

## **Guided Notes 2: Section 3.3 (Part1)**

### **I. Vocabulary (Fill in the definition)**

A) Independent Variable:

B) Dependent Variable:

*Complete the following statements*

C) The value of the \_\_\_\_\_ depends on, or is a function of the value of the \_\_\_\_\_.

### **II. Identify the Dependent and Independent Variables in each of the following (Complete the statements by filling in the blanks):**

A) In winter, more electricity is used when the outside temperature goes down, and less is used when the outside temperature rises.

So, the \_\_\_\_\_ depends on the \_\_\_\_\_.

Dependent:

Independent:

B) The cost of shipping a package is based on its weight.

The \_\_\_\_\_ depends on the \_\_\_\_\_.

Dependent:

Independent:

C) The faster Tom walks, the quicker he gets home.

The \_\_\_\_\_ depends on the \_\_\_\_\_.

Dependent:

Independent:

D) Reflect:

- 1) Give a situation where “time” is the dependent variable and “distance” is the independent variable.
  
  
  
  
  
  
  
  
  
  
- 2) Example A, how do we know that the amount of electricity used is not the independent variable?

**III. Functional Notation (Complete the Table)**

The dependent variable	is		
	is	a function of	$x$
$Y$	=		

**IV. Write an equation in function notation.**

A) Amanda baby sits and charges \$5 per hour.

(Fill in the chart)

Time worked in Hours ( $x$ )				
Amount Earned in Dollars ( $y$ )				

The \_\_\_\_\_ is \$5 time the \_\_\_\_\_.

B) Define Function Rule:

C) Write an equation using two variables to show this relationship.

Amount earned is \$5 times the number of hours worked.

\_\_\_\_\_ = \_\_\_\_\_ x \_\_\_\_\_

D) Write the equation in function notation.

E) Reflection:

- 1) Can  $y$  be used instead of  $f(x)$  in function notation? If so, tell why. If not, give an example of a function not written in function notation and the same function written in function notation.