**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_**

**U5 HW #1** *Linear Equations*

1. Write the slope formula: Write the formula we use for the

 equation of a line:

**Directions:** Identify the slope (m) and y-intercept (b) for the following problems.

**2.** $y=4x$ **3.** $y=\frac{3}{2}x$ **4.** $y=-\frac{1}{5}x$

 *m = m = m =*

 *b = b = b =*

**5.** $y=-x$ **6.** $y=-\frac{3}{2}x$ **7.** $y=\frac{1}{2}x$

 *m = m = m =*

 *b = b = b =*

**8.** $y=-6x$ **9.** $y=\frac{7}{4}x$ **10.** $y=\frac{5}{2}x$

 *m = m = m =*

 *b = b = b =*

**11.** $y=-2x+3$ 12**.** $y=4x-3$ **13.** $y=\frac{5}{2}x-1$

 *m = m = m =*

 *b = b = b =*

**14.** $y=-6$ 15**.** $x=-8$ **16.** $y=\frac{2}{3}x+0$

 *m = m = m =*

 *b = b = b =*

**Directions:** Sketch the graph of each.

**17.** **18.**



**19.** $y=-2x$ **20.** $y=6x $

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|  |  |
| --- | --- |
| 1. $y=3x-2$

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

 |
| 1. $ y=2$

 | 1. $ x=1$

 |

**Directions: Find, Fix, and Justify**. Find the error each student made in their graphing below. Describe the error in words. Fix the error on the graph with a colored pencil.

|  |  |
| --- | --- |
| 1. Lani was asked to graph the line $y=\frac{4}{3}x-2$. Lani graphed the line and made a common error.
 |  |
| 1. Janeen was asked to graph the line $x=1$. Janeen graphed the line and made a common error.
 |  |
| 1. Zach was asked to graph the line $y=4-2x$. Zach graphed the line and made a common error.
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