

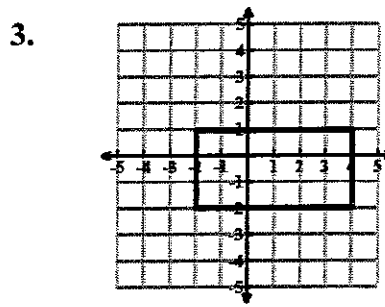
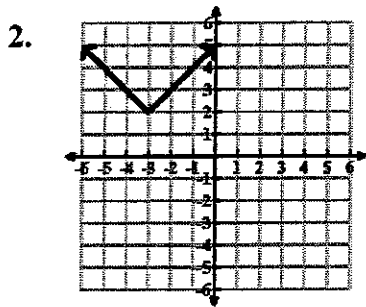
Function and Slope Review

1. Give the domain and range of each relationship. Determine whether or not each relationship is a function.

Input	Output
2	6
3	7
4	7
5	8

Domain: _____
 Range: _____
 Function: _____

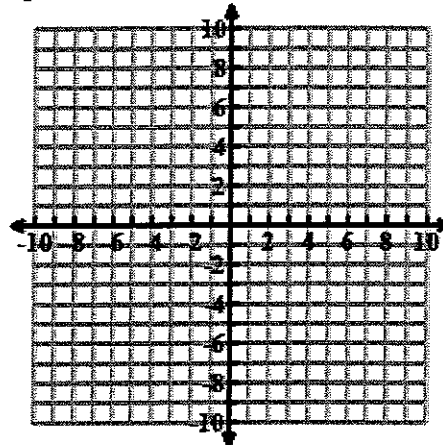
Determine if each graph represents a function. Explain your reasoning.



4. Use the function $f(x) = 4x - 1$.
 a. Complete the table below.

x	$f(x)$
-2	-9
-1	-5
0	-1
1	3
2	7

- b. Create a graph for the function. Connect the points with a line.



Determine the rate of change and y-intercept (start value) for each table. Write a linear equation that represents each table.

5.

x	y
0	12
1	10
2	8
3	6
4	4

Rate of Change: _____

Start Value: _____

Linear Equation: _____

6.

x	y
-2	-5
0	7
3	25
4	31
8	55

Rate of Change: _____

Start Value: _____

Linear Equation: _____

7. Sandy buys a laptop computer for \$800. Each year, the value of her laptop decreases by \$90.
- Write a recursive routine that describes the value of Sandy's laptop based on the number of years she has owned it.

Start Value: _____ Operation: _____

- Fill in the input-output table at right with the value of the laptop for the first four years.

Years x	Value (\$) y
0	
1	
2	
3	
4	

- How many years will it take before the laptop is not worth anything? Explain how you know your answer is correct.

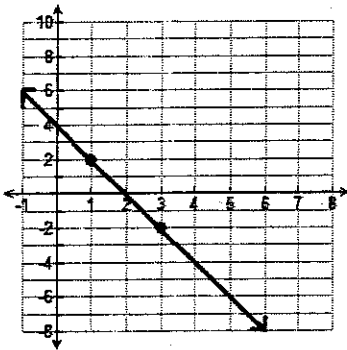
8. What is the rate of change and the y -intercept for the equation $y = 5x - 1.5$?

Rate of Change: _____ y -Intercept: _____

9. Write the linear equation for a line that has a y -intercept of 4 and a rate of change equal to 7?

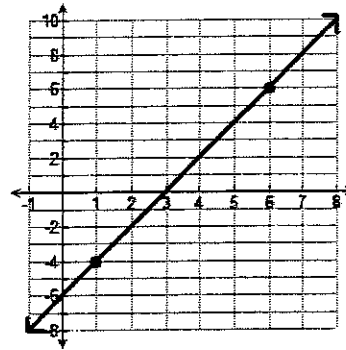
Find the slope of each line. Write in simplest form.

10.



Slope: _____

11.



Slope: _____

12. Molly said the slope of the line that passes through $(0, 2)$ and $(7, 13)$ was $\frac{4}{3}$. Do you agree with her? Show all work necessary to support your answer.

13. What is the slope of the line through $(3, 6)$ and $(6, 12)$?

14. What is the slope of the line that passes through $(6, 1)$ and $(8, 4)$?