# Some maths

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Experimentations in LaTeX

I hereby decree the following:

$$1 + 2 = 3$$

$$1 = 3 - 2$$

$$\begin{aligned} 1 + 2 &= 3 \\ 1 &= 3 - 2 \end{aligned}$$

$$\begin{aligned} f(x) &= x^2 \\ g(x) &= \frac{1}{x} \\ F(x) &= \int_b^a \frac{1}{3} x^3 \end{aligned}$$

$$\frac{1}{\sqrt{x}}$$

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

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

$$\left( \frac{1}{\sqrt{x}} \right)$$

$$\lambda \Lambda \alpha \epsilon \delta \Delta$$

Let

$$\begin{aligned} E &= \frac{\sigma}{\epsilon} \\ \sigma &= \frac{F}{A} \\ \epsilon &= \frac{x}{l_0} \\ \Rightarrow E &= \frac{Fl_0}{Ax} \end{aligned}$$

Given that

$$\begin{aligned} n &= 2k+1 \\ M &= n^2 \\ \Rightarrow M &= (2k+1)^2 = 4k^2+4k+1 \\ \Rightarrow M &= 4(k^2+k)+1 \\ \Rightarrow M &= 4q+1 : q \in \mathbb{Z} \\ \Rightarrow M &= 1 \mod 4 \end{aligned}$$