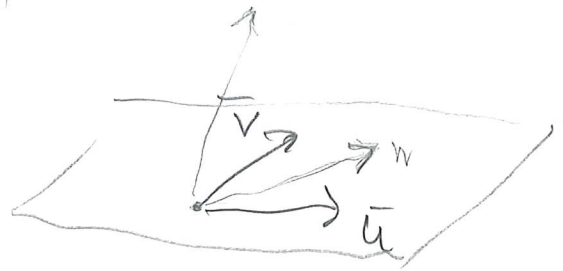


2.3.9 Ligger

$$\bar{u} = \underline{e} \begin{pmatrix} 1 \\ -2 \\ 1 \end{pmatrix}, \quad \bar{v} = \underline{e} \begin{pmatrix} 2 \\ -1 \\ -1 \end{pmatrix}, \quad \bar{w} = \underline{e} \begin{pmatrix} -1 \\ -4 \\ 5 \end{pmatrix}$$

i samma plan?



$$x_1 \bar{u} + x_2 \bar{v} = \bar{w}$$

$$x_1 \begin{pmatrix} 1 \\ -2 \\ 1 \end{pmatrix} + x_2 \begin{pmatrix} 2 \\ -1 \\ -1 \end{pmatrix} = \begin{pmatrix} -1 \\ -4 \\ 5 \end{pmatrix}$$

$$\begin{array}{l} \text{G.D. (2)} \\ \downarrow \\ \downarrow \end{array} \left\{ \begin{array}{l} x_1 + 2x_2 = -1 \\ -2x_1 - x_2 = -4 \\ x_1 - x_2 = 5 \end{array} \right. \Leftrightarrow \left\{ \begin{array}{l} x_1 + 2x_2 = -1 \\ 3x_2 = -6 \\ -3x_2 = 6 \end{array} \right.$$

$$\Leftrightarrow \left\{ \begin{array}{l} x_1 = 3 \\ x_2 = -2 \end{array} \right.$$

$$3\bar{u} + (-2)\bar{v} = \bar{w}$$

$$3 \begin{pmatrix} 1 \\ -2 \\ 1 \end{pmatrix} - 2 \begin{pmatrix} 2 \\ -1 \\ -1 \end{pmatrix} = \begin{pmatrix} -1 \\ -4 \\ 5 \end{pmatrix}$$

Svar Ja