Algebra 1   Name_____

Homework 35.1

Solve each equation by factoring.

1) $r^2 - r - 30 = 0$

2) $x^2 - 4x + 3 = 0$

3) $7x^2 - 24x + 9 = 0$

4) $2b^2 + 7b + 3 = 0$

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: $(1, 5)$,   slope $= 1$

8) through: $(2, -2)$,   slope $=$ undefined

Solve each system by elimination.

9) $-x + 6y = 11$
   $x - 8y = -15$

10) $-7x - 6y = -6$
    $7x + 10y = -18$

Answers to Homework 35.1

1) $\{6, -5\}$

2) $\{1, 3\}$

3) $\left\{\dfrac{3}{7}, 3\right\}$

4) $\left\{-\dfrac{1}{2}, -3\right\}$

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

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

7) $y = x + 4$

8) $x = 2$

9) $(1, 2)$

10) $(6, -6)$