

$$\begin{array}{ccccccc} 0 & 1 & \begin{pmatrix} 0 & -i \\ i & 0 \end{pmatrix} & \begin{bmatrix} 0 & -1 \\ -1 & 0 \end{bmatrix} & \begin{Bmatrix} 0 & 1 \\ 1 & 0 \end{Bmatrix} & \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} & \left\| \begin{array}{cc} 0 & 1 \\ 1 & 0 \end{array} \right\| \end{array}$$

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

$$B = \begin{bmatrix} a_{11} & \dots & a_{1n} \\ \vdots & \ddots & \vdots \\ a_{n1} & \dots & a_{nn} \end{bmatrix}_{n \times n}$$

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

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

$$E = \begin{pmatrix} 1 & \frac{1}{2} & \dots & \frac{1}{n} \\ \dots & \dots & \dots & \dots \\ m & \frac{m}{2} & \dots & \frac{m}{n} \end{pmatrix}$$

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

$$G = \begin{array}{c|c} \frac{1}{2} & 0 \\ \hline 0 & -\frac{a}{b}c \end{array}$$

$$\underbrace{\left(\begin{array}{ccc|ccc} a & \cdots & a & b & \cdots & b \\ & \ddots & \vdots & \vdots & \ddots & \\ & & a & b & & \\ \hline & & 0 & c & \cdots & c \\ & & & \vdots & & \vdots \\ & & & c & \cdots & c \end{array} \right)}_{\substack{m \quad n}} \left. \vphantom{\begin{array}{ccc|ccc} a & \cdots & a & b & \cdots & b \\ & \ddots & \vdots & \vdots & \ddots & \\ & & a & b & & \\ \hline & & 0 & c & \cdots & c \\ & & & \vdots & & \vdots \\ & & & c & \cdots & c \end{array}} \right\} \begin{array}{l} p \\ q \end{array}$$