3.5 Writing Linear Equations in Slope-Intercept Form – Notes Date: \_\_\_\_\_\_\_\_\_\_

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| **Learning Targets** | **Help!** | **I’m getting there…** | **I’m almost there…** | **Yes! I totally got this! ☺** |
| 1. I can define slope. |  |  |  |  |
| 2. I can write an of a line equation in slope-intercept form. |  |  |  |  |
| 3. I can write an equation of a line in point-slope form. |  |  |  |  |

\*\*Finding the Slope of the Line

The slope of a nonvertical line passing through the two points (x1, y1) and (x2, y2).

Slope = Slope (m) = Slope =







Example 1: Find the slope between the given points.



a) A(-2, 4) B(1, -3) b) C(-3, -2) D(7, 1) c) E(4, 5) F(-6, 5) d) G(1, 8) H(1, 9)



*Classifying Slope:*



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Slope-intercept form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Writing Equations of Lines:



1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Example 1: Write the equation in slope-intercept form of a line with a slope of 8 and a y-intercept of



(0,7).



Example 2: Write the equation in slope-intercept form for the line whose slope is  and y-intercept of (0, -3).



Example 3: Write the equation in slope-intercept form for the line that passes through the points



(-4,6) and (0,-2)



Example 4: Write the equation in slope-intercept form for the line that passes through the points

(0,4) and (6,13).

