Algebra 2   Name_____
Solving Systems of Equations by Substitution or Elimination

Solve each system by elimination.

1) $x - 7y = 18$
   $4x - 14y = 30$

2) $9x + 3y = -15$
   $-18x - 6y = 30$

3) $6x - 12y = 0$
   $x - 6y = 4$

4) $18x + 4y = -4$
   $-9x + 8y = -8$

5) $-2x + 7y = 4$
   $-5x - 9y = 10$

6) $4x - 5y = 14$
   $-6x + 6y = -6$

7) $6x + 10y = 20$
   $4x - 6y = 26$

8) $4x + 5y = -7$
   $-5x - 3y = -1$

Solve each system by substitution.

9) $y = -2x + 6$
   $8x - 3y = -4$

10) $y = 5x + 9$
    $4x + 6y = 20$

11) $y = x + 5$
$-2x + 7y = 20$

12) $y = -3x + 15$
$-x - y = -9$

13) $y = -2x + 7$
$y = -4x + 15$

14) $y = 2x + 2$
$y = 5x - 7$

15) $6x + 2y = -6$
$x + 5y = -15$

16) $-3x + y = 0$
$-2x - 7y = -23$

17) $x - 2y = -3$
    $8x - 6y = 16$

18) $-2x - 2y = 20$
    $x - 7y = 14$

19) $-2x - 5y = 16$
    $2x - 3y = -16$

20) $-5x + 2y = 11$
    $-3x + 4y = -13$

21) $-7x - 5y = -8$
    $8x - 3y = -17$

22) $2x - 3y = 18$
    $5x - 3y = 9$

Answers to Solving Systems of Equations by Substitution or Elimination

1) $(-3, -3)$

2) Infinite number of solutions

3) $(-2, -1)$

4) $(0, -1)$

5) $(-2, 0)$

6) $(-9, -10)$

7) $(5, -1)$

8) $(2, -3)$

9) $(1, 4)$

10) $(-1, 4)$

11) $(-3, 2)$

12) $(3, 6)$

13) $(4, -1)$

14) $(3, 8)$

15) $(0, -3)$

16) $(1, 3)$

17) $(5, 4)$

18) $(-7, -3)$

19) $(-8, 0)$

20) $(-5, -7)$

21) $(-1, 3)$

22) $(-3, -8)$