$$(a+b) = (b+a) \tag{1}$$

1 希腊字母

α
β
γ
Γ
Δ
Θ
Π
Ω
$\alpha^3 + \beta^2 + \gamma^2$

$$\begin{matrix} 0 & 1 \\ 1 & 0 \end{matrix} \quad \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix} \quad \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix} \quad \begin{Bmatrix} 0 & 1 \\ 1 & 0 \end{Bmatrix} \quad \begin{vmatrix} 0 & 1 \\ 1 & 0 \end{vmatrix} \quad \begin{Vmatrix} 0 & 1 \\ 1 & 0 \end{Vmatrix}$$

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

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

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

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

$$\begin{pmatrix} 1 & \frac{1}{2} & \cdots & \frac{1}{n} \\ \cdots & \cdots & \cdots & \cdots \\ m & \frac{m}{2} & \cdots & \frac{m}{n} \end{pmatrix}_{m\times n}$$

复数 $Z = (x, y)$ 也可以用矩阵 $\left(\begin{smallmatrix} x & -y \\ y & x \end{smallmatrix}\right)$

$$\begin{array}{c|c} \frac{1}{2} & 0 \\ 2 & \frac{x}{y} \end{array}$$

$$a + \alpha = \frac{s}{y} + 1 \tag{2}$$

$$g + d = f(a) \tag{3}$$

$$\tag{4}$$

$$x = t + \cos t + 1 \tag{5}$$

$$y = 2\sin t \tag{6}$$

$$\begin{array}{lll} x = t & x = \cos t & x = t \\ y = 2t & y = \sin(t+1) & y = \sin t \end{array}$$

$$\begin{aligned} \cos 2x &= \cos^2 x - \sin^2 x \\ &= x\cos^2 x - 1 \end{aligned} \tag{7}$$

$$D(x) = \begin{cases} 1, & \text{如果} x \in \mathbb{Q} \\ 0, & if x \in \mathbb{R} \setminus \mathbb{Q} \end{cases} \tag{8}$$