

$$K1 = x^2 + y^2 + z^2 + 3x + y + 3z - 3 = 0$$

$$K2 = x^2 + y^2 + z^2 - x - 3y - z - 3 = 0$$

$$K3 = x^2 + y^2 + z^2 + x + 3y - 3z - 3 = 0$$

$$\begin{cases} K1 - K2 = 0 \\ K1 - K3 = 0 \end{cases}$$

$$K1 - K2 = x^2 + y^2 + z^2 + 3x + y + 3z - 3 - (x^2 + y^2 + z^2 - x - 3y - z - 3) = 0$$

$$4x + 4y + 4z = 0$$

$$K1 - K3 = x^2 + y^2 + z^2 + 3x + y + 3z - 3 - (x^2 + y^2 + z^2 + x + 3y - 3z - 3) = 0$$

$$2x - 2y + 6z = 0$$

$$g \begin{cases} v1 \equiv 2x - 2y + 6z = 0 \\ v2 \equiv -x + 3y - 5z = 0 \end{cases}$$

$$2a + (-2b) + 6c = 0 \quad [1x] \quad 2a - 2b + 6c = 0$$

$$-a + 3b - 5c = 0 \quad [2x] \quad -2a + 6b - 10c = 0 \quad \text{eliminasi}$$

$$4b - 4c = 0$$

$$b - c = 0$$

$$b = c$$

$$-a + 3c - 5c = 0$$

$$a = 5c - 3c$$

$$a = 2c$$

$$[2c, c, c] \rightarrow [2, 1, 1]$$

Ambil sembarang titik pada garis yaitu $(-4, 2, 2)$ sehingga persamaan garis pada R3 yaitu:

$$g \equiv \frac{x + 4}{2} = \frac{y - 2}{2} = \frac{z - 2}{2}$$