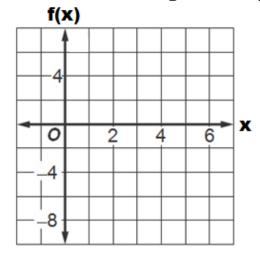
Do Now: What is the domain of the relation shown below?  $\{(4, 2), (1, 1), (0, 0), (1, -1), (4, -2)\}$ 

- 1) {0,1,4}
- (-2,-1,0,1,2)

- 3) {-2,-1,0,1,2,4}
- 4)  $\{-2, -1, 0, 0, 1, 1, 1, 2, 4, 4\}$

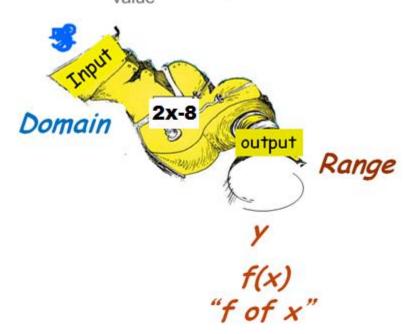
## Aim: How Do We Evaluate Functions Algebraically?

X	f(x)
0	-8
1	-6
2	-4
3	-2
4	0
5	2
6	4



The most popular function notation is f(x) which is read "f of x". This is **NOT** the multiplication of f times x..

$$f(x) = 2x-8$$
input
value
output value



If the questions asks to "find f(#)" then I need to			
1. Evaluate the following function: $f(x) = 2x + 13$			
Find f(4)	Find f(-1)		
2. Evaluate the following function: $h(x) = -3x + 3$	5		
Find h(12)	Find h(-10)		
3. Evaluate the following function: $g(x) = 4x^2 +$	7		
Find g(2)	Find g(-4)		

If the questions asks to	"find $f(x) = \#$ " the	hen I need to	
1	<b>、</b> /		

4. Evaluate the following function: f(x) = 2x + 3

Find $f(x) = 11$	Find $f(x) = -5$	
		ļ
		ļ

5. Evaluate the following function:  $g(x) = 3x^2 + 7$ 

Find $g(x) = 34$	Find $g(x) = 82$

- 6. Evaluate the following function: h(x) = -5x + 1
  - a) Find h(-8)

b) Find h(x) = -4

- 7. Evaluate the following function: f(x) = 3x + 4
  - a. Find f(2)

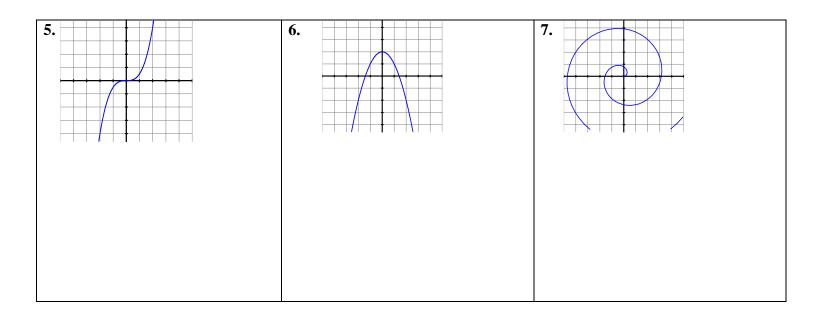
b. Find x if f(x) = 19

Name:	Date:
UNIT 6	LESSON 4

HW#\_

	HW#				
1.	Given: The function $f(x) = 4x + 1$ . a) What is $f(8)$ ?		Given: The function $g(x) = -3x + 2$ a) What is $g(-3)$ ?		
	b) What is $x$ when $f(x) = 25$ ?		b) What is x when $g(x) = 17$ ?		
3.	Given: The function $h(x) = x^2$ ? a) What is $h(-7)$ ?	4.	Given: The function $h(x) = x^2 - 2x$ . What is $h(5)$ ?		
	b) What is x when $h(x) = 144$ ?				

Directions: Determine if the following are functions. Write yes or no and explain your answer.



- 8. The function w(x) = 60x represents the number of words w(x) you can type in x minutes. How many words can you type in 9 minutes?
- 9. What is a value of x that makes the relation  $\{(2, 4), (3, 6), (x, 8)\}$  a function? Explain your answer.

- 10. Determine which relation is a function. Justify your answers.
  - a. The assignment of the members of a football team to jersey numbers.
  - b. The assignment of teachers to the students enrolled in each of their classes.

## **DON'T FORGET TEXTBOOK!!**