Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_ Number: \_\_\_\_\_\_\_\_\_\_\_\_

Math 8 / 8H

**4.1b HW**

**1.** Make a table of values and plot the following function on the graph below: .

|  |  |
| --- | --- |
| ***x*** |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |

****

Is this linear or nonlinear graph? Why?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.** Graph the following table; determine whether it is linear or nonlinear.

|  |  |
| --- | --- |
| *x* | *y* |
| - 4 | 4 |
| -2 | 0 |
| 0 | -4 |
| 2 | -8 |



**4.** With the following 4 tables, tell me whether they are linear or not. If they are linear, what is the rate of change?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **x** | 3 | 6 | 9 | 12 | | **y** | 12 | 10 | 8 | 6 | | |  |  | | --- | --- | | Input | Output | | 3 | -7 | | 7 | -5 | | 9 | -1 | | 10 | 0 | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | X | 5 | 7 | 11 | 13 | | Y | 12 | 8 | 0 | -4 | | |  |  | | --- | --- | | X | Y | | 0 | 0 | | 1 | -1 | | 2 | -2 | | 3 | -3 | |

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**5.**

6.