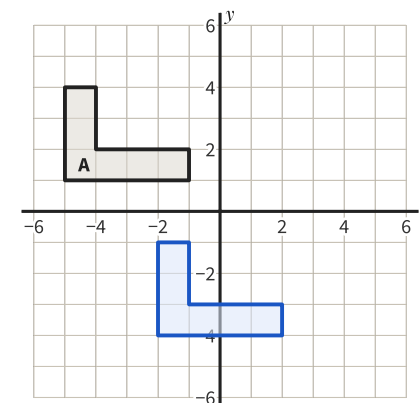
Shape B is the image of shape A after a translation by $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$. Draw shape A.



A (-3, 1), (0, 1), (0, 3)

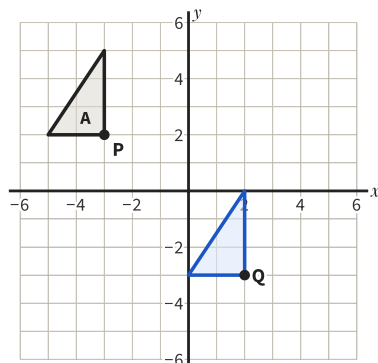
12

This room plan shows a corner sofa A. It is moved by the vector $\begin{pmatrix} 3 \\ -5 \end{pmatrix}$.
Draw the sofa in its new place.



13

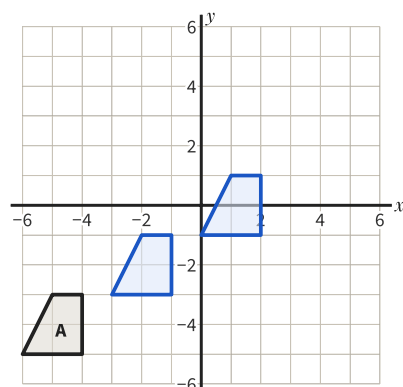
Shape A is translated so that corner P moves to the point Q. Draw the image of A.



Answer the vector $\begin{pmatrix} 5 \\ -5 \end{pmatrix}$

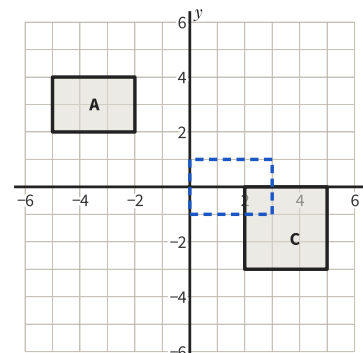
14

Tiles are painted up a wall beside some stairs. Each tile is the tile before translated by $\begin{pmatrix} 3 \\ 2 \end{pmatrix}$. Draw the next two tiles after A.



15

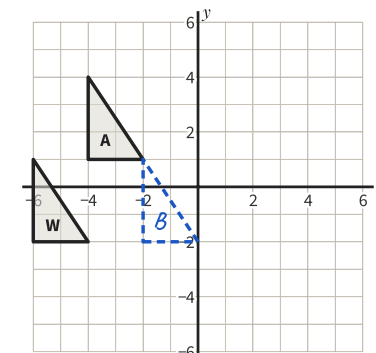
A forklift moves crate A by the vector $\begin{pmatrix} 5 \\ -3 \end{pmatrix}$. Will crate A overlap crate C in its new place? Show how you know.



Answer Yes, they overlap

16

Tia translates shape A by $\begin{pmatrix} 2 \\ -3 \end{pmatrix}$. She draws shape W. Explain Tia's mistake.



Answer she moved 2 left, not 2 right