

Add a squared and b squared to get c squared. Or, using a more mathematical approach: $a^2 + b^2 = c^2$

Add a squared and b squared to get c squared

$$a^2 + b^2 = c^2 \tag{1}$$

Einstein says

$$E = mc^2 \tag{2}$$

This is a reference to (2).

It's wrong to say

$$1 + 1 = 3 \tag{dumb}$$

or

$$1 + 1 = 4$$

Again...

$$a^2 + b^2 = c^2$$

or you can type less for the same effect:

$$a^2 + b^2 = c^2$$

or if you like the long one:

$$a^2 + b^2 = c^2$$

In text: $\lim_{n \rightarrow \infty} \sum_{k=1}^n \frac{1}{k^2} = \frac{\pi^2}{6}$.
In display:

$$\lim_{n \rightarrow \infty} \sum_{k=1}^n \frac{1}{k^2} = \frac{\pi^2}{6}$$

$f''(x)$

In display style:

$$3/8 \qquad \frac{3}{8} \qquad \frac{3}{8}$$

In text style: $1\frac{1}{2}$ hours $1\frac{1}{2}$ hours

Pascal's rule is

$$\binom{n}{k} = \binom{n-1}{k} + \binom{n-1}{k-1}$$

$\neq \leq \geq \approx \not\leq \not\geq$

$$f_n(x) \overset{*}{\approx} 1$$

$\times \div \cdot \pm \mp \nabla \partial$

ker dim hom deg lim sup lim inf sup det Pr gcd

$a \bmod b$

$x \equiv a \pmod{b}$

$$\operatorname{argh} 3 = \operatorname{Nut}_{x=1} 4x$$

$$a = b + c \tag{4}$$

$$= d + e + f + g + h + i + j + k + l + m + n + o \tag{5}$$

$$= p + q + r + s \tag{6}$$

$$a = b + c \tag{7}$$

$$d = e + f + g \tag{8}$$

$$h + i = j + k \tag{9}$$

$$l + m = n$$

$$a = b + c$$

$$d = e + f + g$$

$$h + i = j + k \tag{10}$$

$$l + m = n$$

$$\mathbf{X} = \begin{pmatrix} x_{11} & x_{12} & \dots & x_{1n} \\ x_{21} & x_{22} & \dots & x_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ x_{n1} & x_{n2} & \dots & x_{nn} \end{pmatrix}$$

$$|x| = \begin{cases} -x & \text{if } x < 0, \\ 0 & \text{if } x = 0, \\ x & \text{if } x > 0. \end{cases} \tag{11}$$

$$|x| = \begin{cases} -x & \text{if } x < 0, \\ 0 & \text{if } x = 0, \\ x & \text{if } x > 0. \end{cases} \tag{12}$$

$$\begin{matrix} 1 & 2 \\ 3 & 4 \end{matrix} \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1n} \\ x_{21} & x_{22} & \dots & x_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ x_{n1} & x_{n2} & \dots & x_{nn} \end{bmatrix}$$

$$\mathbf{H} = \begin{bmatrix} \frac{\partial^2 f}{\partial x^2} & \frac{\partial^2 f}{\partial x \partial y} \\ \frac{\partial^2 f}{\partial x \partial y} & \frac{\partial^2 f}{\partial y^2} \end{bmatrix}$$

$$\begin{array}{c}
aa \qquad \qquad a \ a \\
a \ \ a \\
a \qquad \qquad a \\
a \ a \\
a \ a \\
a \ a \\
a \ a \\
aa
\end{array}
\tag{13}$$

$$\int \int \int \int \int \int \int \int \int$$

$$\mathcal{R} \quad \mathfrak{R} \quad \mathbb{R}$$

$$\mathcal{L}=-\frac{1}{4}F_{\mu\nu}F^{\mu\nu}$$

$$\mathfrak{su}(2) \text{ and } \mathfrak{so}(3) \text{ Lie algebra}$$

$$P=\frac{\sum_{i=1}^n(x_i-x)(y_i-y)}{\left[\sum_{i=1}^n(x_i-x)^2\sum_{i=1}^n(y_i-y)^2\right]^{1/2}}$$

$$\mu, M \qquad \boldsymbol{\mu}, \boldsymbol{M}$$

$$\textbf{My Theorem 0.1.} \text{ The light speed in vaccum is } 299,792,458 \text{ m/s.}$$

$$\textbf{My Theorem 0.2 (Energy).} \text{ The relationship of energy, momentum and mass is}$$

$$E^2=m_0^2c^4+p^2c^2$$

$$where\ c\ is\ the\ light\ speed\ described\ in\ theorem\ 0.1.$$

$$\textbf{Law 1.} \text{ Don't hide in the witness box.}$$

$$\textbf{Jury 2 (The Twelve).} \text{ It could be you! So beware and see law 1.}$$

$$\textbf{Jury 3.} \text{ You will disregard the last statement.}$$

$$Margaret. \text{ No, No, No}$$

$$Margaret. \text{ Denis!}$$

$$Proof. \text{ For simplicity, we use}$$

$$E=mc^2$$

$$\text{That's it.} \qquad \qquad \qquad \square$$

$$Proof. \text{ For simplicity, we use}$$

$$E=mc^2 \qquad \qquad \qquad \square$$