



Figure 1.1: Samples of MATLAB plotting.

that is, the directory where your files are located. MATLAB searches for M-files in all locations specified in a list called the "path." Use the `path` command or the "Set path..." menu item to add your directories to MATLAB's path.

After MATLAB executes the commands in the M-file, it returns control to the command line. You can then enter individual commands (for example, to display the values of your variables). The interactive help may be used from the command line. For example,

```
EDU>> help bessell
```

tells you about MATLAB's Bessel function routines. You can also get help on special characters (e.g., try `help &`).

## EXERCISES

(Recommended exercises indicated by boldface numbers)

1. For the matrix  $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ , use compute MATLAB to find: (a)  $A * A$ ; (b)  $A .* A$ ; (c)  $A ^ 2$ ; (d)  $A . ^ 2$ ; (e)  $A / A$ ; (f)  $A ./ A$ . [MATLAB]
2. Given the vectors  $x = [1 \ 2 \ 3 \dots \ 10]$  and  $y = [1 \ 4 \ 9 \dots \ 100]$ , plot them in MATLAB using: (a) `plot(x,y)`; (b) `plot(x,y,'+')`; (c) `plot(x,y,'-',x,y,'+')`; (d) `plot(x,y,'-', x(1:2:10), y(1:2:10), '+')`; (e) `semilogy(x,y)`; (f) `loglog(x,y,'+')`. [MATLAB]
- ③ Reproduce the plots shown in Figure 1.1. Try to be as accurate as possible in your reconstruction. [MATLAB]

Just  
A+B