

Name _____
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Date _____
Algebra II



Solving Quadratic Systems Algebraically

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

1. $y = x^2 - 3x + 1$
 $y = -5x + 9$

2. $y = x^2 - 5x + 7$
 $y = -2x + 17$

3. $y = x^2 - 5x + 1$
 $y = -5x + 10$

4. $y = 2x^2 - 7x + 4$
 $y = 11 - 2x$

$$\begin{array}{l} 5. \quad y = x^2 - 4x + 3 \\ \quad y + 1 = x \end{array}$$

$$\begin{array}{l} 6. \quad y = 3x - 1 \\ \quad y + 5 = x^2 \end{array}$$

$$\begin{array}{l} 7. \quad x^2 + y^2 = 10 \\ \quad x = y - 4 \end{array}$$

$$\begin{array}{l} 8. \quad x^2 + y^2 = 2 \\ \quad y + 2 = x \end{array}$$

$$\begin{array}{l} 9. \quad x^2 + y^2 = 34 \\ \quad y - x = 2 \end{array}$$

$$\begin{array}{l} 10. \quad x^2 + y^2 = 25 \\ \quad y + 5 = 2x \end{array}$$

$$11. \begin{aligned} (x+2)^2 + (y-4)^2 &= 40 \\ y &= x+2 \end{aligned}$$

$$12. \begin{aligned} (x-2)^2 + (y-3)^2 &= 16 \\ x+y-1 &= 0 \end{aligned}$$

$$13. \begin{aligned} x+y &= 5 \\ (x+3)^2 + (y-3)^2 &= 53 \end{aligned}$$

$$14. \begin{aligned} (x-3)^2 + (y+2)^2 &= 16 \\ 2x+2y &= 10 \end{aligned}$$