Bruce, read 11.27.24

(1) Here is something people often do, and I wonder if you do it.

For example, you want the derivative of the following:

$y(x) = x^2 \sin(x)\, e^x$.

The answer is this:

$y'(x) = [\, x^2 \sin(x)\,]\, [\, e^x\,]' \; + \; [\, x^2 \sin(x)\,]'\; e^x$

$= x^2 \sin(x)\, e^x \; + \; [\, x^2 \cos(x) + 2x \sin(x)\,]\, e^x$

and then you might factor out common factors. The point is the use of the notation

[.....]' to indicate the derivative of some quantity.

(2) Also, I have a way of doing math notation very fast in Word if you are someday interested. Things like this:

$$\frac{\partial x^2}{\partial x} \qquad \int_{-\infty}^{\infty} f(x)dx \qquad \sum_{n=0}^{3} n^2 \qquad \sqrt{\frac{a}{b}}$$

The trick is to laboriously make these things one at a time, then park them off in some separate file, and copy them in as needed. You build up a little library of things in that file. To edit them, select and hit F4. I have special keystrokes for sub and superscript and for all Greek letters.

$T^{\mu\upsilon}$ // my small superscripts, hard to read but do not increase row height

$T^{\mu\upsilon}$ // my large ones, but row height is increased.

Polynomial might be $y(x) = x^4 - 2\, x^2 + 31\, x - 10$.

All this stuff is in my normal.dot file.

For me, the "equation editor" is about 20x too slow to use for rapid in-line stuff.