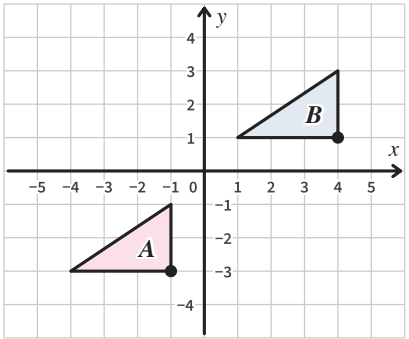
Describing translations

1

Describe fully the single transformation that maps shape A onto shape B.



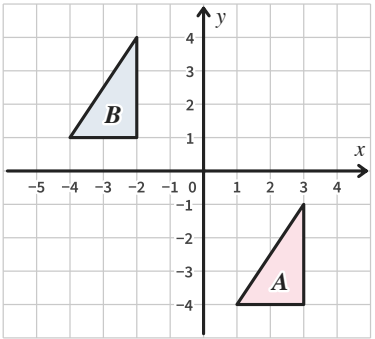
across first: 5 right

then up or down: _____

Translation by the vector _____

2

Describe fully the single transformation that maps shape A onto shape B.



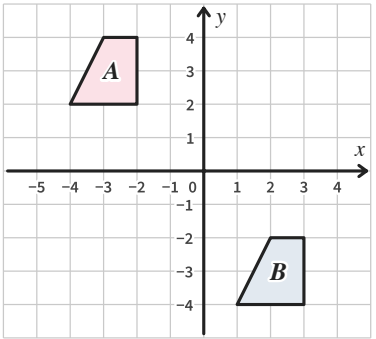
across first: _____

then up or down: _____

Translation by the vector _____

3

Describe fully the single transformation that maps shape A onto shape B.



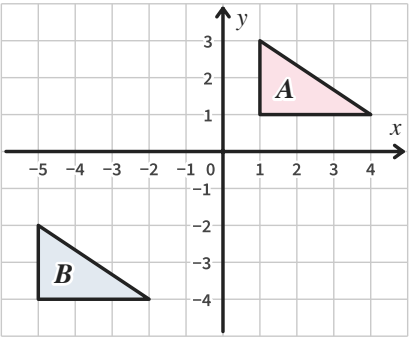
across first: _____

then up or down: _____

Translation by the vector _____

4 *Notice the change!*

Describe fully the single transformation that maps shape **B** onto shape **A**.

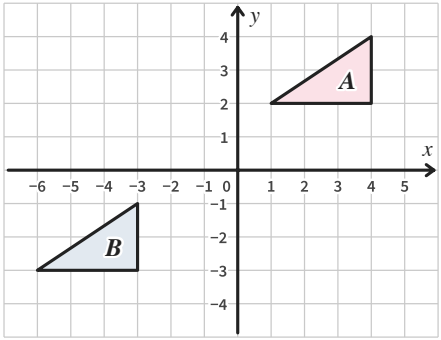


start at B: _____

Translation by the vector _____

5

Describe fully the single transformation that maps shape A onto shape B.

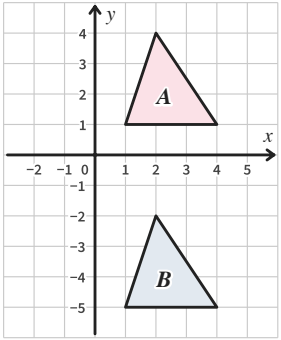


_____

_____

6

Describe fully the single transformation that maps shape A onto shape B.

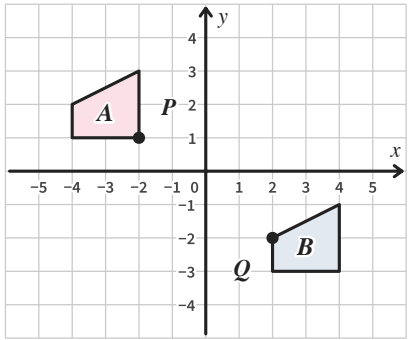


_____

_____

7

Mo counted from P to Q and wrote Translation by $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$. Explain his mistake.

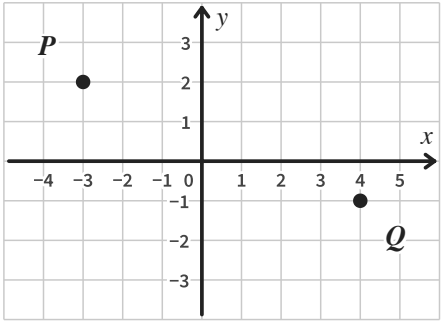


mistake: _____

it is: _____

8

Point P is translated to point Q. Write the column vector of the translation.



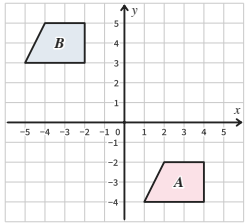
_____

The vector _____

Describing translations *further practice*

9

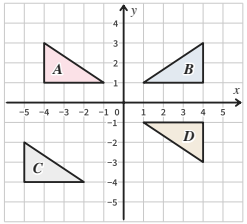
Describe fully the single transformation that maps shape A onto shape B.



Answer _____

10

Which shape is a translation of shape A?
Describe that translation fully.



Answer _____

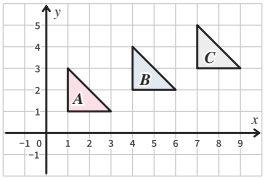
11

Shape A is translated onto shape B.
The corner (−2, 5) of A moves to the corner (6, 1) of B.
Describe fully the translation.

Answer _____

12

Tile A moves to B, then B to C, by the same vector. Write the vector.
Then describe fully the translation from A to C.



Answer _____

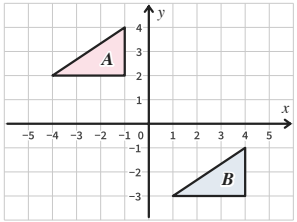
13

A counter moves by $\begin{pmatrix} 3 \\ -2 \end{pmatrix}$, then by $\begin{pmatrix} -7 \\ 5 \end{pmatrix}$. Write the single column vector that takes it straight from start to finish.

Answer _____

14

Leo was asked for the translation that maps A onto B. He wrote $\begin{pmatrix} -5 \\ 5 \end{pmatrix}$.
Explain Leo's mistake.



Answer _____

15

A floor robot moves by the vector $\begin{pmatrix} 3 \\ 2 \end{pmatrix}$ four times. Describe fully the single translation from where it starts to where it stops.

Answer _____

16

Ella says that a translation by $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$ and a translation by $\begin{pmatrix} -3 \\ 4 \end{pmatrix}$ move a shape to the same place, because they use the same numbers. Is Ella right? Explain.

Answer _____