$$s_{1} \leq 1, \quad s_{2} \leq 1, \quad s_{3} \leq 1$$

$$\begin{vmatrix} s_{1} \rangle \\ \vdots \\ s_{2} \rangle \end{vmatrix}$$

$$\equiv \begin{vmatrix} s_{2} \rangle \\ \vdots \\ s_{3} \rangle \end{vmatrix}$$

$$= \begin{vmatrix} s_{1} \rangle \\ \vdots \\ s_{2} \rangle \end{vmatrix}$$

$$(-1)^{s_{1}s_{2}s_{3}} |s_{3} \rangle$$

$$|s_{3} \rangle \end{vmatrix}$$