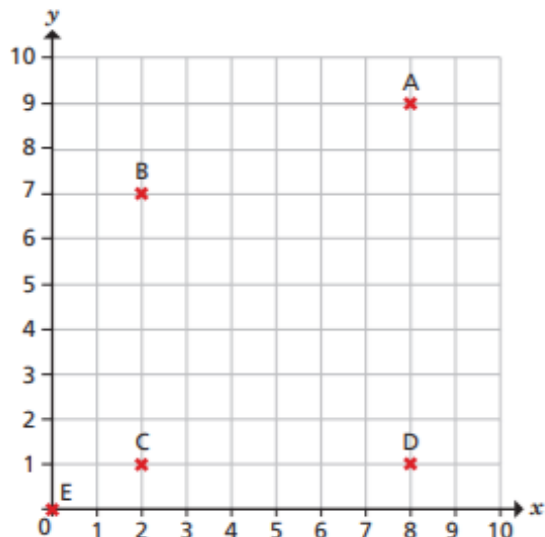


3 Five points are drawn on a grid.



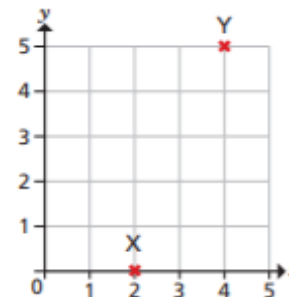
Complete the sentences to describe the translations.

- a) C to D is a translation  right.
- b) A to D is a translation  down.
- c) E to C is a translation  right and  up.
- d) C to A is a translation  \_\_\_\_\_ and  \_\_\_\_\_
- e) A to B is a translation  \_\_\_\_\_ and  \_\_\_\_\_

How many other translations can you describe from the grid?



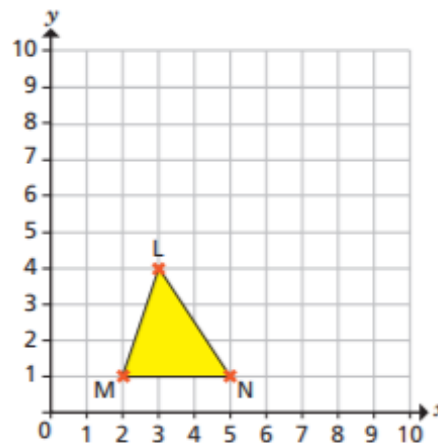
4 Two points, X and Y, are shown on the grid.



- a) Describe the translation from X to Y.  
\_\_\_\_\_
- b) Describe the translation from Y to X.  
\_\_\_\_\_

What do you notice? Does this always happen?

5 A triangle is drawn on the grid.



It is translated so that the vertex M moves to (7, 4).

- a) Describe the translation.  
\_\_\_\_\_
- b) Draw the translated triangle on the grid to show its new position. Create your own problem like this for a partner.