Tricks

1. In a script, line breaking is allowed where the scanner needs something to complete an expression. For example, the scanner will automatically go to the next line after an operator.

2. Setting `trace=1` in a script causes each line to be printed just before it is evaluated. Useful for debugging.

3. The last result is stored in symbol `last`.

4. Use `contract(A)` to get the mathematical trace of matrix A.

5. Use `binding(s)` to get the unevaluated binding of symbol s.

6. Use `s=quote(s)` to clear symbol s.

7. Use `float(pi)` to get the floating point value of π. Set `pi=float(pi)` to evaluate expressions with a numerical value for π. Set `pi=quote(pi)` to make π symbolic again.

8. Assign strings to unit names so they are printed normally. For example, setting `meter="meter"` causes the symbol *meter* to be printed as meter instead of m_{eter}.

9. Use `expsin` and `expcos` instead of `sin` and `cos`. Trigonometric simplifications occur automatically when exponentials are used.

10. Use `A==B` or `A-B==0` to test for equality of A and B. The equality operator `==` uses a cross multiply algorithm to eliminate denominators. Hence `==` can typically determine equality even when the unsimplified result of $A - B$ is nonzero. Note: Equality tests involving floating point numbers can be problematic due to roundoff error.