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

$$17 + 29i \in \mathbb{C}$$

$$4.56 + 4.56 + \frac{4}{5} + 4 + 5i + 4.56e^{i4.56} + \pi + e + e + i - i + \gamma + \infty$$

$$\frac{22}{7} \approx \pi$$

$$\begin{pmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ & & \vdots & \\ a_{m1} & a_{m2} & \dots & a_{mn} \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \\ \vdots \\ x_n \end{pmatrix} = \begin{pmatrix} b_1 \\ b_2 \\ \vdots \\ b_n \end{pmatrix}$$

$$f(x) = \sum_{j=0}^{\infty} \frac{f^{(j)}(0)}{j!} x^j$$

$$\begin{aligned} x^2 - 9 &= x^2 - 3^2 \\ &= (x - 3)(x + 3) \end{aligned}$$

$$x^2 - 9 = x^2 - 3^2$$

$$ax^2 + bx + c = 0$$

$$ax^2 + bx = -c$$

$$x^2 + \frac{b}{a}x = \frac{-c}{a} \quad \text{\textcolor{red}{Divide out leading coefficient.}}$$

$$x^2 + \frac{b}{a}x + \left(\frac{b}{2a}\right)^2 = \frac{-c(4a)}{a(4a)} + \frac{b^2}{4a^2} \quad \text{\textcolor{red}{Complete the square.}}$$

$$\left(x + \frac{b}{2a}\right)\left(x + \frac{b}{2a}\right) = \frac{b^2 - 4ac}{4a^2} \quad \text{\textcolor{red}{Discriminant revealed.}}$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2 - 4ac}{4a^2}$$

$$x + \frac{b}{2a} = \sqrt{\frac{b^2 - 4ac}{4a^2}}$$

$$x = \frac{-b}{2a} \pm \{C\}\sqrt{\frac{b^2 - 4ac}{4a^2}} \quad \text{\textcolor{red}{There's the vertex formula.}}$$

$$x = \frac{-b \pm \{C\}\sqrt{b^2 - 4ac}}{2a}$$