6A. 2.

$\vec{v_1} = \begin{pmatrix}1\\-1\\1\end{pmatrix}$ $\vec{v_2} = \begin{pmatrix}2\\-1\\-1\end{pmatrix}$ $\vec{v_3} = \begin{pmatrix}0\\-1\\3\end{pmatrix}$ $\vec{v_4} = \begin{pmatrix}3\\-2\\0\end{pmatrix}$ $\vec{v_5} = \begin{pmatrix}1\\-2\\3\end{pmatrix}$.

$$\vec{v_1} + \vec{v_2} = \begin{pmatrix}1\\-1\\1\end{pmatrix} + \cancel{0}\begin{pmatrix}2\\-1\\-1\end{pmatrix} = \begin{pmatrix}3\\-2\\0\end{pmatrix} = \vec{v_4}$$

∴ there cause a redundancy.

so they're ~~not~~ linearly dependent.

choose V_2, V_4, V_5 to form a three-tuples.

6B6.