

Math 165 Typing Assignments

Some assignments must be typed.

Microsoft Word[©] and other word processors have facilities for superscripts, subscripts, and fractions. The instructor is using T_EX, a program for typesetting mathematics.

If you prefer, mathematics may be typed as you would enter the information in your calculator.

For example, the sentence

$$\sin^2(x) + \cos^2 x = 1.$$

may be typed as

$$\text{sin}^2(x) + \text{cos}^2(x) = 1.$$

The sentence

$$\frac{1}{x+h} - \frac{1}{x} = -\frac{h}{x(x+h)}.$$

may be typed as

$$(1/(x+h)) - (1/x) = - (h/(x(x+h))).$$

Which of the following is correct?

$$\begin{aligned} 1/(x+h) - 1/x &= - h/x(x+h). \\ 1/(x+h) - 1/x &= - h/(x(x+h)). \end{aligned}$$

When in doubt, use parentheses ().

Suggested conventions (partly borrowed from T_EX):

- \leq : type `<=` or `\leq`, \geq : type `>=` or `\geq`
- \pm : type `\pm`
- subscripts: a_{23} : type `a_{23}`
- superscripts: a^{23} : type `a^{23}`
- \Rightarrow : type `=>` or `implies`
- absolute value: type `|a|` or `abs(a)` or `\abs(a)`
- square root: $\sqrt{a^2 + b^2}$: type `sqrt(a^2 + b^2)` or `\sqrt{a^2 + b^2}`
- $\lim_{x \rightarrow a} f(x)$: type `lim_{x->a}f(x)` or `\lim_{x \to a}f(x)`
- Integrals: $\int_a^b f(x) dx$: type `fnInt(f(x),x,a,b)`