1 Desiderata from Last Time

Let me know if you have questions about:

(a) Passwords.
(b) Using the pine mailer.
(c) Invoking Maple in venues other than MG-104.
(d) Entering algebraic expressions.
(e) Entering expressions involving $\pi$ and $e$.
(f) Entering expressions involving the MATH-147 transcendental functions ($e^x$).
(g) Defining Maple functions (“arrow-defined”)
(h) Defining Maple functions (“arrow-defined” functions)
(i) Plotting a function.
(j) Plotting a function on a particular interval (What your TI calculator would call “setting $X_{\text{min}}$ and $X_{\text{max}}$”).
(k) Limiting the $y$-range of a function plot. (What your TI calculator would call “setting $Y_{\text{min}}$ and $Y_{\text{max}}$”).
(l) Avoiding retyping intermediate results.
(m) Why breaking up commands is a good idea.

2 Snappier Maple

If you’ve tired of waiting for Maple to load and start. If Maple seems ponderously leisurely to you, then the Classic Worksheet Interface is for you:

(i) In MG-104, click on the penguin Xterm button on the left of your screen. When the terminal window comes up, type `xmaple -cw &` at the terminal-window’s prompt.

(ii) In MP-121, the Classic Interface is one of the possibilities listed.
3 Section 1.3 factor, simplify, expand

3.1 Assign the expression $x^2 - 6x - 16$ to the Maple variable goo. Cause Maple to factor goo.

3.2 Try to cause Maple to factor goo + 50. Then read problem 7, page 11, and try the option listed at the very top of page 12.

3.3 Does problem 7 help with factoring goo - 12?

3.4 Use the expand command on the following (using variables A, B, x and y):

(a) $(x + 1)^3$
(b) $(x + 1)^3 - (x - 1)^3$
(c) $\cos(A + B)$
(d) $\sin(A + B) - \sin(A - B)$
(e) $\cos(2x)$
(f) $\sin(2x)$
(g) $e^{x+y}$
(h) $\ln(xy)$

Did the last of these turn out as you expected?

3.5 Use the simplify command on the following:

(a) $\frac{1}{x - 1} + \frac{8}{x + 2}$
(b) $\frac{1}{x - 1} + \frac{24}{(x + 2)^2} - \frac{1}{x + 2}$