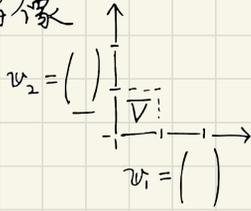


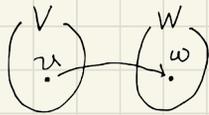
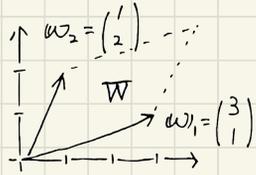
線形代数 演習 - IV

/ /

◦ 写像



$$A = \begin{pmatrix} & \\ & \end{pmatrix}$$



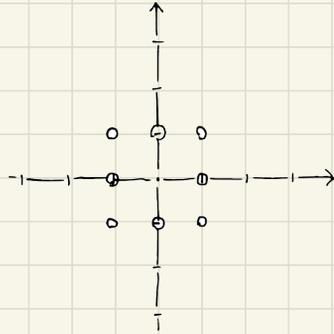
$$f(v) = w$$

$$\begin{pmatrix} a & b \\ c & d \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} \\ \end{pmatrix}$$

◦ 固有値 (Eigen Value)

$$A v = \lambda v$$

$$A = \begin{pmatrix} 2 & 1 \\ 1 & 2 \end{pmatrix}$$



$$|A - \lambda E|$$

$$= \left| \begin{pmatrix} 2 & 1 \\ 1 & 2 \end{pmatrix} - \lambda \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \right|$$

◦ 固有ベクトル (Eigen Vectors)

$$\lambda_1 = \underline{\quad}$$

$$\lambda_2 = \underline{\quad}$$

$$\lambda = \underline{\quad}, \underline{\quad}$$

$$v_1 = \begin{pmatrix} \\ \end{pmatrix}$$

$$v_2 = \begin{pmatrix} \\ \end{pmatrix}$$

検算?
