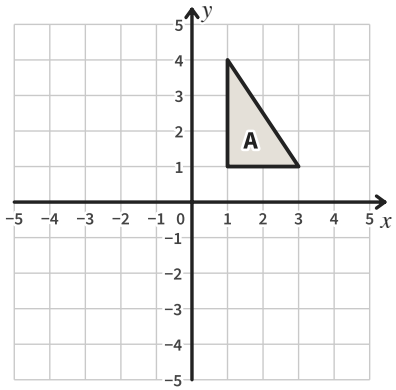
Reflecting shapes

1

Reflect shape A in the y axis.
Label the image B.

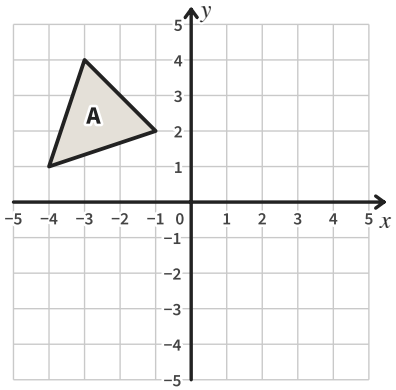


mirror line: the y axis

(3, 1) → (−3, 1)

2

Reflect shape A in the x axis.
Label the image B.

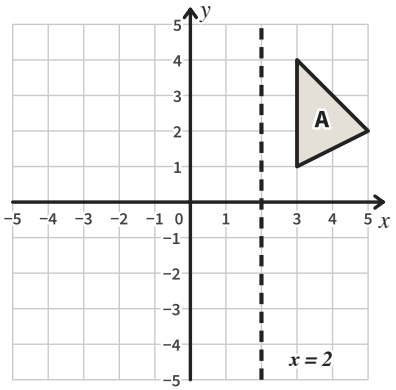


mirror line: the x axis

(−1, 2) →

3

Reflect shape A in the line $x = 2$.
Label the image B.

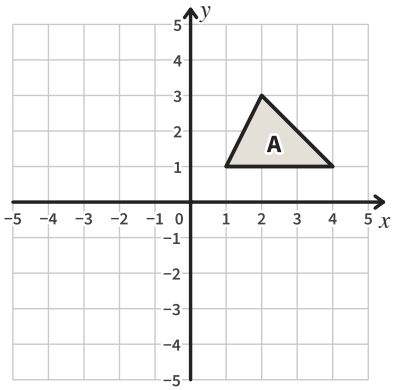


mirror line:

(3, 4) →

4

Draw the line $y = -1$. Reflect shape A in it.
Label the image B.

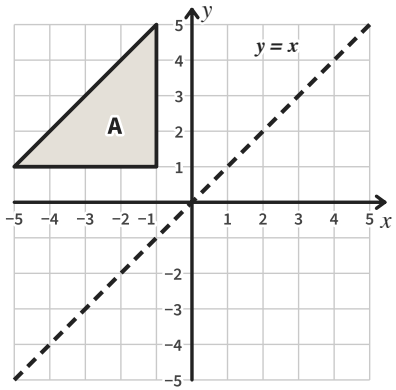


mirror line:

(2, 3) →

5

Reflect shape A in the line $y = x$.
Label the image B.

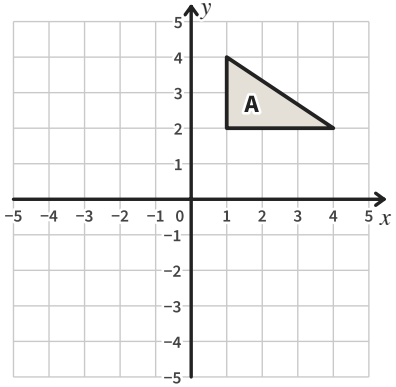


(−5, 1) →

check:

6

Reflect A in the y axis. Label it B.
Then reflect A in the x axis. Label it C.

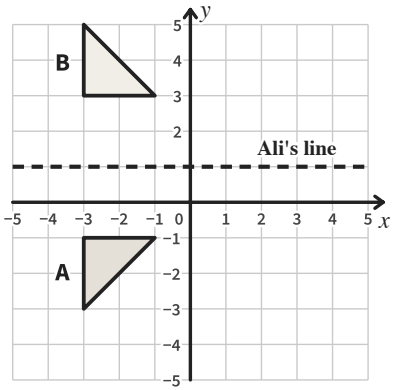


B: (4, 2) →

C: (4, 2) →

7

Ali reflects A in the line $x = 1$ and gets B.
Explain his mistake.



mistake:

$x = 1$ is:

8

A triangle has corners (2, 1), (4, 1) and (4, 3). It is reflected in the line $x = 1$.
Write down the corners of the image.

(2, 1) →

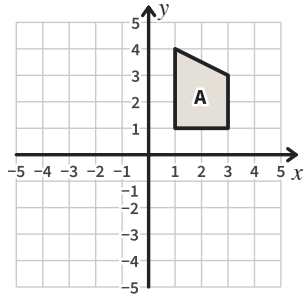
(4, 1) →

(4, 3) →

Reflecting shapes *further practice*

9

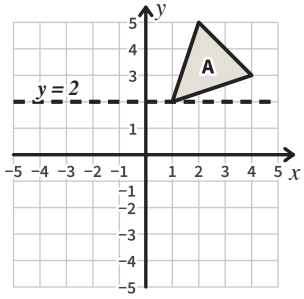
Reflect shape A in the line $x = -1$.
Label the image B.



Answer _____

10

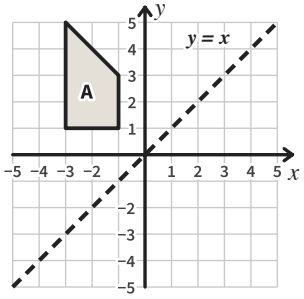
Reflect shape A in the line $y = 2$.
Label the image B.



Answer _____

11

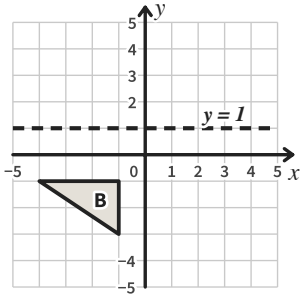
Reflect shape A in the line $y = x$.
Label the image B.



Answer _____

12

Shape B is the reflection of shape A in the line $y = 1$. Draw shape A.



Answer _____

13

Zara folds a coordinate grid along the line $x = 2$. The point (5, 2) lands on another point. Which one?

Answer _____

14

On a garden plan, a path runs along the line $x = -1$. A flower bed has corners (1, 2), (3, 2) and (3, 4). A matching bed is its reflection in the path. Write down its corners.

Answer _____

15

Ravi is making a tile pattern. He reflects the point (3, −2) in the x axis, then reflects that point in the y axis. Where does it end up?

Answer _____

16

Leah says that when a shape is reflected in the y axis, each x coordinate changes sign and each y coordinate stays the same. Is she right? Explain, using the corner (3, 2).

Answer _____