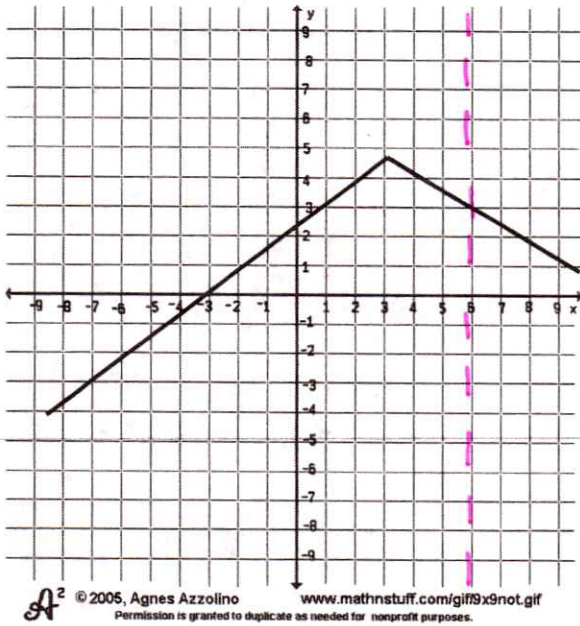


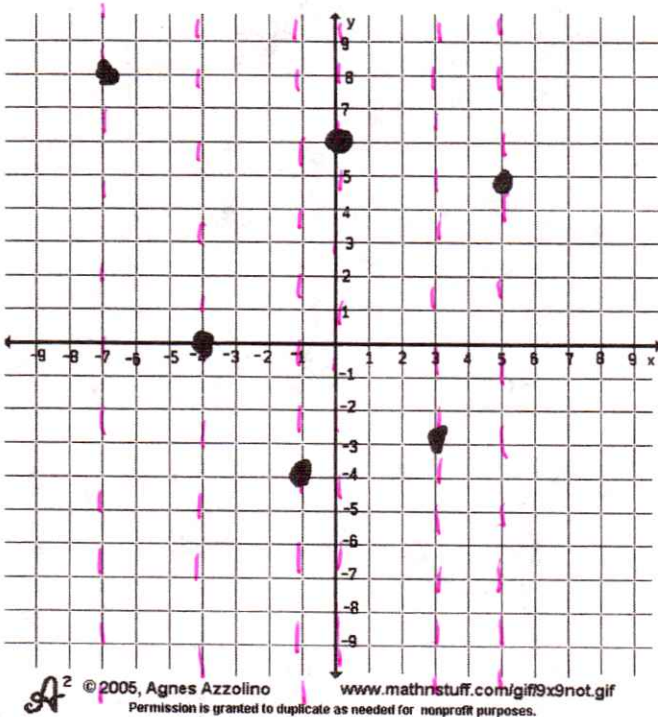
Unit 5 Day 1 Notes and Practice

Example:



yes, function
no vertical line drawn
will pass through graph
more than once.

Example:



-7	8
-4	0
-1	-4
0	6
3	-3
5	5

no x values repeat
yes, it's a function

Day 1-Intro to Functions

Name: _____

Practice Assignment

Date: _____ Block: _____

State the domain and range of the relation. Then determine if the relation is a function.

1.) $\begin{matrix} x & y & x & y & x & y & x & y \\ \{ & (1, & 2), & (4, & 3), & (5, & 9), & (-2, & 0) \} \end{matrix}$

2.)

$D: \{1, 4, 5, -2\} \xrightarrow{\text{in order}} \{-2, 1, 4, 5\}$
 $R: \{0, 2, 3, 9\}$
 Function

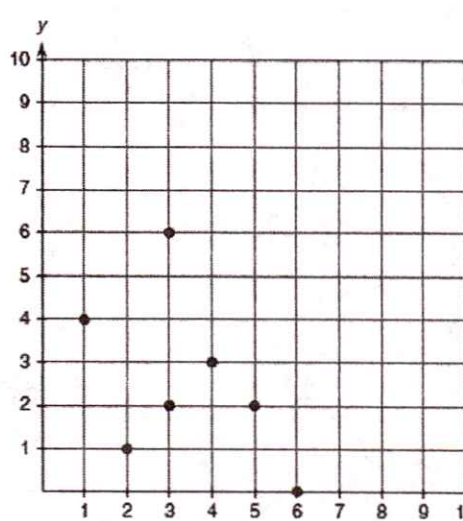
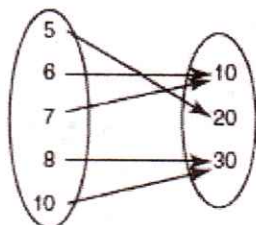
X	Y
8	1
6	2
5	3
8	4
7	5
3	3

$D: \{3, 5, 6, 7, 8\}$
 $R: \{1, 2, 3, 4, 5\}$

8 repeats - no function
 *does not matter if y's repeat

3.)

4.)



x	y
1	4
2	1
3	2
3	6
4	3
5	2
6	0

$D: \{5, 6, 7, 8, 10\}$
 $R: \{10, 20, 30\}$
 Function; x's do not repeat

No Function
 x's repeat

$D: \{1, 2, 3, 4, 5, 6\}$
 $R: \{0, 1, 2, 3, 4, 6\}$

Evaluating the function and show proper function notation:

5.) For $f(x) = 7x + 2$, find $f(0)$.

$f(0) = 7(0) + 2$

$f(0) = 2$

6.) For $k(p) = -\frac{1}{5}p + 7$, find $k(10)$.

$k(10) = -\frac{1}{5}(10) + 7$

$k(10) = 2$

7.) For $h(x) = 5x + 2$, find $h(-6)$.

$h(-6) = 5(-6) + 2$

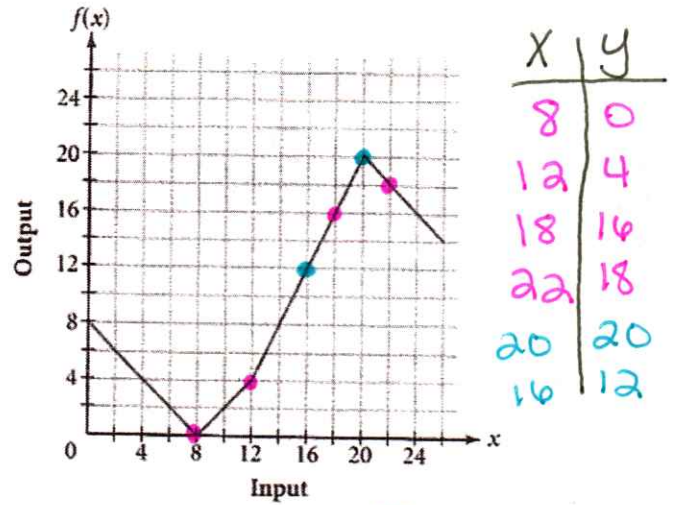
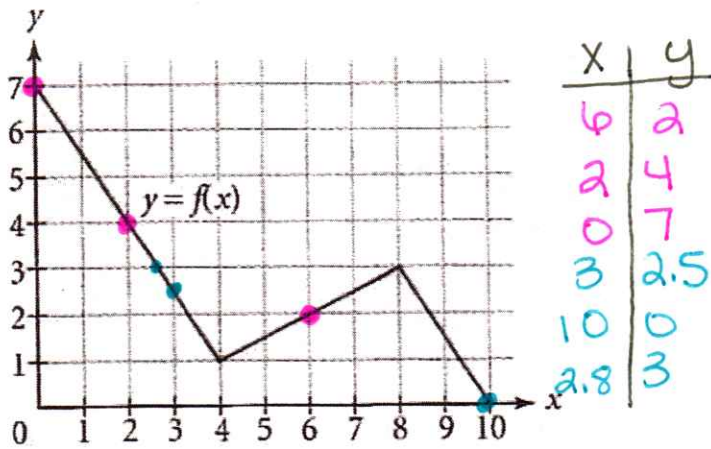
$h(-6) = -28$

8.) For $g(y) = -3y - 5$, find $g(-4)$.

$g(-4) = -3(-4) - 5$

$g(-4) = 7$

9.) Evaluate the function for the given values: 10.) Evaluate the function for the given values:



$f(x) = y$

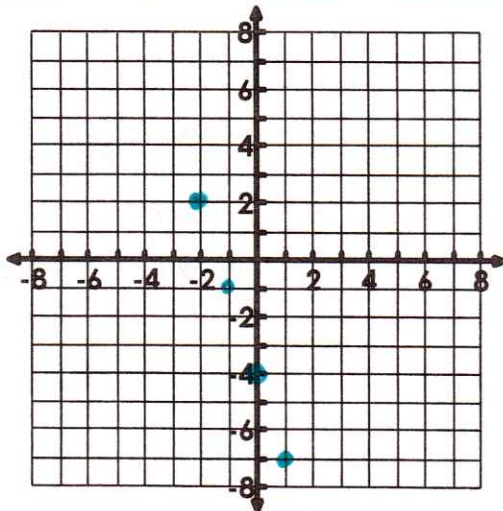
- a. $f(6) = 2$
- b. $f(2) = 4$
- c. $f(0) = 7$
- d. $f(3) = 2.5$
- e. $f(10) = 0$
- f. $f(2.8) = 3$

- a. $f(8) = 0$
- b. $f(12) = 4$
- c. $f(18) = 16$
- d. $f(22) = 18$
- e. $f(20) = 20$
- f. $f(16) = 12$

Graph the linear equation using a table of value. Use -2, -1, 0, 1, 2 as your input values.

11.) $g(x) = -3x - 4$

x (Input)		y (Output)
-2	$-3(-2) - 4$	2
-1	$-3(-1) - 4$	-1
0	$-3(0) - 4$	-4
1	$-3(1) - 4$	-7
2	$-3(2) - 4$	-10



12.) $h(x) = \frac{1}{2}x - 2$

x (Input)		y (Output)
-2	$\frac{1}{2}(-2) - 2$	-3
-1	$\frac{1}{2}(-1) - 2$	-2.5
0	$\frac{1}{2}(0) - 2$	-2
1	$\frac{1}{2}(1) - 2$	-1.5
2	$\frac{1}{2}(2) - 2$	-1

