

$$A = \begin{bmatrix} -6 & 3 \\ 4 & 8 \end{bmatrix} \quad I_A = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

$$Av = \lambda v$$

$$Av - \lambda v = 0$$

$$\vec{v} (A - \lambda) = 0$$

$$\uparrow \quad \uparrow$$

$$\vec{v} (A - \lambda \cdot I_A) = 0$$

$$\uparrow$$