

Systems of linear and quadratic equations

© 2015 Kuta Software LLC. All rights reserved.

Name _____

Date _____

Solve each system of equations.

1) $-3x^2 + y^2 + 25x + 3y - 98 = 0$
 $x - y = 0$

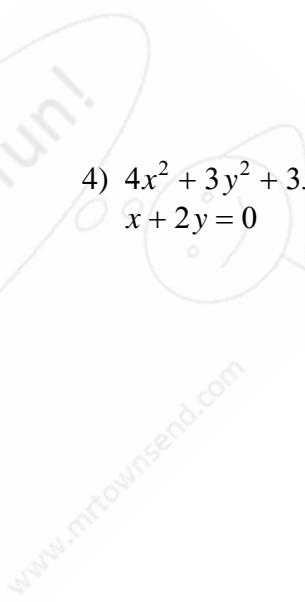
2) $4x^2 - 2y^2 - 54x - 3y + 28 = 0$
 $2x + y = 4$

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

4) $4x^2 + 3y^2 + 3x - 127y + 190 = 0$
 $x + 2y = 0$

5) $4x^2 + y^2 - 56x - y + 76 = 0$
 $3x - y = 1$

6) $x^2 - 6y^2 - 45x + 3y + 84 = 0$
 $x + y = 4$



$$7) \begin{aligned} -2x^2 - 6x + y - 4 &= 0 \\ 2x - y &= -2 \end{aligned}$$

$$8) \begin{aligned} -4x^2 - 42x - 3y - 138 &= 0 \\ -2x + y - 2 &= 0 \end{aligned}$$

$$9) \begin{aligned} 2x^2 + y^2 - 15x - y - 6 &= 0 \\ 3x + y + 2 &= 0 \end{aligned}$$

$$10) \begin{aligned} 6x^2 + 2y^2 + 32x - y - 94 &= 0 \\ -2x + y + 2 &= 0 \end{aligned}$$

$$11) \begin{aligned} 4x^2 - 55x - y + 196 &= 0 \\ x - y &= 0 \end{aligned}$$

$$12) \begin{aligned} x^2 + y^2 - 25x + y + 34 &= 0 \\ -3x + y + 3 &= 0 \end{aligned}$$

Answers to

1) $(7, 7)$
5) $(3, 8), (2, 5)$
9) $(0, -2)$

2) $(-2, 8)$
6) $(0, 4)$
10) $(2, 2), (-3, -8)$

3) $(-2, -5), (2, -1)$
7) $(-1, 0)$
11) $(7, 7)$

4) $(-10, 5), (-4, 2)$
8) $(-6, -10)$
12) $(2, 3)$

