Onderwerp: Lineaire Algebra
Datum: Wk 4

Lineaire Algebra wk 4

opdracht 2

c) $\text{vlak}(r,s) = \begin{pmatrix}1\\2\\1\end{pmatrix} + r\begin{pmatrix}1\\2\\3\end{pmatrix} + s\begin{pmatrix}5\\1\\7\end{pmatrix}$

$\vec{p} = \begin{pmatrix}1\\2\\3\end{pmatrix} \times \begin{pmatrix}5\\1\\7\end{pmatrix} = \begin{pmatrix}11\\8\\-9\end{pmatrix}$

$S = \left(\begin{pmatrix}11\\8\\-9\end{pmatrix} \cdot \begin{pmatrix}1\\2\\1\end{pmatrix}\right) = 0$

$\text{vlak} = 11 \cdot x + 8 \cdot y - 9 \cdot z = 0$

$= 11x + 8y - 9z = 0$

d) $\text{vlak}(r,s) = \begin{pmatrix}1\\1\\1\end{pmatrix} + r\begin{pmatrix}6\\6\\0\end{pmatrix} + s\begin{pmatrix}1\\1\\0\end{pmatrix}$

$\vec{p} = \begin{pmatrix}6\\6\\0\end{pmatrix} \times \begin{pmatrix}1\\1\\0\end{pmatrix} = \begin{pmatrix}0\\0\\0\end{pmatrix}$

$S = \left(\begin{pmatrix}6\\0\\0\end{pmatrix}, \begin{pmatrix}1\\1\\1\end{pmatrix}\right) = 0$

$\text{vlak} = 6 \cdot x + 0 \cdot y + 0 \cdot z = 0$

$= 6x + y + z = 0$