To be able to write an equation given a table of values.

Use the general form of the equation $y = mx + b$

Where $m = slope$ and $b = y - intercept$

x	-8	-4		4	8
y	11	9		5	3

take a look at the x-values they are changing by adding 4

while the y-values are changing by subtracting 2

$$slope = \frac{c\text{ange in } y}{c\text{ange in } x} = \frac{2}{4} \ reduces \ to \ \frac{1}{2}$$

Next find the y-intercept by looking to see what y is equal to when x=0.

So from the table we see b=7 and we found $m = \frac{1}{2}$

Now write you equation by substituting in the values for m and b.

$$y = \frac{1}{2}x + 7$$

Write an equation for each table of values.

1.

0	1	2	3	4	5	6
0	2	4	6	8	10	12

2.

0	1	2	3	4	5	6
25	21	17	13	9	5	1

3.

0	1	2	3	4	5	6
-1	-4	-7	-10	-13	-16	-19

4.

x	3	6	9	12	15
y	12	18	24	30	36

5.

To get cable TV at home, it costs $60 to get the cable box installed plus $25 each month.

     a.) Complete the table to show the cost of having cable TV for the number of months described. (3 points)

     b.) Write an *equation* for the total cost, *c*, of having cable TV for *m* months.

# Months	Cost ($)
0	
1	
2	
3	
4	

6. The cost to rent a set of jet skis is a $30 fee plus $20 per hour. Complete the table below to rent the jet skis for 1 through 4 hours. Then write an equation for the situation.

# Hours	Cost ($)
0	
1	
2	
3	
4	