

# Mathematics 700 Quiz #1

Name: \_\_\_\_\_

- (1) Give an example of two linear equations with real coefficients in two unknowns so that
- (a) They have exactly one solution.

(b) The set of solutions is a line in  $\mathbf{R}^2$ .

(c) They have no solutions.

- (2) Find all solutions to

$$2x + y + z = 5$$

$$x + y - 4z = 3$$