Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_

**4.1A Graphing Horizontal and Vertical Lines\_Classwork**

*Objective: Graph linear equations using a table. Understand that lines represent solutions of linear equations (CCSS: 8.EE.5)*

*HW: 4.1A worksheet\_#1-14 ALL*

|  |
| --- |
| \*\*The equation x = 5 is a **vertical line**. The equation means that the line goes through the x-axis at 5; a vertical line would go through the x-axis, not a horizontal line.  \*\*The equation y = 2 is a **horizontal line**. The equation means that the line goes through the y-axis at 2.  Notice in horizontal and vertical line equations there is only one letter. If you ever see an equation of a line with only one variable, you know right away that it is either vertical or horizontal line. SLOPE The slope of all **horizontal lines** is 0.  The reason for this is that horizontal lines would have 0 in the numerator, which is always 0.  The slope of all **vertical lines** is undefined.  The reason for this is that vertical lines have 0 in the denominator, which is always undefined. |

***PART 1: Graph each linear function.***

1. x = 3 2. y = -1 3. y = 6

4. x = -2 5. y = -4 6. x = 0

BACK 🡪

***PART 2: Write the slope-intercept form (y=mx+b) of the equation of each line.***

|  |  |  |
| --- | --- | --- |
| EXAMPLE    Linear equation: | 1. | 2. |

***PART 3: Graph each linear function. Pick any values for x.***

|  |  |
| --- | --- |
|  |  |
|  |  |