

**Homework 35.3**

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**Solve each equation by factoring.**

1)  $p^2 - 3p - 4 = 0$

2)  $x^2 + 13x + 40 = 0$

3)  $3m^2 + 20m + 32 = 0$

4)  $14n^2 - 19n - 40 = 0$

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:  $(-2, 4)$ , slope = 0

8) through:  $(-5, -2)$ , slope =  $\frac{6}{5}$

**Solve each system by elimination.**

9)  $3x - 2y = 20$   
 $9x + 2y = -20$

10)  $-5x - 5y = 10$   
 $-8x + 5y = 29$

## Answers to Homework 35.3

1)  $\{4, -1\}$

2)  $\{-8, -5\}$

3)  $\left\{-\frac{8}{3}, -4\right\}$

4)  $\left\{-\frac{8}{7}, \frac{5}{2}\right\}$

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

6)  $y = (x + 9)(x + 1)$

7)  $y = 4$

8)  $y = \frac{6}{5}x + 4$

9)  $(0, -10)$

10)  $(-3, 1)$