

Spotlight On: Collaborative Learning

Collaborative learning is one of the pillars of *Inspiring Connections*. The Prelude and Chapter 1 introduced several teamwork strategies and routines that students will continue to use throughout the course. These strategies and routines help students learn mathematics and communicate effectively with their teammates.

The Big Picture

Growing From

Rigid transformations;
Graphing linear relationships

Working On

Rigid transformations with
coordinates;
Dilations and similar figures;
Interpreting a point of intersection on
a graph

Growing To

Congruence of polygons on a
coordinate plane;
Systems of equations

Need Help?

Methods & Meanings boxes are included in the Mathematician's Notebook as reference.

2.1.2: Rigid Transformations

2.2.5: Corresponding Parts of Similar
Shapes

2.3.1: Dilations

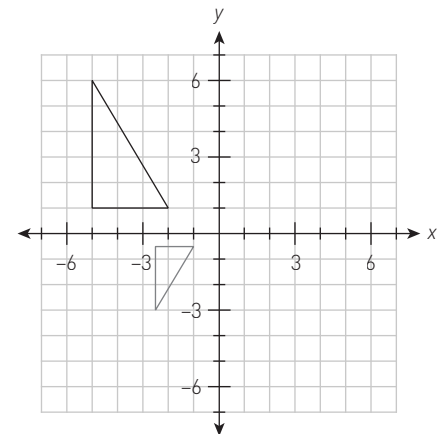
Current Topics

This chapter starts with a deeper look at the transformations that students investigated in Section 1.2 and adds a transformation called “dilation,” which is related to scaled figures from a prior course. Later in the chapter, students practice plotting and interpreting points and connecting visual and other representations.

Rigid Transformations (Section 2.1) and Similarity (Section 2.2)

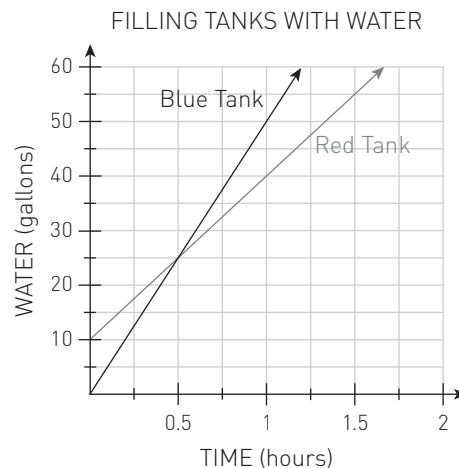
In Section 2.1, students work with rigid transformations: translation (slide), reflection (flip), and rotation (turn). Students describe the effect each of these transformations has on the coordinates of a shape.

In Section 2.2, students continue to work with transformations, focusing on dilations. In a previous course, students worked with similar figures using scale factors. In this course, students work with similarity in the coordinate plane by connecting the concept of similarity to dilations.



Graphing Systems of Equations (Section 2.3)

In this section, students revisit graphing linear equations, this time by graphing two lines on the same set of axes. They make sense of the point of intersection of the two lines. In Chapters 5 and 6, they will connect the point of intersection to the solution of a system of equations.



Try This at Home!

Look for patterns with repeating shapes, such as stones on a walking path or tiles on a bathroom floor. Talk with your student about how each shape in the pattern is placed. Maybe one shape is a rotation of another, or a shape could fit onto another if you slid it into position (a movement called a translation).

