Linear Functions and Slope

1. Find the slope of the line passing through each pair of points or state that the slope is undefined:

(-4, 2) and (5, 7)

2. Use the given conditions to write an equation for each line in slope-intercept form:

Slope = -3, passing through (-5, -1)

3. Use the given conditions to write an equation for each line in slope-intercept form:

Slope = -4, passing through (-2, 21/2)

4. Use the given conditions to write an equation for each line in slope-intercept form:

Passing through (4, 10) and (8, 30)

5. Use the given conditions to write an equation for each line in slope-intercept form:

Passing through (-1, -5) and (4, -3)

6. Use the given conditions to write an equation for each line in slope-intercept form:

x-intercept = 3 and y-intercept = -1

7. Give the slope and y-intercept of each line whose equation is given. Then graph the linear function:

$$y = \frac{-1}{2}x + 3$$

8. Graph each equation in a rectangular coordinate system.

$$f(x) = 2$$

9. Graph each equation in a rectangular coordinate system.

$$4x - 8 = 0$$

10. Rewrite the given equation in slope-intercept form and graph:

$$5x - 4y - 12 = 0$$