

After saving or printing, reset the environment with the command `gset terminal x11`, or else any subsequent graphs will be saved/printed without being displayed onscreen.

SciLab

Scilab is a free software package similar to Maple. Its syntax is considerably different from Matlab, but Scilab can perform symbolic manipulation, unlike Matlab. It includes excellent demos, as found by pressing the "Demos" button on the toolbar.

Creating transfer functions

This is perhaps the easiest task of all. Just type the following:

```
s = poly(0, "s");  
L = syslin('c', 3e4 * (0.05*s + 1)^2 / ((s+1)^3 * (0.01*s + 1)));
```

The `poly` command simply defines a polynomial with the symbol "s." Don't forget it! Simply type `L` to see the transfer function you've just defined.

The graph commands

Root locus

For root locus, use `evans(L)`.

```
s = poly(0, "s");  
L = syslin('c', 3e4 * (0.05*s + 1)^2 / ((s+1)^3 * (0.01*s + 1)));  
evans(L, 2.6);
```