

MATH 275

Fall 2007

Getting started with Maple

1. Log in to the computer and once logged in click the Maple icon.
2. Try it by typing (please copy exactly)

```
f := x->3*x^2;
```

3. Important notes about Maple:

- (a) All Maple commands must end in a semicolon.
- (b) e^x is typed as `exp(x)`, $\sin x$ as `sin(x)`, \sqrt{x} as `sqrt(x)`, π as `Pi`.
- (c) Save your work often.
- (d) When can go back to a previous statement and change it to get a new result. However, this may have unexpected consequences.
- (e) When starting a new problem type

```
restart;
```

4. Maple can be used as a word processor. When you hand in your work it must have your name, and some problems may require you to write text. Try this by clicking the \mathcal{T} button on the toolbar at the top of the screen. To insert text at another place on the screen use *Insert* and either *Text* or *Paragraph*.
5. Assignments are different than equations. For example an assignment is $y:=x$; while an equation would be $eq:= 2 * x + 1 = 0$; (Try it!)
6. There are two ways to make an assignment, as an expression or a function. For example, an expression is $g := 2 * x^3$; while a function is $f:=x \rightarrow 2 * x^3$; (Try it!)
7. To evaluate an expression type $subs(x=1,g)$; while to evaluate a function type $f(1)$; (Try it, does Maple give you the answer you expected?).
8. To plot an expression type $plot(g,x=-1..1)$; while to plot a function type either $plot(f,-1..1)$; or $plot(f(x),x=-1..1)$; With either assignment you can also specify a range for y. (Try it, are the graphs what you would expect?)