Week of Monday, November 19th - Tuesday, November 20th Guided Notes: **Slope Intercept Form**

**Monday, November 19th**

**> Do Now**

1. Write BOTH formulas for slope.
2. Find the slope of a line that passes through (-10, 8) and (15, 7).
3. What is the slope of the given graph?

**> Slope Intercept Form**

* Each function has an equation that corresponds to it.
* If the equation is in the correct form, it can indicate a lot about the line.
* The correct form for an equation of a line is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ Written as **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- Where **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
			* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- Where **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
			* The point on the graph **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- x and y refer to coordinates that fall on the line.

**> Slope Intercept Form Examples**

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| 1) Identify the slope and y –intercept. y = 3x – 7 |
| 2) Identify the slope and y –intercept. y = ½ x + 2 |
| 3) Identify the slope and y –intercept. y = 4 x - 5 |
| 4) Identify the slope and y –intercept. y = ¾x - 1  |
| 5) Identify the slope and y –intercept. y = -5x + 2  |
| 6) Identify the slope and y –intercept. y = -9x + 10 |
| 7) Identify the slope and y –intercept. y = -7x + 4 |

Writing an Equation from a Graph:

* The following steps will help you write an equation from a graph:
	+ **Step 1:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ **Step 2:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ **Step 3:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (y = mx + b).

**> Writing an Equation from a Graph Examples:** Write the equation for the graphs in slope intercept form.

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| 8. C:\Users\IT\AppData\Local\Temp\graph_20111113_133247.png | 9.C:\Users\IT\AppData\Local\Temp\graph_20111113_133524.png |
| 10. C:\Users\IT\AppData\Local\Temp\graph_20111113_135115.png | 11.C:\Users\IT\AppData\Local\Temp\graph_20111113_135856.png |
| 12. C:\Users\IT\AppData\Local\Temp\graph_20111113_140134.png | 13. C:\Users\IT\AppData\Local\Temp\graph_20111113_140459.png |
| 14. C:\Users\IT\AppData\Local\Temp\graph_20111113_140934.png | 15.C:\Users\IT\AppData\Local\Temp\graph_20111113_141228.png |

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**Tuesday, November 20th**

**> Do Now**

1. Identify the slope and y-intercept of y = ¾ x – 6
2. Identify the slope and y-intercept and write the equation in slope intercept form.
* The following steps will help you write an equation from a graph:
	+ **Step 1:** Identify the y-intercept.
	+ **Step 2:** Identify the slope.
	+ **Step 3:** Sub the y-intercept and slope into the slope intercept form equation (y = mx + b).

**Example Problems:** Write the equation for the graphs in slope intercept form.

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| 1.C:\Users\IT\AppData\Local\Temp\graph_20111113_141548.png | 2.**C:\Users\IT\AppData\Local\Temp\graph_20111113_141825.png** |
| 3. C:\Users\IT\AppData\Local\Temp\graph_20111113_142154.png | 4.C:\Users\IT\AppData\Local\Temp\graph_20111113_142454.png |
| 5. C:\Users\IT\AppData\Local\Temp\graph_20111113_142700.png | 6.C:\Users\IT\AppData\Local\Temp\graph_20111113_142855.png |
| 7.32.tiff | 8.33.tiff |
| 9.34.tiff | 10.35.tiff |
| 11.36.tiff | 12.41.tiff |