**Exercises 9**

1. (a) Exercise 9.1.

(b) use the Edit plot to insert the ‘title’ and ‘legend’ of the figure & change the line type.

1. Draw the surface shown in Figure 9.7 with a finer mesh (of 0.25 units in each direction), using

[x y] = meshgrid(0:0.25:5); (the number of mesh points in each direction is 21).

1. The initial heat distribution over a steel plate is given by the function

*u(x, y)* = 

Plot the surface *u* over the grid defined by

−2*.*1 ≤ *x* ≤ 2*.*1*,* −6 ≤ *y* ≤ 6*,*

where the grid width is 0.15 in both directions. You should get the plot shown in

Figure 9.8.

1. Use the following command:

figure, plot(x,sin(x), x, cos(x), 'om--')

to create the figure, use the graphic handle to change the properties of two chartlines.

1. Use the handle graphics to create an animation of the line plot . FOR x=0:5\*pi, eith step pi/20. (ref to the script in p.222)