Section 1.7

Parallel and Perpendicular Lines

1. A slope of a line is given. Determine (a) the slope of any line parallel to the line whose slope is given and (b) the slope of any line perpendicular to the line whose slope is given.
(Similar to p.126 #15-17)

$$m = \frac{-4}{3}$$

2. Determine whether the given linear equations are parallel, perpendicular or neither
(Similar to p.126 #19-25)

$$-4x - 2y = 5$$
$$12x + 6y = -7$$

3. Find an equation of the line with the given properties. Express your answer in slope-intercept form. Graph the lines.
(Similar to p.126 #33-45)

Parallel to y = -2x + 3 through the point (-3, 4)

4. Find an equation of the line with the given properties. Express your answer in slope-intercept form. Graph the lines.
(Similar to p.126 #33-45)

Parallel to 3x + y = 5
through the point (-2, 6)

5. Find an equation of the line with the given properties. Express your answer in slope-intercept form. Graph the lines.
(Similar to p.126 #33-45)

Perpendicular to -8x + 4y - 1 = 0
through the point (-1, -3)

6. Find an equation of the line with the given properties. Express your answer in slope-intercept form. Graph the lines.
(Similar to p.126 #33-45)

Parallel to $x = -5$
through the point (7, 1)

7. Find an equation of the line with the given properties. Express your answer in slope-intercept form. Graph the lines.
(Similar to p.126 #33-45)

Perpendicular to $y = 2$
through the point (3, -1)