

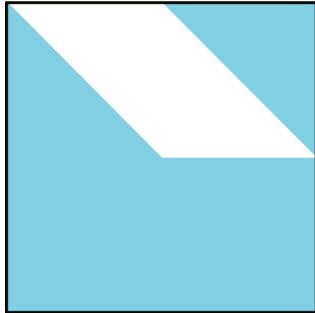
## Unit 3 Lesson 12: Solutions to Linear Equations

### 1 Estimate Area (Warm up)

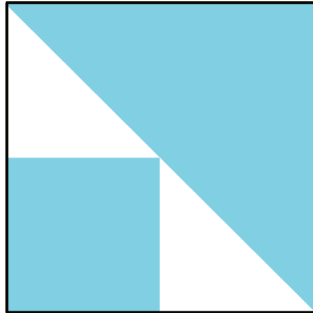
#### Student Task Statement

Which figure has the largest shaded region?

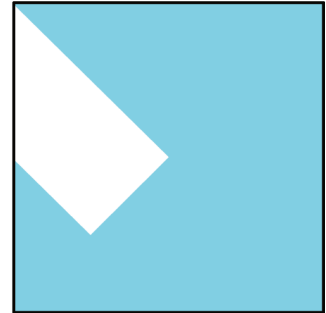
A



B



C



## 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?