Remediation Name _____

Unit 2 Objective 6 Section _____

Determine the slope of a line given an equation.

To find the slope of a line from an equation, write the equation into slope-intercept form and use the formula $y = mx + b$.

To put an equation into slope-intercept form, solve the equation for y. The slope will be the number in front of the x (the coefficient of the x term).

Example 1: $y = \frac{3}{11}x + 2$ $m = \frac{3}{11}$

Example 2: $3x - 2y = 11$

$$-2y = -3x + 11$$

$$y = \frac{-3}{-2}x + \frac{11}{-2}$$

$$y = \frac{3}{2}x - \frac{11}{2}$$

$$m = \frac{3}{2}$$

Find the slope for each of these equations. Show all work.

1. $y = -\frac{7}{5}x + 2$
   m=

2. $2x - 8y = 1$
   m=

3. $y = 9x - 5$
   m=

4. $5x + y = 7$
   m=

5. $y = \frac{2}{3}x - 10$

m=

6. $-2x - 7y = 8$

m=

7. $y = -11x$

m=

8. $x - 7y = 14$

m=

9. $y = \frac{1}{8}x - 14$

m=

10. $6x + 8y = 5$

m=

11. $y = -7$

m=

12. $-5x - 20y = 8$

m=

13. $y = -2x + 4$

m=

14. $8x + y = 4$

m=