EQUATIONS OF FUNCTIONS

BELL WORK

Each month Jean's phone bill includes a basic fee of $25 plus a charge of $0.07 per minute for the number of minutes of long-distance calls she makes. If Jean's monthly bill was $33.75, how many long-distance minutes did Jean use? And write a dependency statement for her monthly bill and number of minutes used.

Example 1: At a rental company, small trucks rent for $19.99 and a charge of $0.25 per mile is added. Write a function to find "c" the cost of renting a small truck for "m" miles.

Write the equation: _____ Write in function notation: _____

_____depends on _____

Independent variable :_____

Dependent variable: _____

What would it cost to rent the truck to drive 32 miles?

If the cost for renting the truck "m" miles is $300.50, how many miles was the truck driven?

Equation:_____ Answer: _____

Example 2: The shipping and handling charges for a mail order company are $2.75 fixed charge and $0.50 per pound. Write a function to find "C" the cost of mailing an order weighing "p" pounds.

Write the equation: _____ Write in function notation: _____

Independent variable: _____ Dependent variable: _____

_____is a function of _____

What is the value of C(20)?

Meaning of this question in words: _____

C(20) = _____

What is the value of p if C(p) = 56?

Meaning of this question in words: _____

Equation:_____ Answer: _____

Example 3: A store manager begins each shift with the same total amount of money. She keeps $200 in a safe and distributes the rest equally to the 5 cashiers in the store. This situation can be represented by the function y = $\frac{x-200}{5}$**.**

a) What does the variable x represent in this situation?

A. The total amount of money the manager has at the beginning of a shift.

B. The total amount of money the manager has at the end of the shift.

C. The amount of money each cashier has at the beginning of a shift.

D. The amount of money each cashier has at the end of a shift.

b) At the beginning of each shift, each cashier receives between $100 and $200. What is the domain of the function for this situation?