

Inconsistent and Dependent  
Systems and Their Applications

1. Use Gaussian elimination to find the complete solution to each system of equations, or show that none exists

$$2x - 4y + z = -1$$

$$4x - 8y + 2z = 5$$

$$3x - y - 4z = -5$$

2. Use Gaussian elimination to find the complete solution to each system of equations, or show that none exists

$$3x - y + 6z = 1$$

$$2x - 3y + z = -13$$

$$x - y - z = -10$$

3. Use Gaussian elimination to find the complete solution to each system of equations, or show that none exists

$$x - 2y - 3z = 4$$

$$x + 5y - 4z = 7$$

$$2x - 4y - 6z = 8$$

4. Use Gaussian elimination to find the complete solution to each system of equations, or show that none exists

$$5x - y - z = 2$$

$$3x + 2y - z = 4$$