

Chapter 5 Review

#1

Match the graph with the corresponding situation.

- The amount of milk in Jill's bowl as she poured milk into her empty bowl, ate the cereal, then drank the milk that was left.
- The speed of Sam's car as he started his car, increased his speed, slowed down for a stop sign, then increased again while on the interstate.
- The height of a tree that Heidi planted, then trimmed and allowed to grow again.



#2

Draw an example of a graph that could fit the following situations.

- The distance away from home as you walk to school and then walk back home
- The temperature throughout the day in April in Nebraska.
- The checking account balance as you deposit a check and then go shopping to two stores and write a check at each store.

#3

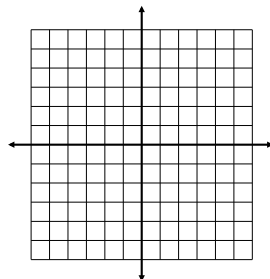
Are the following relations functions? Explain why or why not.

- | x | y |
|-----|-----|
| 1 | 4 |
| 2 | 4 |
| 3 | 6 |
| 4 | 9 |
- 

#4

Make a table of values and graph the function $y = 2x - 3$

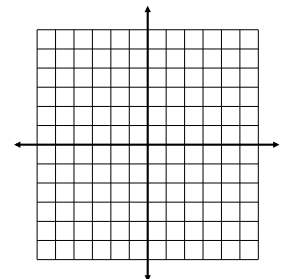
x	y
-2	
-1	
0	
1	
2	



#5

Make a table of values and graph the function $y = |x| + 3$

x	y
-2	
-1	
0	
1	
2	



#6

- a) List **three** words that correspond to “x”
- b) List **four** words that correspond to “y”

#7

Using the function $f(x) = x^2 - 1$ and the domain $\{-2, 0, 2, 4\}$, identify the range.

#8

Label the following situations as discrete graphs or continuous graphs.

- a) the graph of the growth (weight) of your pet guinea pig
- b) the graph of the number of students per class
- c) the graph of the speed of an airplane during a flight

#9

Write a rule for each function.

a)

x	y
-1	4
0	0
1	-4
2	-8

b)

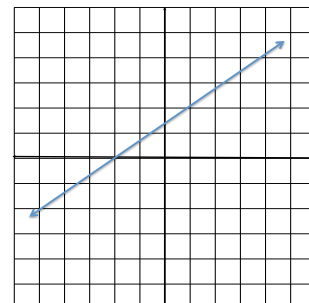
x	y
-1	0
0	2
1	4
2	6

#10

- a) Write a function rule to determine the cost of books that costs \$6.50 each.
- b) How much would it cost if you bought 5 books?
- c) If you spent \$26, how many books did you buy?

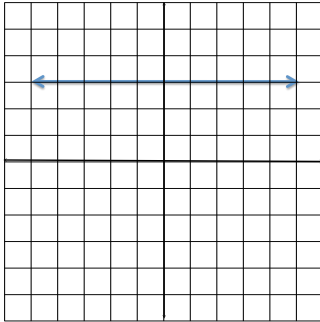
#11

Find the slope of the line.



#12

Find the slope of the line.



#13

Find the slope of the lines with the following ordered pairs:

- a. $(-5, 3)$ and $(4, 2)$
- b. $(0, 3)$ and $(1, -5)$

#14

Find the rate of change

The cost of a car was \$10,000 in 1986 and \$16,000 in 1990.

#15

a) Explain the difference between a discrete and a continuous graph.

Would the graphs of the following situations be discrete or continuous?

- b) the height of a tree per year
- c) the amount of money earned at a car wash per car