

Systems of Non-Linear Equations Practice

Name: _____

Solve the following systems of equations. When necessary, round your answers to the nearest hundredth.

1) $x^2 - y = -2$
 $-x + y = 4$ $(2, 6)$
 $(-1, 3)$

2) $x^2 + y^2 = 1$
 $2x + y = 2$ $(1, 0)$

3) $x^2 + y = -5$
 $-x + y = 3$ No Solution

4) $x^2 - y = -1$
 $x^2 + y^2 = 1$ $(0, 1)$

5) $4x^2 + y = 0$
 $x^2 + y^2 = 3$ $(.64, -1.61)$
 $(-.64, -1.61)$

6) $-2x^2 + y = 7$
 $x^2 + y^2 = -6$ No Solution

7) $y = x^2 - 4$
 $y = 2x - 1$ $(3, 5)$ $(-1, -3)$

8) $y = x^2 - 4$
 $x^2 + y^2 = 4$ $(2, 0)$ $(-2, 0)$
 $(\sqrt{3}, -1)$ $(-\sqrt{3}, -1)$

9) $x^2 = 2y + 10$
 $3x - y = 9$ $(4, 3)$ $(2, -3)$

10) $y = x^2 + 3$
 $x^2 + y^2 = 9$ $(0, 3)$