



(b)  $\mathbb{H}_4 = \mathbb{H}_2 \otimes \mathbb{H}_2$

$$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & -1 & 1 & -1 \\ 1 & 1 & -1 & -1 \\ 1 & -1 & -1 & 1 \end{bmatrix}$$

$W_0 \quad W_1 \quad W_2 \quad W_3$

