NOTES: Lesson 4-10: Writing Equations (Given a Table)

REMEMBER: $y = mx + b$

"m" stands for the _____ of the line.

"b" stands for the _____ of the line.

If you are given a table of values, and you have verified that the table represents a linear relationship (there is a constant rate of change), you can find both the slope and y-intercept from that table and write the equation of that line.

- To find the **slope** (rate of change), use the formula $m = \frac{\Delta y}{\Delta x}$
- To find the **y-intercept** (initial value), find the coordinate point (x,y) in which the x-coordinate is 0. (0, ___)

1)

x	y
-2	-4
0	2
2	8
4	14
6	20

slope: _____

y-intercept: _____

equation: _____

2)

x	y
-2	80
-1	70
0	60
1	50
2	40

slope: _____

y-intercept: _____

equation: _____

3)

x	y
-2	1
-1	0.5
0	0
1	-0.5
2	-1

slope: _____

y-intercept: _____

equation: _____

4)

x	y
1	5
2	10
3	15
4	20
5	25

slope: _____

y-intercept: _____

equation: _____

5)

x	y
-3	9
-1	7
1	5
3	3
5	1

slope: _____

y-intercept: _____

equation: _____

6)

slope: _____

x	y
3	2
6	7
9	12
12	17
15	22

y-intercept: _____

equation: _____

7)

slope: _____

x	y
-3	-2.5
-1	-1.5
1	-0.5
3	0.5
5	1.5

y-intercept: _____

equation: _____