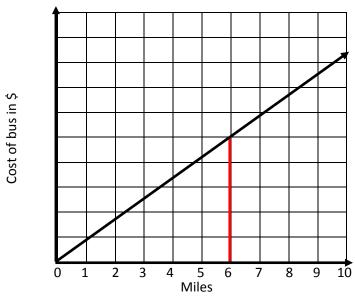
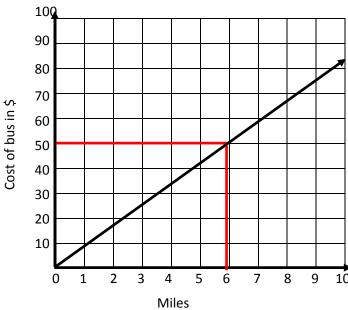
# Functions as Inputs and Outputs - Guided Lesson Explanation

# Explanation#1

Find 6 miles on the x-axis. Move up until you intersect the graph.



Now move left until you intersect the y-axis.



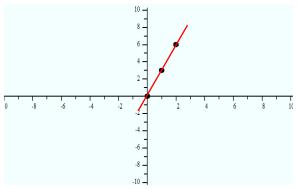
You intersect the y-axis at 50 dollars.

If Kenny goes 6 miles, he will spend \$50.

### Explanation#2

Step 1) Graph the points as they are listed (0,0) (1,3) (2,6)

Step 2) We can graph a function by plotting ordered pairs.



The graph of the function is the straight line connecting the pairs.

## Explanation#3

The first x value in the table is -5.

Evaluate f(x) = 2x+5 for x=-5

$$f(x) = 2x + 5$$

$$f(x) = 2(-5) + 5$$

(x = -5 in the table)

$$f(x) = -10 + 5$$

When 
$$x = -5$$
, So  $f(x) = -5$ 

Complete the first row of the table.

The second x value in the table is -1.

Evaluate f(x) = 2x + 5 for x = -1

$$f(x) = 2x + 5$$

$$f(x) = 2(-1) + 5$$

(x = -1 in the table)

$$f(x) = -2 + 5$$

When 
$$x = -1$$
, So  $f(x) = 3$ 

Complete the second row of the table.

Name \_\_\_\_\_

Date \_\_\_\_\_

The second x value in the table is 1.

### The third x value in the table is 1.

Evaluate f(x) = 2x + 5 for x = 1

$$f(x) = 2x + 5$$

$$f(x) = 2(1) + 5$$

(x = 1 in the table)

$$f(x) = 2 + 5$$

When 
$$x = 1$$
, So  $f(x) = 7$ 

Complete the third row of the table.

### The fourth x value in the table is 5.

Evaluate f(x) = 2x + 5 for x = 4

$$f(x) = 2x + 5$$

$$f(x) = 2(5) + 5$$

(x = 5 in the table)

$$f(x) = 10 + 5$$

When x = 5, So f(x) = 15