Name _____ Date _____

Mr. Schlansky Algebra II

Solving Quadratic Systems Algebraically

Solve each of the following systems of equations for all values of x and y

1. $y = -2x + 1$
   $y = -2x^2 + 3x + 1$

2. $y = x^2 - 4x + 3$
   $y + 1 = x$

3. $x^2 - y = 5$
   $y = 3x - 1$

4. $5 = y - x$
   $4x^2 = -17x + y + 4$

5. $y^2 - x^2 + 32 = 0$
   $3y - x = 0$

6. $x^2 + y^2 = 10$
   $x = y - 4$

7. $x^2 + y^2 = 2$
$y + 2 = x$

8. $3x^2 + y^2 = 13$
$y = x - 3$

9. $(x+2)^2 + (y-4)^2 = 40$
$y = x + 2$

10. $x^2 + (y+4)^2 = 109$
$y = x + 3$

11. $x + y = 5$
$(x+3)^2 + (y-3)^2 = 53$

12. $(x-3)^2 + (y+2)^2 = 16$
$2x + 2y = 10$