Math 8 Name_____

Slope, Y-Intercept, and Function Rules of Tables

Score_____Per____

1. **a.** What variable do we use to represent rate of change, or slope? _____
b. What variable do we use to represent initial value, or y-intercept? _____
c. Use your answers from **a** and **b** to fill in the blanks of the following function rule: $y = \_\_\_\_x + \_\_\_\_$
d. What do you call the form of the equation in part **c**?_____

2. What does the equation look like if the slope is undefined? _____

3. How do you find the rate of change from a table? _____
_____

4. How do you find the initial value in a table? _____
_____

For each table, find the slope and y-intercept. Then write the function rule for the table in slope-intercept form.

Table	*Slope* (m)	*Y-Intercept* $(0, b)$	*Function Rule*
x | y -1 | 9 0 | 7 1 | 5 2 | 3	**5.** _____	**6.** $(0, \_\_\_\_)$	**7.** _____
x | y 3 | -5 6 | -10 9 | -15	**8.** _____	**9.** $(0, \_\_\_\_)$	**10.** _____
x | y 3 | 8 2 | 8 1 | 8	**11.** _____	**12.** $(0, \_\_\_\_)$	**13.** _____
x | y -1 | 0 -1 | 1 -1 | 2 -1 | 3	**14.** _____	**15.** $(0, \_\_\_\_)$	**16.** _____

x | y 0 | -3 2 | -5 5 | -8	**17.** _____	**18.** $(0,$ ____ $)$	**19.** _____
x | y 2 | 7 4 | 7 6 | 7	**20.** _____	**21.** $(0,$ ____ $)$	**22.** _____
x | y -2 | 4 2 | 2 4 | 1 8 | -1	**23.** _____	**24.** $(0,$ ____ $)$	**25.** _____
x | y -6 | -9 -3 | -5 3 | 3 9 | 11	**26.** _____	**27.** $(0,$ ____ $)$	**28.** _____
x | y 18 | -6 18 | 0	**29.** _____	**30.** $(0,$ ____ $)$	**31.** _____