Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Introduction to Functions

Input and Output Values

Independent Practice

1. A giraffe’s hunger level depends on the size of its last meal.

*Part A:* What is the independent variable?

*Part B:* What is the dependent variable?

1. You earn per hour doing landscaping work. Your total earnings depend on the amount of hours you spend landscaping.

*Part A:* What is the independent variable?

*Part B:* What is the dependent variable?

*Part C:* Write a function to represent the situation.

1. Mr. Khans is buying staplers for his office. Each stapler costs .

*Part A:* What does his final total cost depend upon?

*Part B:*In this scenario, what is the input? What is the output?

*Part C:* Write a function to represent the situation.

*Part D:* If Mr. Khans buys staplers, it would cost him . How would you write this using function notation?

1. Cristiano Ronaldo has a messy house. The function that represents the total cost Cristiano spends having his house cleaned is *,* where represents the number of visits.

*Part A:* How much does Cristiano spend per visit?

*Part B:* Define the input and output in the given scenario.

1. Consider the following incomplete mapping diagrams.



*Part A:* Complete Diagram A so that it is a function.

*Part B:* Is it possible to complete Diagram B so that it is NOT a function. If so, complete the diagram to show a relation, but not a function. If not, justify your reasoning.

*Part C:* Is it possible to complete the mapping diagram for Diagram C so it represents a function? If so, complete the diagram to show a function. If not, justify your reasoning.

1. The cost to manufacture chairs can be represented by the function . Circle the pair of numbers (one in each box) that correctly completes the statement about the function.

6.

189.

378.

2,268.

0

6

63

378

If , then chairs cost $

1. Which of the following relations are not functions? Select all that apply.