

MATH 260, Homework 1, Spring '14

Due: January 17, 2014

Honor Code:

Name:

1) How many solutions does each of the following linear systems have? What are they?

a) (10 pts)

$$\begin{array}{ccccccc} x & + & y & + & z & = & 6 \\ x & - & y & + & z & = & 4 \\ 3x & - & 2y & + & 3z & = & 13 \end{array}$$

b) (10 pts)

$$\begin{array}{ccccccc} x & + & y & + & z & = & 6 \\ x & - & y & + & z & = & 4 \\ 2x & + & y & + & 3z & = & 13 \end{array}$$

2) (5 pts) Given two linear equations in three variables, what are the possibilities for the numbers of solutions (such as “there could be two or five solutions”)?