



Objective: Solving Quadratic Linear Systems Graphically

Homework QF-10 – NYA p. NY755 #1 – 6

Do Now: Find the solutions to the nearest hundredth

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

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

Exam Prep: Which of the following is a factor of $y = x^2 - 5x$?

- A) $x + 5$ B) 5 C) $-x$ D) $x - 5$

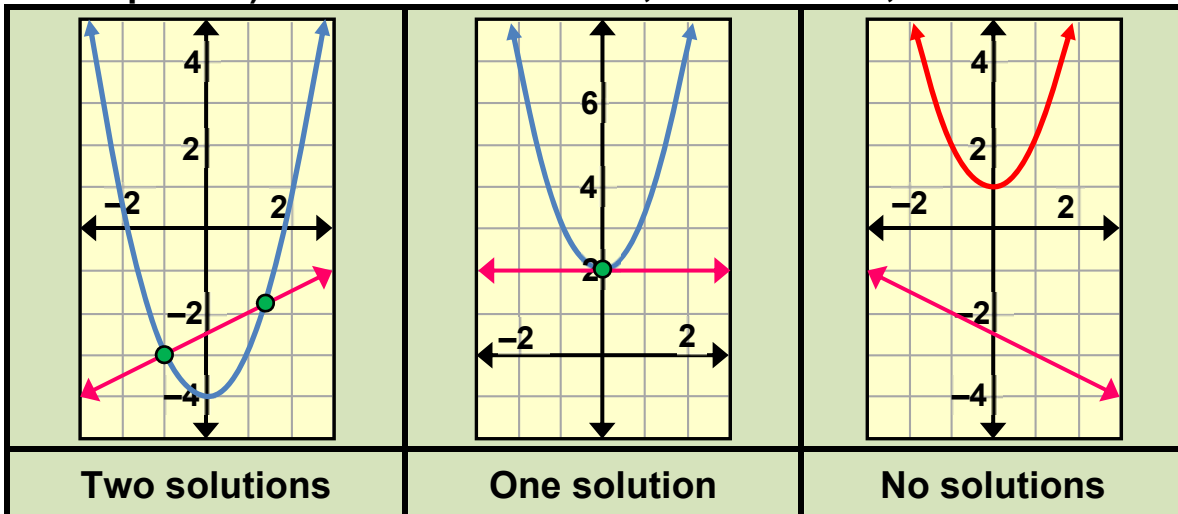


The journey continues...

You REALLY need a TI graphing calculator.

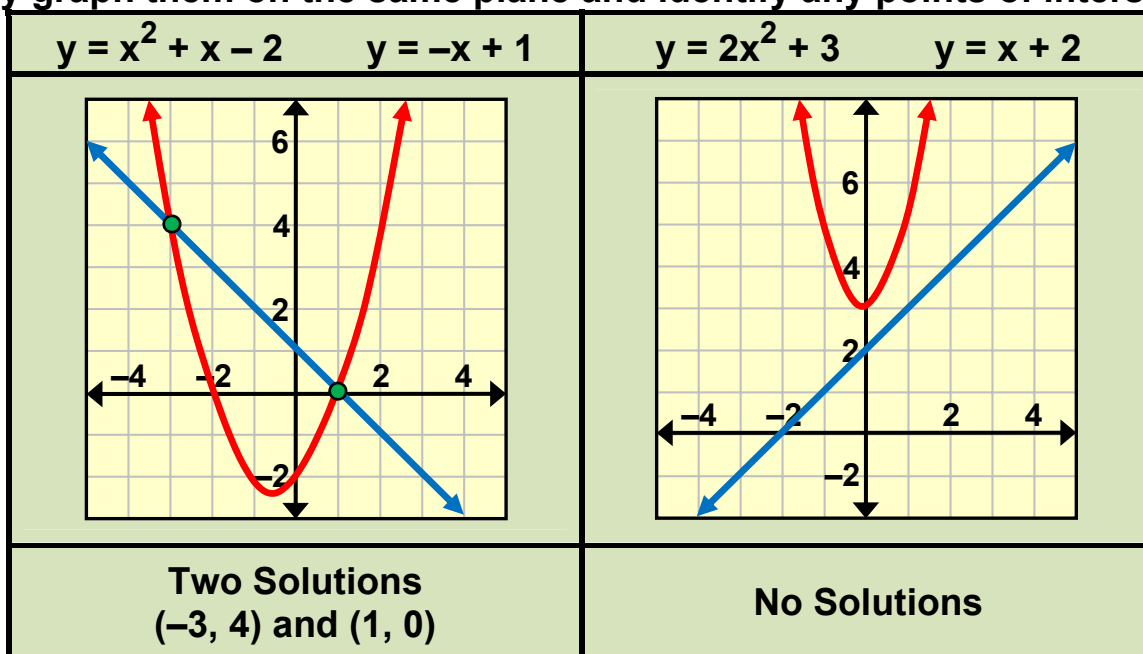
RECALL BUT DO NOT COPY (FROM EARLIER LESSON)

A system of linear and quadratic equations contains at least one of each. Recall that a solution occurs when the graphs intersect. A linear-quadratic system (with one of each equation) can have no solution, one solution, or two solutions.



Solving Linear-Quadratic Systems: Graphing

Simply graph them on the same plane and identify any points of intersection.



Calculator Instructions

1. Put both functions into "y ="
2. Graph them so the solutions appear on the screen
3. Select "intersection" (5) from the "calc" (2nd Trace) menu
4. Press "enter" on each function and then "guess" near the solution
5. Repeat for the second intersection

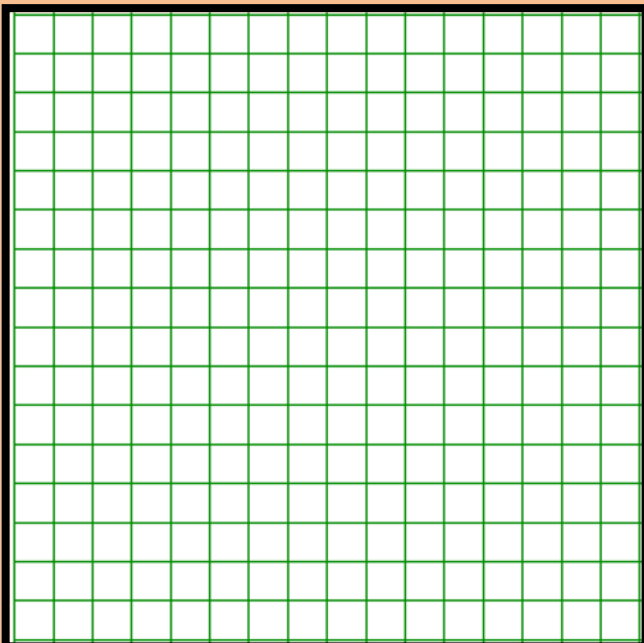
Practice: Find solutions with calculator

1. $y = x^2 + 1$ $y = -x + 3$	3. $y = -x^2 + 4x$ $y = 3$
2. $y = x^2$ $y = x + 2$	4. $y = x^2 - 4x - 5$ $y = -x - 7$

Practice: Graph functions and label solutions

$$y = 2x^2 + x$$

$$y = x - 4$$



$$y = x^2 + x - 2$$

$$y = 4$$

