Unit 5 Lesson 10: Solutions to Linear Equations

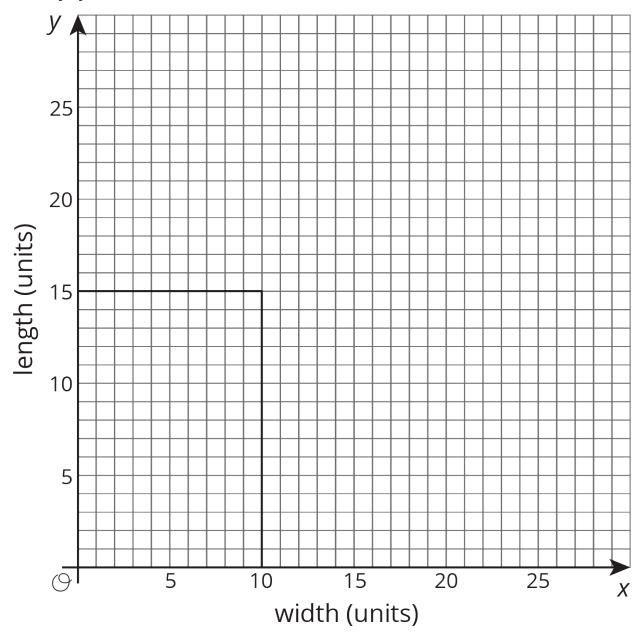
1 Same Perimeter (Warm up)

Student Task Statement

There are many possible rectangles whose perimeter is 50 units. Complete the first 3 entries of the table with lengths, ℓ , and widths, w.

ℓ					
w					

Activity Synthesis



2 Apples and Oranges

Student Task Statement

At the corner produce market, apples cost \$1 each and oranges cost \$2 each.

- 1. Find the cost of:
 - a. 6 apples and 3 oranges
 - b. 4 apples and 4 oranges
 - c. 5 apples and 4 oranges
 - d. 8 apples and 2 oranges

- 2. Noah has \$10 to spend at the produce market. Can he buy 7 apples and 2 oranges? Explain or show your reasoning.
- 3. What combinations of apples and oranges can Noah buy if he spends all of his \$10?
- 4. Use two variables to write an equation that represents \$10-combinations of apples and oranges. Be sure to say what each variable means.
- 5. What are 3 combinations of apples and oranges that make your equation true? What are three combinations of apples and oranges that make it false?

3 Solutions and Everything Else

Student Task Statement

You have two numbers. If you double the first number and add it to the second number, the sum is 10.

- 1. Let *x* represent the first number and let *y* represent the second number. Write an equation showing the relationship between *x*, *y*, and 10.
- 2. Draw and label a set of *x* and *y*-axes. Plot at least five points on this coordinate plane that make the statement and your equation true. What do you notice about the points you have plotted?
- 3. List ten points that do *not* make the statement true. Using a different color, plot each point in the same coordinate plane. What do you notice about these points compared to your first set of points?