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

**4.4A Graphing Linear Equations in Slope Intercept Form\_Classwork**

*Objective: Analyze graphs to determine slope, y-intercept and equation of the line. CCSS: 8.EE.6*

HW: (4.4A) p. 170 #4 – 15 (Solutions on p. A22)

*Graph each equation. Find the slope and the point where each line crosses the y-axis*

*(y-intercept) 🡪 y = mx + b*

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| Slope: \_\_\_\_\_\_\_\_\_\_  y-intercept: \_\_\_\_\_\_\_\_\_\_   |  |  |  | | --- | --- | --- | | **x** |  | **y** | | **0** |  |  | | Slope: \_\_\_\_\_\_\_\_\_\_  y-intercept: \_\_\_\_\_\_\_\_\_\_   |  |  |  | | --- | --- | --- | | **x** |  | **y** | | **0** |  |  | |
| Slope: \_\_\_\_\_\_\_\_\_\_  y-intercept: \_\_\_\_\_\_\_\_\_\_   |  |  |  | | --- | --- | --- | | **x** |  | **y** | | **0** |  |  | | Slope: \_\_\_\_\_\_\_\_\_\_  y-intercept: \_\_\_\_\_\_\_\_\_\_   |  |  |  | | --- | --- | --- | | **x** |  | **y** | | **0** |  |  | |

**4.4A Notes (Slope Intercept Form: y = mx + b)**

\*\*\* Start with “Lesson Launch” on back \*\*\*

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| SLOPE INTERCEPT FORM  Y = *m* x + ***b*** |

Identify the slope (m) and y-intercept (b) of each graph. Then write the equation of the line (y=mx+b)

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| 1.  slope \_\_\_\_\_\_\_\_\_\_  y-intercept \_\_\_\_\_\_  equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 2.  slope \_\_\_\_\_\_\_\_\_\_  y-intercept \_\_\_\_\_\_  equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3.  slope \_\_\_\_\_\_\_\_\_\_  y-intercept \_\_\_\_\_\_  equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 4.  slope \_\_\_\_\_\_\_\_\_\_  y-intercept \_\_\_\_\_\_  equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 5.  slope \_\_\_\_\_\_\_\_\_\_  y-intercept \_\_\_\_\_\_  equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 6. Write the equation of the line  whose graph has a slope of  -3 and y-intercept of 4. |

DIRECTION: for each problem, rewrite it in slope-intercept form.

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DIRECTION: for each problem, rewrite it in slope-intercept form.

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Follow Up Questions to 4.4A Notes

* What do you notice about the slope of the line and its equation? Can you identify the slope of the line without graphing? Explain.

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* What is the value of x at the y-intercept? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What do you notice between the point of intersection with the y-axis (y-intercept) and its equation? Can you identify the y-intercept of the line without graphing? Explain.

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