

## **Linear Algebra: Existence/Uniqueness of Solutions**

Investigate the values of  $\lambda$  and  $\mu$  so that the equations:

$$2x + 3y + 5z = 9$$

$$7x + 3y - 2z = 8$$

$$2x + 3y + \lambda z = \mu$$

have:

- a) No solution
- b) A unique solution
- c) An infinite number of solutions.