Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_Period: \_\_\_\_\_\_Date: \_\_\_\_\_\_

**6.3A Linear Functions\_Classwork**

*Objective: Interpret y = mx + b as defining a linear function. Writing linear functions from tables. CCSS: 8.F.3*

*HW: (6.3A) p. 261 #4 – 10, 20 - 23 (Solutions on p. A29)*

**A LINEAR FUNCTION** can be written in the form **y = mx + b**, where m is the slope and b is the y-intercept.

|  |  |
| --- | --- |
| **Writing a Linear Function Using a Graph**- How is the slope determined from the graph?  **FIND** $\frac{rise}{run}$- How is the y-intercept determined from the graph?  **IT IS THE POINT THAT LIES ON THE Y-AXIS** | **EXAMPLE 2: Writing a Linear Function Using a Table**- How is the slope determined from the table?  **FIND** $\frac{change in y}{change in x}$- How is the y-intercept determined from the table?  **WHEN x = 0, THE “y” IS THE Y-INTERCEPT.**  **FOR EXAMPLE, (0,2) THE Y-INT. OR b is 2**  |
| **EXAMPLE 1: Use the graph to write a linear function that relates y to x.** | **EXAMPLE 2: Use the table to write a linear function that relates y to x.** |
| **EXAMPLE 3: Use the graph to write a linear function that relates y to x.** | **EXAMPLE 4: Use the table to write a linear function that relates y to x.** |



|  |  |
| --- | --- |
|   |  |
| 3.  | 4.  |
| 5. | 6.  |
| 7. | 8. |

WARM UP

|  |  |  |
| --- | --- | --- |
| 1. Graph y = -3   | 2. Graph x = 4  | 3. Graph $y= \frac{1}{2}x+1$ |