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$$\pi(n) = \sum_{m=2}^{n} \Big(\sum_{k=1}^{m-1} (\sum_{\ell=lceilm/k\rceil}^{lfloorm/k\rfloor} \ell) \Big) \tag{1}$$

$$A = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & a_{mn} \end{bmatrix} \tag{2}$$

$$\begin{cases} \alpha = f(2) \\ \beta = f(2^2) \\ \gamma = f(2^3) \end{cases} \qquad \Longrightarrow \qquad \begin{cases} x = \alpha^2 - \beta \\ y = \gamma \end{cases} \tag{3}$$

$$p_1(n) = \lim_{m \to \infty} \sum_{\nu=0}^{n} \big(1 - \cos 2^m (\nu^n / n) \big) \tag{4}$$

$$\prod_{j=0}^{\infty} \Big(\sum_{k_j=0}^{2} x_{jk_j}^2 \Big) = \sum_{n=0}^{\infty} 2^n \sum_{\substack{k_0, k_1, \dots \geq 0 \\ k_0 + k_1 + \dots = n}} a_{0k_0} a_{1k_1} \dots \tag{5}$$

$$\sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + x}}}} \tag{6}$$

$$\sqrt[3]{\sqrt[4]{1^5 + 5 + 6 + 7}} \tag{7}$$

$$\int_0^{a+n} x \, dx \; = \; \left(\frac{a+b}{c} \right)^2 \tag{8}$$