



$$S = \begin{bmatrix} -1 & 1 & -1 & -1 & -1 \\ 1 & -1 & -1 & -1 & 1 \\ -1 & 1 & 1 & -1 & 1 \\ -1 & 1 & \begin{matrix} \updownarrow \\ 1 \\ \updownarrow \\ (x,y) \end{matrix} & 1 & -1 \\ -1 & -1 & 1 & -1 & -1 \\ -1 & 1 & -1 & -1 & 1 \end{bmatrix}$$