

Lesson 4-4A: Functions
Algebra Bellwork - December 6, 2011

Is this relation a function?
If so, write a function rule.

Domain

x	f(x)
1	5
2	7
3	9
4	11

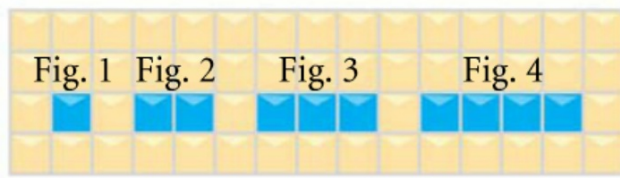
*an equation
that describes
a function*

$$F(x) = 2x + 3$$

Due Today: p.190 #9-17 odds, #46; p. 186 #1-10 all.
Due Tomorrow: 4-4A p.196 #1-13 all

**Objective: Today we will write function rules
for tables of values, and descriptions of
situations.**

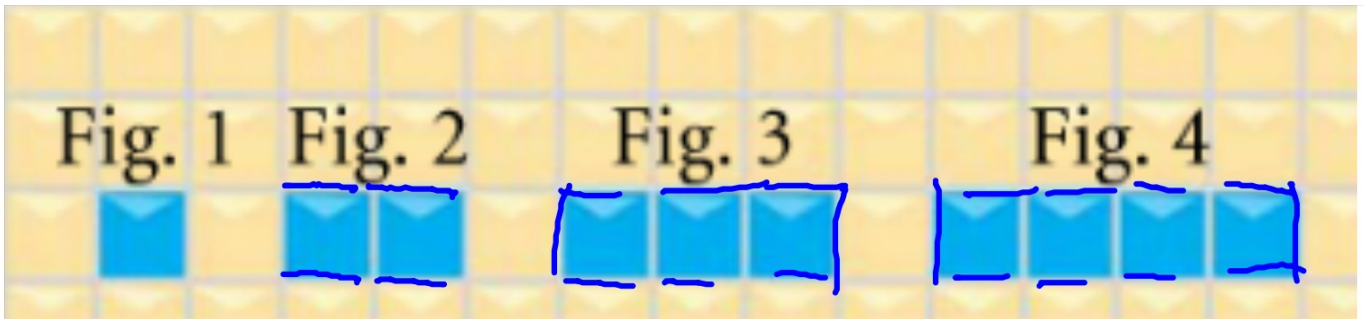
46. a. Make a table for the perimeters of the rectangles formed by each set of blue tiles.



- b. The perimeter $P(t)$ is a function of the number of tiles t . Write a rule for the data in your table and graph the function.

t	$P(t)$
1	4
2	6
3	8
4	10

$$P(t) = 2t + 2$$



$$p(t) = 2t + 2$$

18. Juan charges \$3.50 per hour for baby-sitting.

- Write a rule to describe how the amount of money M earned is a function of the number of hours h spent baby-sitting.
- Make a table of values.
- Graph the values and join the points with a line.
- Estimation** Use the graph to estimate how long it will take Juan to earn \$15.

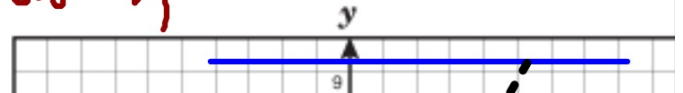
h	$M(h)$
1 $\times 3.50$	3.50
2 $\times 3.50$	7
3 $\times 3.50$	10.50
4 $\times 3.50$	14

? 5 $\times 3.50$ 17.50

Juan cobra \$ 3.50 por hora de cuidado de niños. Escribe una regla de función para describir la cantidad de dinero (M) que gana después de trabajar h horas ..

$$M = 3.50h$$

$$15 = 3.50h$$



Write a function rule for each situation.

10. the total cost $t(c)$ of c ounces of cinnamon if each ounce costs \$.79
11. the total distance $d(n)$ traveled after n hours at a constant speed of 45 miles per hour
12. the height $f(h)$ of an object in feet when you know the height h in inches
13. a worker's earnings $e(n)$ for n hours when the worker's hourly wage is \$6.37

$$\rightarrow t(c) = .79c$$