CHECK HOMEWORK

Quiz Tuesday

- Is it a function?
- Function Notation f(x)
- Writing a Function and Describe the Independent and Dependent Variables
- Function Notation and Graphs

WHITEBOARDS

- **Write a rule in function notation to model the situation. Describe what the input and output represent.**

- Herb is buying pizzas. Each pizza costs $12.

c(x) = 12x

Input: # of pizzas
Output: Total cost

- **Write a rule in function notation to model the situation. Describe what the input and output represent.**

- Kim walks 4 miles every hour.

m(x) = 4x

Input: # of hours
Output: # of miles walked

- **Write a rule in function notation to model the situation. Describe what the input and output represent.**
- There are 100 brownies on a tray. 2 brownies are eaten every minute.

b(x) = 100 – 2x
b(x) = 2x

Input: minutes
Output: # of brownies left OR # of brownies eaten

- **Write a rule in function notation to model the situation. Describe what the input and output represent.**
- Willard has $150 to spend on iTunes. He is downloading songs, each of which cost $1.29.

f(x) = 150 – 1.29x
f(x) = 1.29x

Input: # of songs downloaded
Output: amount of money spent (or amount of money he has left)

Independent vs Dependent Variables

- **The input of a function is the independent variable**
- **The output of a function is the dependent variable**
- *The value of the dependent variable depends on, or is a function of, the value of the independent variable*

- **Write a rule in function notation to model the situation. Give the independent and dependent variables:**

- Amanda babysits and charges $5 per hour.

f(x) = 5x

Independent: # of hours
Dependent: total amount charged

- **Write a rule in function notation to model the situation. Give the independent and dependent variables:**

- An amusement park charges a $5 fee for parking and $30 per person.

f(x) = 30x + 5

Independent: # of people
Dependent: total amount charged

- A lawyer's fee is $180 per hour for his services.

Find f(5). What does it mean in this situation?

f(5) = 900. It means for 5 hours the lawyer will charge $900.

- **Write a rule in function notation to model the situation. Give the independent and dependent variables:**
- Jenna's parents have given her an interest-free loan of $100 to buy a new pair of shoes. She plans to pay back the loan with monthly payments of $20 each.

j(x) = 100-20x
j(x) = 20x

Independent: minutes
Dependent: amount of money left to pay OR amount of money earned

- Jenna's parents have given her an interest-free loan of $100 to buy a new pair of shoes. She plans to pay back the loan with monthly payments of $20 each.

j(x) = 100-20x

Find j(3). What does it mean in terms of the situation?

j(3) = 40. It means she has $40 left to pay her parents after 3 months.

GRAPHS AND FUNCTION NOTATION

Reading inputs and outputs from a graph!!!

Homework

- Worksheet