

$$\mathbf{A}^2 = \begin{matrix} & \begin{matrix} v_1 & v_2 & (v_1, v_3) & (v_2, v_3) & (v_3, v_4) & \dagger \end{matrix} \\ \begin{matrix} * \\ v_1 \\ v_2 \\ (v_1, v_3) \\ (v_2, v_3) \\ (v_3, v_4) \end{matrix} & \left[\begin{array}{cccccc} 10 & 10 & 0 & 0 & 0 & 0 \\ 0 & 0 & 20 & 0 & 0 & 0 \\ 0 & 0 & 0 & 10 & 0 & 0 \\ 0 & 0 & 0 & 0 & 10 & 10 \\ 0 & 0 & 0 & 0 & 10 & 0 \\ 0 & 0 & 0 & 0 & 0 & 10 \end{array} \right] \end{matrix}$$

where

$A_{0,1}$	$A_{1,2}$
$A_{2,2}$	A_{\dagger}