5.1-5.4 REVIEW WORKSHEET

Name: _____

Find the rate of change and explain what it means.

| 1. Distance a car travels | |
|---------------------------|--------------|
| Time (s) | Distance (m) |
| 3 | 75 |
| 6 | 150 |
| 9 | 225 |
| 12 | 300 |

Find the slope of the line that passes through each pair of points.

 2. (-2, 1) & (3, 6)
 3. (2, 5) & (-8, 5)
 4. (6, 4) & (2, 7)

Tell whether each equation is a direct variation. If it is, find the constant of variation.

5. $y = \frac{1}{2}x$ 6. 5x + 3 = 8y + 37. 2y + 4 = 4x + 1

Find the slope and y-intercept of the graph of each equation.

8.
$$y = \frac{1}{5}x + 3$$

9. $4x + 5y = 20$
10. $2y = -8x - 10$

11. The distance a wheel moves forward varies directly with the number of rotations. Suppose the wheel moves 56 feet in 8 rotations. Write a direct variation equation to represent this situation. What distance does the wheel move in 20 rotations?

Write an equation in slope-intercept form for the line.



Write an equation in point-slope form for the line through the given point with the given slope.

| 14. $(4,0)$ $m = 4$ | 15. $(3, -2)$ $m = -\frac{1}{2}$ |
|---------------------|----------------------------------|
|---------------------|----------------------------------|

Write an equation, in slope-intercept form, of the line that passes through the pair of points.

16. (-1, -5) & (2, 10)17. (-2, 4) & (3, -1)





21. y - 4 = -2(x - 2)

