## ASSIGNMENT 21

## COMPLETE ON LOOSELEAF!!

For the following tables of ordered pairs, determine whether or not the ordered pairs represent a function. For each one, STATE HOW YOU KNOW.
1.

| $X$ | $Y$ |
| :---: | :---: |
| 0 | 2 |
| 2 | 4 |
| 3 | 5 |
| 4 | 6 |
| 9 | 11 |
| 100 | 102 |

2. 

| $X$ | $Y$ |
| :---: | :---: |
| 0 | 3 |
| 1 | 3 |
| 2 | 3 |
| 3 | 3 |
| 4 | 3 |
| 5 | 3 |

3. 

| $X$ | $Y$ |
| :---: | :---: |
| -3 | 10 |
| -2 | 5 |
| -1 | 2 |
| 0 | 1 |
| 1 | 2 |
| 2 | 5 |

4. 

| ordered pairs |
| :--- |
| $(3,7)$ |
| $(4,9)$ |
| $(4,10)$ |
| $(4,11)$ |
| $(5,12)$ |

Determine which equation will give you the ordered pairs in each table.
5. $f(x)=$ $\qquad$ 6. $f(x)=$ $\qquad$ 7. $f(x)=$ $\qquad$ 8. $f(x)=$ $\qquad$

| $X$ | $Y$ |
| :---: | :---: |
| -2 | 4 |
| -1 | 2 |
| 0 | 0 |
| 1 | -2 |
| 2 | -4 |
| 3 | -6 |
| 4 | -8 |


| $X$ | $Y$ |
| :---: | :---: |
| -2 | -13 |
| -1 | -9 |
| 0 | -5 |
| 1 | -1 |
| 2 | 3 |
| 3 | 7 |
| 4 | 11 |


| $X$ | $Y$ |
| :---: | :---: |
| 0 | 15 |
| 1 | 16 |
| 3 | 18 |
| 5 | 20 |
| 10 | 25 |
| 20 | 35 |
| 50 | 65 |


| $X$ | $Y$ |
| :---: | :---: |
| 2 | -6 |
| 4 | -2 |
| 5 | 0 |
| 12 | 14 |
| 13 | 16 |
| 20 | 30 |
| 50 | 90 |

9. 



Given the graph to the left,
a) Name three points (ordered pairs) included in this function.
b) Fill in the table below based on the graph:

| X | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Y |  |  |  |  |  |  |

c) What function equation is represented in the graph and the table?
d) How do you recognize the rate of change of the function in the table, graph, and equation (state for all three ways).

