BE-1A TUESDAY 11-17-09

1. DEFINE: (A) domain
   (B) range

2. EXPRESS THE RELATION AS A table, graph, and mapping:
   $\{(-3,-1), (2,0), (-4,2), (-3,-5)\}$

3. Find the percent change to nearest whole percent:
   original: 200
   new: 210

In addition to a list, table, graph, and mapping, an EQUATION is an important way to express a relation in Algebra.

(Ex) $y = 3x + 1$

To show this is a relation, you need values of x (the domain) to find values of y (the range).

Find the (x, y) pairs for this equation if the domain is $\{-1, 0, 1, 2\}$

that is: $x = \{-1, 0, 1, 2\}$

Use a T-Table

x	$y = 3x + 1$	Relation (x, y)
-1	$3(-1) + 1 = -2$	$(-1, -2)$
0	$3(0) + 1 = 1$	$(0, 1)$
1	$3(1) + 1 = 4$	$(1, 4)$
2	$3(2) + 1 = 7$	$(2, 7)$

Ch. 4-4 Equations as Relations

Solve (find the relation) $y = x - 6$ if the domain is $\{-3, 4, 5, 12\}$

X	Y= X-6	(X, Y)
-3	(-3) -6 = -9	(-3, -9)
4	(4) -6 = -2	(4, -2)
5	(5) -6 = -1	(5, -1)
12	(12) -6 = 6	(12, 6)

* If your Equation is NOT solved for y, do this before starting your T-Table.

Ex 3 Pg 213

Solve and graph the relation

for $4x+2y=10$ $\quad X=\{-1,0,2,4\}$

[domain]

Solve for y: $4x+2y=10$

$-4x \qquad -4x$

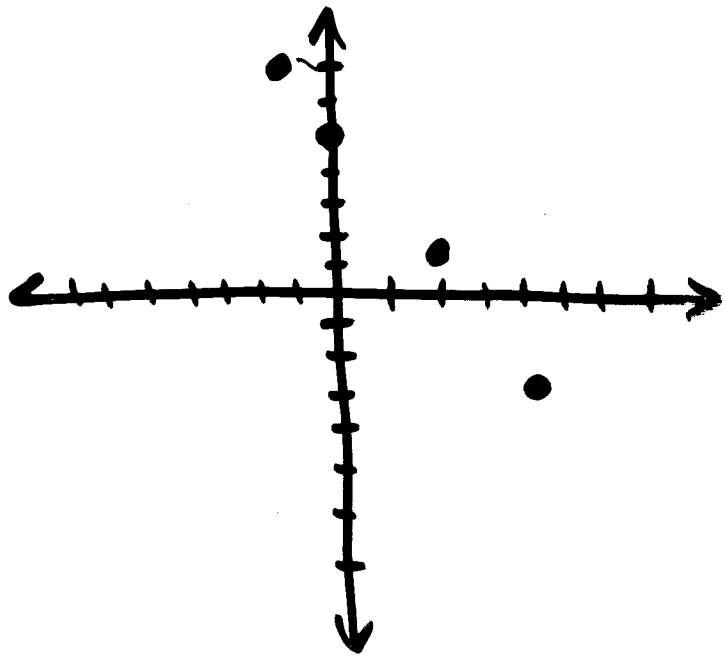
$$\frac{2y}{2} = \frac{10-4x}{2}$$

$$y = 5-2x$$

or $y=-2x+5$

T = Table

X	$y=-2x+5$
-1	$-2(-1)+5=7$
0	$-2(0)+5=5$
2	$-2(2)+5=1$
4	$-2(4)+5=-3$



Homework: Pg 214 #10
Pg 215 #32 and 33