

$$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$$

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$$\left\{ \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \right\}$$

$$\begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix}$$

$$\left\| \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \right\|$$

$$A = \begin{pmatrix} a_{11}^2 & a_{12}^2 & a_{13}^2 \\ 0 & a_{22} & a_{23} \\ 0 & 0 & a_{33} \end{pmatrix}$$

$$A = \begin{bmatrix} a_{11} & \cdots & a_{1n} \\ & \ddots & \vdots \\ 0 & & a_{nn} \end{bmatrix}$$

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 1 & 0 \\ & 0 & -1 \end{pmatrix}$$

复数 $z = (x, y)$ 也可以用矩阵 $\begin{pmatrix} x & -y \\ y & x \end{pmatrix}$

$$\begin{pmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ & a_{22} & \cdots & a_{2n} \\ & & \ddots & \vdots \\ 0 & & & a_{nn} \end{pmatrix}$$