Foundations 11

Name_____

Substitution Worksheet

Date_____ Period____

Solve each system of equations.

1) $x^2 + y^2 - 15x - 3y + 46 = 0$
     $x + y - 4 = 0$

2) $x^2 + y^2 - 26x - y + 68 = 0$
     $-2x + y + 3 = 0$

3) $4x^2 - 5y^2 + 3x - 7y - 18 = 0$
     $x + y = -2$

4) $-4x^2 + 3x + 15y + 145 = 0$
     $x - 3y = 1$

5) $12x^2 + 6y^2 - 25x + 9y + 16 = 0$
   $x + 3y + 2 = 0$

6) $6x^2 + 2y^2 + 19x + 3y + 8 = 0$
   $x + y = 0$

7) $2x^2 + 2y^2 + 8x + 27y + 6 = 0$
   $-2x^2 + y^2 - 8x + 3y - 6 = 0$

8) $y^2 + 16x + 4y - 69 = 0$
   $-5x^2 + y^2 + 51x + 4y - 129 = 0$

9) $-2x^2 + 9x + y + 89 = 0$
   $-2x^2 + 28x + y + 184 = 0$

10) $x^2 + y^2 - 10x - 10y + 10 = 0$
    $x^2 + 25y^2 - 10x + 38y + 34 = 0$

11) $x^2 + y^2 + x - 10y - 31 = 0$
    $x^2 + y^2 - 3x - 10y - 3 = 0$

12) $2x^2 + 2y^2 + 28x + 7y + 83 = 0$
    $2x^2 + 5y^2 + 28x + 31y + 128 = 0$

Answers to Substitution Worksheet

1) $(5, -1)$ 2) $(4, 5)$ 3) $(-6, 4), (-4, 2)$ 4) $(-5, -2), (7, 2)$

5) $(1, -1)$ 6) $(-1, 1)$ 7) $(-1, 0), (-3, 0), (4, -10), (-8, -10)$

8) $(4, 1), (4, -5), (3, 3), (3, -7)$ 9) $(-5, 6)$ 10) $(7, -1), (3, -1)$

11) $(7, 5)$ 12) $(-7, -5), (-4, -3), (-10, -3)$