Lesson 11.5 Practice: Nonlinear Systems

School Launch · Algebra II · Unit 11: Conic Sections · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Solve the system $y = x^2$ and $y = 3x + 0$. EASY

2. Solve the system $y = x^2$ and $y = -2x - 1$. EASY

3. Solve the system $y = x^2$ and $y = -1x + 2$. EASY

4. Solve the system $y = x^2$ and $y = -2x + 3$. MEDIUM

5. Solve the system $y = x^2$ and $y = -3x + 4$. MEDIUM

6. Solve the system $y = x^2$ and $y = -3x - 2$. MEDIUM

7. Solve the system $y = x^2$ and $y = -1x + 0$. MEDIUM

8. Solve the system $y = x^2$ and $y = -2x + 0$. HARD

9. For $\frac{(x+2)^2}{49} + \frac{(y+1)^2}{16} = 1$, give the center, the length of the major axis, and the distance from center to each focus. HARD

10. Find the center and radius of $x^2 - 2x + y^2 + 16y + 49 = 0$. HARD