

Communicating about Transformations

GOAL

Describe transformations using math language.

transformation

The result of moving a shape according to a rule; when a shape is moved, the result is called the image

For example, **translations**, **reflections**, and **rotations** are transformations.

Mateo is explaining to his friend Stefan how

transformations

are the same and how they are different.



How can you describe transformations?

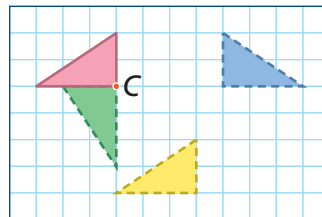


Mateo's Descriptions

I translated the pink triangle and coloured it yellow. I moved it down and to the right.

I reflected the pink triangle and coloured it blue. The line of reflection is in the middle, and the image is facing the other way.

I rotated the pink triangle and coloured it green. The turning point is C, and it's a quarter turn.



Communication Checklist

- ✓ Did you use math language?
- ✓ Did you include diagrams?
- ✓ Did you show the right amount of detail?

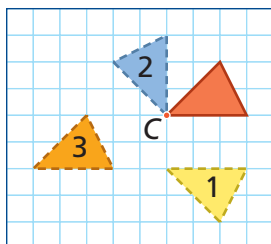
- A.** What is good about Mateo's descriptions? Use the Communication Checklist.
- B.** How can you improve Mateo's descriptions?

Reflecting

- C.** What information do you need to include when describing each type of transformation?

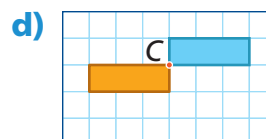
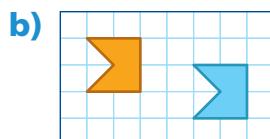
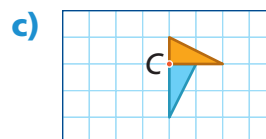
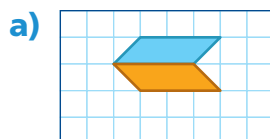
Checking

- 1.** Improve each description of the transformations shown at the left. Use the Communication Checklist to help you.
- a)** Triangle 1 is a flip of the red triangle.
 - b)** Triangle 2 is a turn of the red triangle.
 - c)** Triangle 3 is a slide of the red triangle.

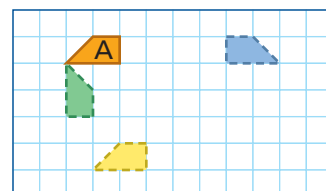


Practising

- 2.** Describe how you can transform each orange shape to cover the blue shape.



- 3.** Describe each transformation of shape A. Use the Communication Checklist to help you.



- 4.** How can you improve each description?
- a)** Ashley: I moved shape A down and to the right.
 - b)** Mateo: I reflected shape A across a line of reflection.
 - c)** Rachel: I rotated shape A counterclockwise.

