A

$$W = V\Lambda V^{-1} = \begin{bmatrix} v_1 \\ v_2 \\ v_3 \\ v_4 \end{bmatrix}^{\top} \begin{bmatrix} \lambda_{1,1} & \lambda_{1,2} & \lambda_{1,3} & \lambda_{1,4} \\ 0 & \lambda_{2,2} & \lambda_{2,3} & \lambda_{2,4} \\ 0 & 0 & \lambda_{3,3} & \lambda_{3,4} \\ 0 & 0 & 0 & \lambda_{4,4} \end{bmatrix} \begin{bmatrix} v_1 \\ v_2 \\ v_3 \\ v_4 \end{bmatrix}$$

$$v_i \in \left\{ \begin{matrix} \text{all} & \text{side} & \text{task} & \text{diag} \\ (+,+,+,+) & (+,-,+,-) & (+,+,-,-) & (+,-,-,+) \end{matrix} \right\}$$

B