**Topic 5 problems**

1. Write a script that does the following.
   1. Make a vector x of 10 random numbers uniformly distributed between 0 and 2π .
   2. Plot the data points (x, sin(x)) as red circles.
   3. On the same axes, plot a smooth green line y = sin(x) through the data points.
2. Write a script that plots a circle of radius 2. Recall that the points on a circle can be written as ( R\*cos(theta), R\*sin(theta) ), where R is the radius and theta varies from 0º to 360º.
3. Write a function **solid.m** that takes as an argument the handle returned from plot and makes the data points of that plot into filled-in symbols, rather than the default outlined symbols. Test your function as follows:

x = linspace(-pi,pi,10);

h = plot(x,sin(x),'ro-');

solid(h);

Hint: Use set and get to examine and manipulate the handle graphics parameters Color and MarkerFaceColor.