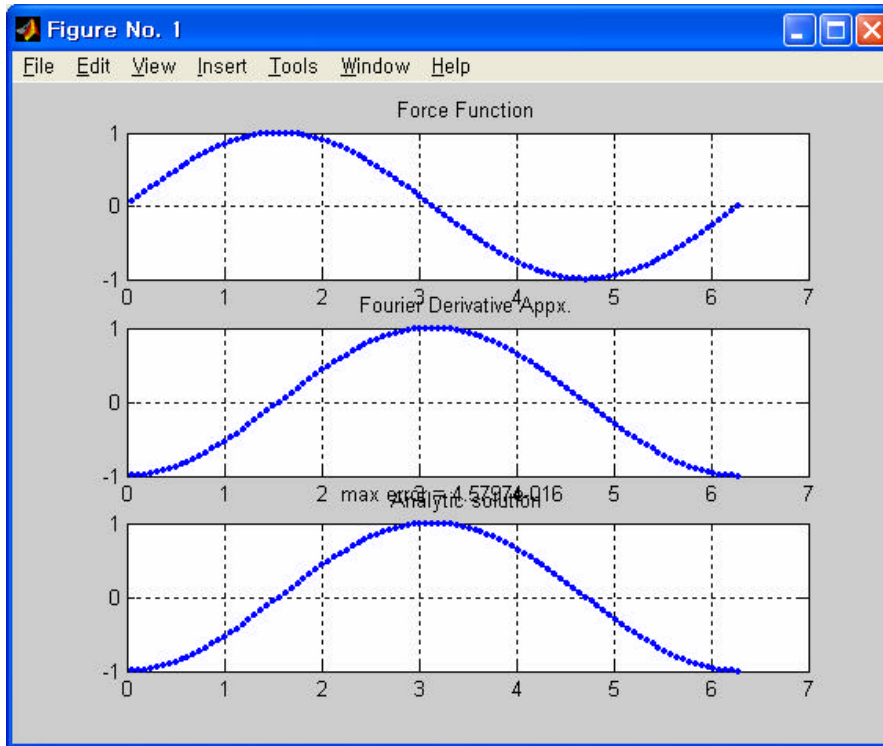# Result of Fourier Method for 1,2th order differential equations.

- **du/dx = f**
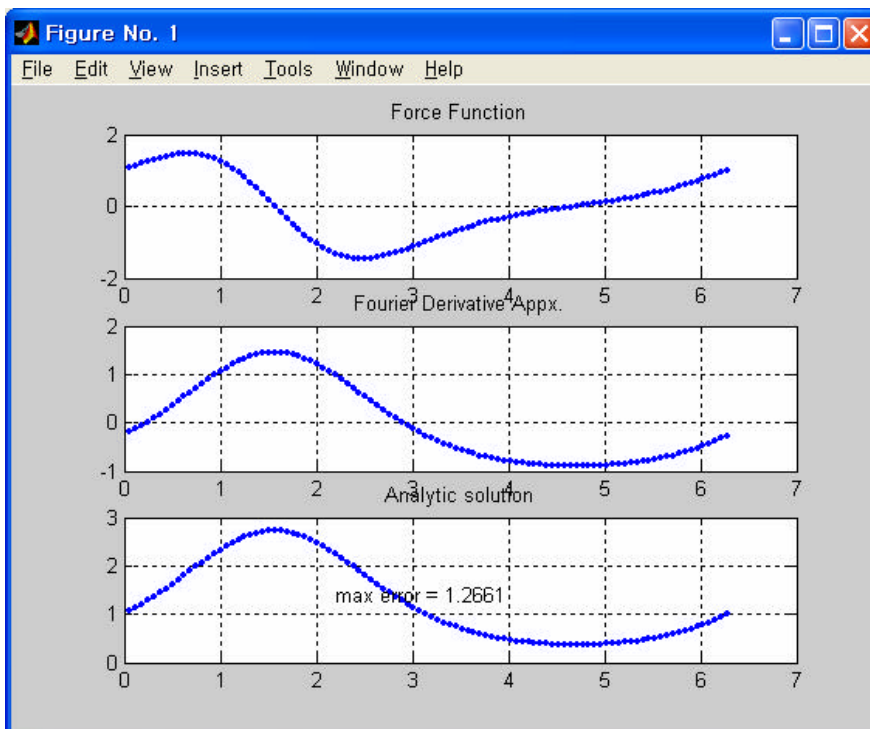
  1 f = sin(x);   u = - cos(x);   error = 4.5797e-016
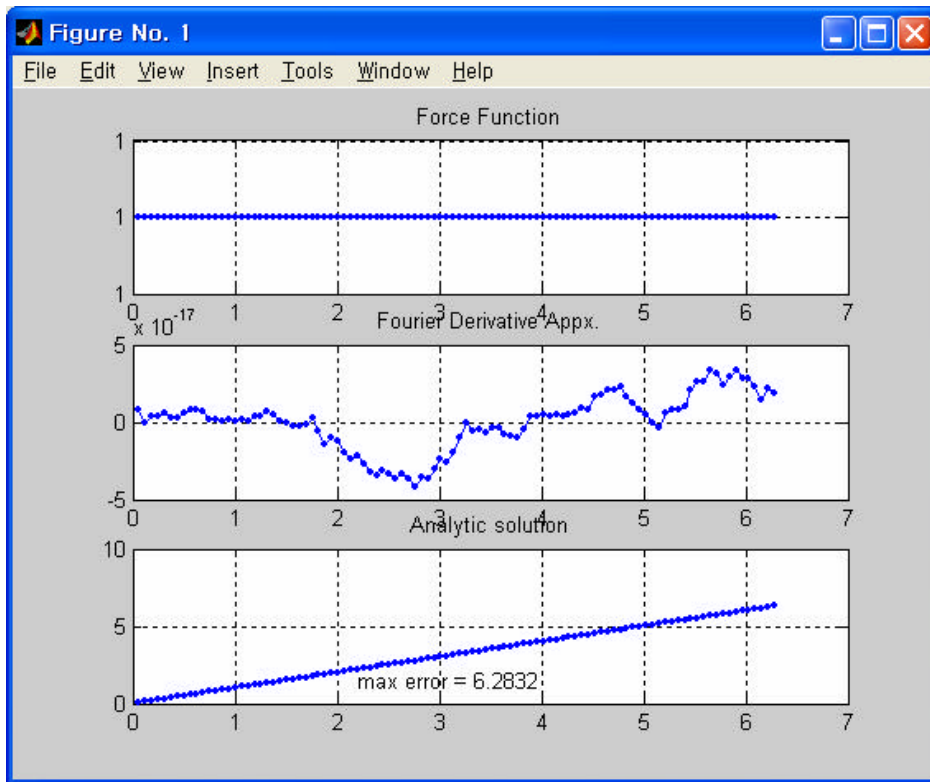

  2 f = cos(x) .* exp(sin(x));   u = exp(sin(x));   error = 1.2661

Non-Periodic Functions

3   f = 1./x .* exp(log(x));   u = exp(log(x));   error = 6.2832

4   f = log(x) + 1; u = x .* log(x);   error = 10.0595