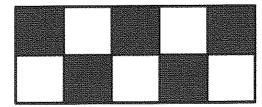
G3-M7-Lesson 31

1. Use the rectangle below to answer Problem 1 (a)–(d).



a. What is the area of the rectangle in square units?

The area of the rectangle is 10 square units.

I can find the area by multiplying the side lengths.

$$2 \times 5 = 10$$

Or, I can count the square units. Either way the answer is the same!

b. What is the area of half of the rectangle in square units?

$$10 \div 2 = 5$$

The area of half of the rectangle is 5 square units.

I can divide the total area by 2 to find the area of half of the rectangle.

c. Shade in half of the rectangle above. Be creative with your shading!

I can use my answer to part (b) to help me shade in half of the rectangle.

d. Explain how you know you shaded in half of the rectangle.

I know I shaded in half of the rectangle because I shaded 5 square units and the area of half of the rectangle is 5 square units.

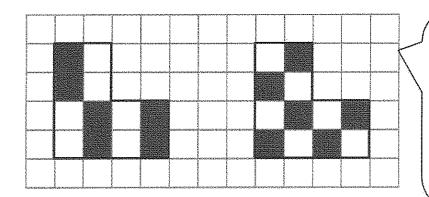
2. During art class, Mia draws a shape and then shades one-half of it. Analyze Mia's work. Determine if she was correct or not, and explain your thinking.

Mia's Drawing	Your Analysis
	Mia did not correctly shaded one-half of her drawing. There is less than one-half of the drawing shaded because of the unshaded heart in the shaded part of the drawing. She needs to shade a same-sized heart in the unshaded part to show one-half shaded.

I can picture what Mia's drawing might look like if she had shaded it correctly. It might look like this:



3. Shade the grid below to show two different ways of shading half of each shape.



I can find the total area for each shape by counting the square units. Then I can divide that number by 2 to figure out how many square units to shade in order to show one-half. I can shade in 6 square units for each shape.

$$12 \div 2 = 6$$

Lesson 31:

Explore and create unconventional representations of one-half.