

BE-1A TUESDAY 11-16-10

- ① DEFINE: ④ domain
⑥ 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

		RELATION
x	$y = 3x + 1$	(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 $4x + 2y = 10$ $x = \{-1, 0, 2, 4\}$
Domain

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

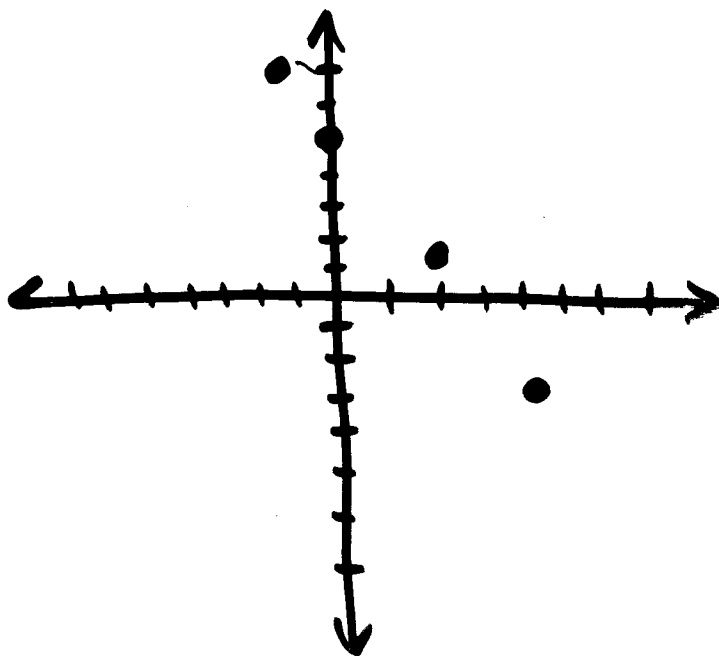
$$\frac{2y}{2} = \frac{10 - 4x}{2}$$

$$y = 5 - 2x$$

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