

## Problem 1

Give a geometric argument that the system

$$2x + 3y + z = 0$$

$$x - 3y + 7z = 0$$

has infinitely many solutions.

## Problem 2

Express the following system in the matrix form of  $AX = B$ :

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

$$-x + 3y - 2z = 0$$

$$10x + y - 5z = 2$$