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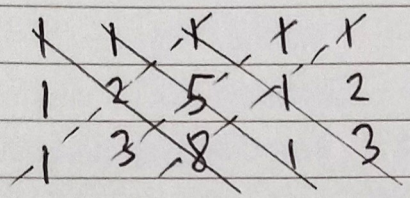
Soal

Misalkan $S = \{ U_1, U_2, U_3 \}$

$U_1 = (1, 1, 1)$, $U_2 = (1, 2, 3)$, $U_3 = (1, 5, 8)$

$a_1(1,1,1) + a_2(1,2,3) + a_3(1,5,8) = (x, y, z)$

$$\begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & 5 \\ 1 & 3 & 8 \end{bmatrix} \begin{bmatrix} a_1 \\ a_2 \\ a_3 \end{bmatrix} = \begin{bmatrix} x \\ y \\ z \end{bmatrix}$$



maka :

$\det(A) = 1.2.8 + 1.5.1 + 1.1.3 - 1.2.1 - 1.5.3 - 1.1.8$

$= 16 + 5 + 3 - 2 - 15 - 8$

$= -1$ //

U_1, U_2, dan U_3 bernilai -1 dari determinan, maka Himpunan S merentang R^3.