$$M = P \cdot \frac{J}{1 - (1 + J)^{-N}}$$

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

$$x = \frac{n}{x}$$

$$x^2 = n$$

$$x = \sqrt{n}$$

$$\begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & \cos \theta & -\sin \theta \\ 0 & \sin \theta & \cos \theta \end{bmatrix}$$

$$v'_i = \sum_{j=1}^n A_{ij} \cdot v_j$$

$$\sigma = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (x_i - \mu)^2}$$

$$f(x) = \sqrt{x}$$

$$F = \frac{Gm_1 m_2}{r^2}$$

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$\mathbf{F}_{ab} = -G \frac{m_a m_b}{|\mathbf{r}_{ab}|^2} \hat{\mathbf{r}}_{ab}$$

$$\hat{\mathbf{r}}_{ab} = \frac{\mathbf{r}_b - \mathbf{r}_a}{|\mathbf{r}_b - \mathbf{r}_a|}$$

$$S = \sum_{i=1}^{N} f(a_i)$$

$$S_1 = \sum_{i=1}^{\lfloor \frac{N}{2} \rfloor} f(a_i)$$

$$S_2 = \sum_{i=\lfloor \frac{N}{2} \rfloor + 1}^{N} f(a_i)$$

$$\text{speedup} = \frac{t_s}{t_c} = \frac{4,100}{1,660,000} = 0.00246$$

$$C_{ij} = \sum_{k=1}^{n} A_{ik} B_{kj} = A_{i1} B_{1j} + A_{i2} B_{2j} + \dots + A_{in} B_{nj}$$

$$y = \sqrt{r^2 - x^2}$$