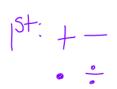
## 5.4 - Writing a Function Rule

## Vocabulary:

Function Rule - relates x to yProfit -x = 4x - 2Subtract any costs to you y = 4x - 2



2nd: 100kat my y's

3rd: try squaring x



## 1 EXAMPLE

Write a function rule for each table.

$$f(x) = x + 6$$

$$\frac{1}{2}$$
 $\frac{1}{2}$ 
 $\frac{1}{3}$ 
 $\frac{1}{2}$ 
 $\frac{1}{3}$ 
 $\frac{1}{4}$ 
 $\frac{1}{2}$ 
 $\frac{1}{4}$ 
 $\frac{1}{2}$ 
 $\frac{1}{4}$ 
 $\frac{1}{4}$ 

$$y = x^2 + 1$$

$$y = 3x + 12$$

## Match each table with its rule.

$$1. y = 4x$$

2.	y	=	х	_	4	Δ
----	---	---	---	---	---	---

	4	_	1)
_	1		U

Х	у
-2	-6
-1	-5
0	-4
1	-3

х	/ <b>y</b>
-1	/ -4
-2	-8
<del>/</del> 3	-12
-4	-16

<b>3.</b> <i>y</i>	=	-4	_	x	

C.	Х	У
	-1	-3
	0	-4
	1	-5
		_

- The journalism class makes \$25 per page of advertising in the yearbook. If the class sells *p* pages, how much money will it earn?
- a. Write a function rule to describe this relationship.

$$C(p) = 25p$$

b. The class sold 6 pages of advertising. How much money did the class make?



$$C(p) = 25.p$$
  
 $((6) = 25.6$ 



11. the total distance  $\underline{d(n)}$  traveled after  $\underline{n}$  hours at a constant speed of 45 miles per hour

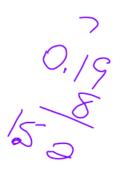
$$d(n) = 45n$$

The choir spent \$100 producing audio tapes of its last performance and will sell the tapes for \$5.50 each. Write a rule to describe the choir's profit as a function of the number of tapes sold.

$$P = 5.50 \pm -100$$

- 17. Food Costs At a supermarket salad bar, the price of a salad depends on its weight. Salad costs \$.19 per ounce.
  - a. Write a rule to describe the function.
  - **b.** How much would an 8-ounce salad cost?

a) 
$$y = 0.19n$$
  
b)  $y = 0.19(8)$   
= \$1.52



Homework: pg. 272 #4-14even, 24, 30, 45, 46, 48