

Guided Notes 3: Section 3.3 (Part 2)

Complete notes with “*Modeling Functions with Domain and Range*” Video.

I. Recalling from Part 1

1) x is the _____.

y is the _____.

2) To write $y = 3x - 7$ in function notation, we replace _____ with _____, read “f of x”, to get _____.

II. For each example identify _____ and _____ variables. Write an equation in the function notation for each situation, then use the equation to solve the problem.

1) A lawyer fee is \$180 per hour for his services. How much does the lawyer charge for 5 hours?

Dependent:

Independent:

Variable:

Equation:

$f(5) =$ _____

2) The admission fee at a carnival is \$9. Each ride costs \$1.75. How much does it cost to go to the carnival and then go on 12 rides?

The _____ depends on the _____ plus \$9 admission.

Dependent:

Independent:

Variable:

Function:

If $r = 12$, what is $f(12) = ?$

$f(12) =$

It costs _____ to go to the carnival on _____ rides.

- 3) Kate earns \$7.50 per hour. How much money will she earn after working 8 hours?

Dependent:

Independent:

Function:

$$f(8) = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

So, Kate will earn _____ for working _____.

- III. Sometimes answers are not reasonable for the domain and range. For example, if you are representing length, or distance, you cannot have a _____. Or, when you're talking about people, you cannot have _____, or _____ answers.

- A) Write a function in function notation for each student find a reasonable domain and range for each function.

- 1) Manuel has already sold \$20 worth of tickets to the school play. He has 4 tickets left to sell at \$2.50 per ticket. Write a function for the total amount collected from ticket sales.

Variable:

Function:

Domain:

Range:

- 2) A telephone company charges \$0.25 per minute for the first 5 minutes of a call plus a \$0.45 connection fee per call. Write a function for the cost in dollars of making a call.

Variable:

Function:

Domain:

Range: