## Homework 35.2

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Solve each equation by factoring.

1) 
$$r^2 + 14r + 48 = 0$$

2) 
$$m^2 + 3m - 28 = 0$$

3) 
$$2n^2 + 19n + 35 = 0$$

4) 
$$7x^2 - 40x + 25 = 0$$

- 5) Write the function the has x-intercepts at (3,0) and (-5,0).
- 6) Write the function that has x-intercepts at (-9,0) and (-1,0).

Write the slope-intercept form of the equation of the line through the given point with the given slope.

7) through: 
$$(-5, 4)$$
, slope =  $-\frac{8}{5}$ 

8) through: (0, -1), slope = undefined

Solve each system by elimination.

9) 
$$-8x - 3y = -17$$
  
 $8x - 7y = -13$ 

10) 
$$7x - 10y = 11$$
  
 $-4x + 10y = -2$ 

3) 
$$\left\{-\frac{5}{2}, -7\right\}$$

4) 
$$\left\{ \frac{5}{7}, 5 \right\}$$
  
8)  $x = 0$ 

5) 
$$y = (x-3)(x+5)$$

5) 
$$y = (x-3)(x+5)$$
 6)  $y = (x+9)(x+1)$ 

7) 
$$y = -\frac{8}{5}x - 4$$

8) 
$$x = 0$$