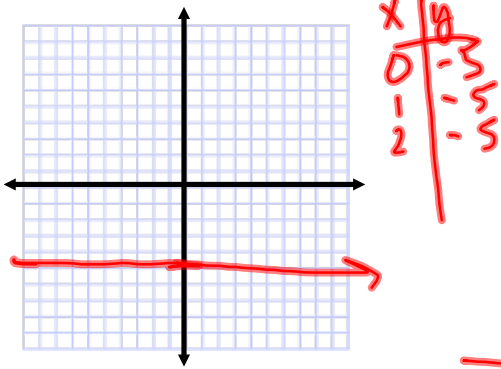**Algebra 5-2: Using Tables**

Warm-Up

1. Graph the line $y = -5$

$\dfrac{x \mid y}{0 \mid -5}$
$1 \mid -5$
$2 \mid -5$

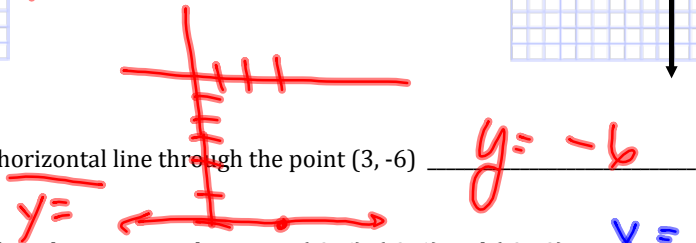2. Write an equation for the graph below.

$X = +6$

$\dfrac{x \mid y}{6 \mid 0}$
$6 \mid 1$
$6 \mid 2$
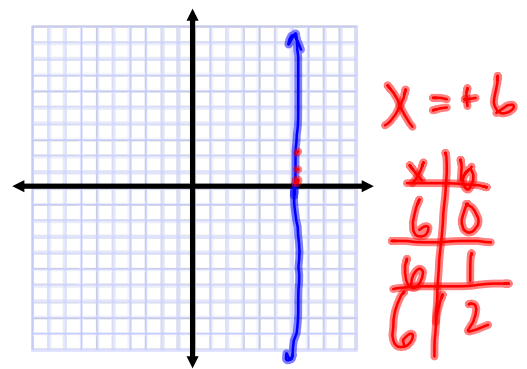
3. Write an equation for a horizontal line through the point (3, -6) ___$y = -6$___

$y =$

4. Write an equation for a line that contains the points (-3, 6), (-3, 1) and (-3, -3). ___$X = -3$___

$\dfrac{x\ y}{}\ \dfrac{x\ y}{}\quad x\ y$
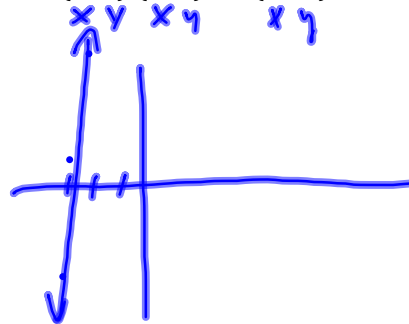
5-2 Using Tables

Vocab	Definition	Example
Table	• help us compare • help us plot points • has an x + y	x / y

Examples

$w = weeks$

1. Write an expression that represents the following situation.

    1. Steven starts with $40 and saves $8 every week. $40 + 8w$

    2. Anglea starts with $120 and spends $12 every week. $120 + -12w$

2. Make a table that shows when they will have the same amount of money.

w	Steven	Angela
0	40	120
1	48	108
2	56	96
3	64	84
4	72	72

They will have the same amount of money at 4 weeks.

3. Write an equation that represents the situation. $40 + 8w = 120 + -12x$
   (Hint: start with the expression from #1)

4. Tony purchased a sofa for $600 and made a deposit of $300. He will pay for the rest in monthly payments of $50.

a) Graph y = 600 on a coordinate plane to show the cost of the sofa.

b) Write an equation to represent the amount, y he has paid after x months. $y = 300 + 50x$

c) Graph your equation from part b on the same grid as part a.

d) Use the graph to determine when Tony will have completed his payments on the sofa.   6 mnths

e) Check you answer by solving an equation.

x	y
0	300
1	350
2	400
3	450

$y = 300 + 50x$

$600 = 300 + 50x$
$-300 \quad -300$
$\overline{}$
$\dfrac{300}{50} = \dfrac{50x}{50}$

$6 = x$

Money

Months

600
500
400
300
200
100

1 2 3 4 5 6 7 8 9
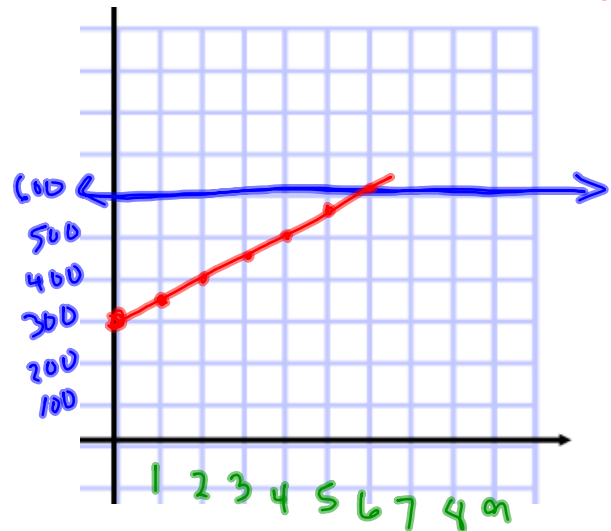
5. You are buying a cell phone and plan. You want to know which is the better deal. fill in the table to help you figure out the better plan.

Plan A-Phone is $75 and you pay $50/month
Plan B-Phone is $100 and you pay $45/month

x = _months_

y = _money_

Which is the better deal and when?

Plan A is better
in the first 4 months,
Otherwise Plan B is
better.

X	Y₁ Plan A	Y₂ Plan B
0	75	100
1	125	145
2	175	190
3	225	235
4	275	280
5	325	325
6	375	370

Assignment: 5-2 #'s 1, 7, 9-12, 16, 17