San José State University
Fall 2015
Math-8: College Algebra
Section 03: MW noon–1:15pm
Section 05: MW 4:30–5:45pm

Quiz #12 (Take-home)

You may use your book, notes, and homework, but please do not work together or ask for help from others.

1. A system of linear equations can have _____, _____, or _____ solutions.

2. Find all points of intersection:

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

3. Why doesn't the answer in problem 2 contradict the statement in problem 1?

4. Solve using substitution, elimination, row operations, or matrices. You must show all steps for full credit:

$$\begin{aligned} x + y + z + w &= 6 \\ 2x + 3y - w &= 0 \\ -3x + 4y + z + 2w &= 4 \\ x + 2y - z + w &= 0 \end{aligned}$$