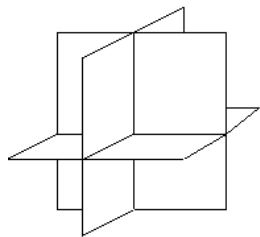
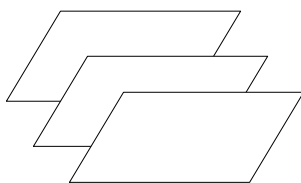


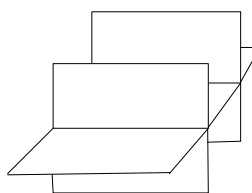
Solving Systems of Equations in Three Variables



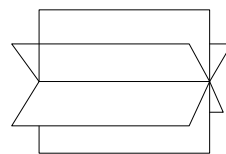
One Solution



No Solution



Infinitely Many Solutions



Directions: Solve the system of linear equations.

1. $x - 2y + 2z = 0$

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

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

2. $2x + y = 2$

$$y + z = 3$$

$$4x - z = 0$$

$$\begin{aligned} 3. \quad & x - 5y + 4z = 8 \\ & 3x + y - 2z = 7 \\ & -9x - 3y + 6z = 5 \end{aligned}$$

4. $4x - 6y + 8z = 4$
 $5x + y - 2z = 4$
 $6x - 9y + 12z = 6$

5. $5x - 2y + z = 4$
 $-3x + 4y - z = 2$
 $6x - 8y + 2z = -4$