Lesson: Graphing Linear Relations

- 1) Each graph below represents a linear relation.
- a) Create a table of values for each using x = -2, -1, 0, 1, 2, 3
- b) Graph each equation (On own GRAPH paper)
- c) Describe the relationship between the variables in each graph.

i) y = -5x + 3

ii) y = 3x - 2

2) A car rental company charges a base fee of \$15 plus \$5 per hour of rental. The equation for the total cost is:

- C = 15 + 5h, where h represents the number of hours rented, and C represents the total cost.
 - a) Create a table of values for h = 0, 1, 2, 3, 4, 5.
 - b) Graph the relation.
 - c) Can you connect the dots? Why or why not
 - c) Describe the relationship between the variables in the graph.
 - d) Find the ordered pair on the graph that shows the total cost when the car is rented for 4 hours.
- 3) Given y = 7x + 2 find the missing term below (Show work)
 a. (5, ____) b) (-8, ___) c) (___, 100)
- 4) Given the following graph, describe the relationship between x and y. (Hint table of values)



a)



5) Graph each of the following relations on your own graph paper for integer values of x from -3 to 3. Create a table of values and show work for the first three entries.

a) y = x + 2 b) y = -x + 4 c) y = -3x + 6 d) y = 2x - 1