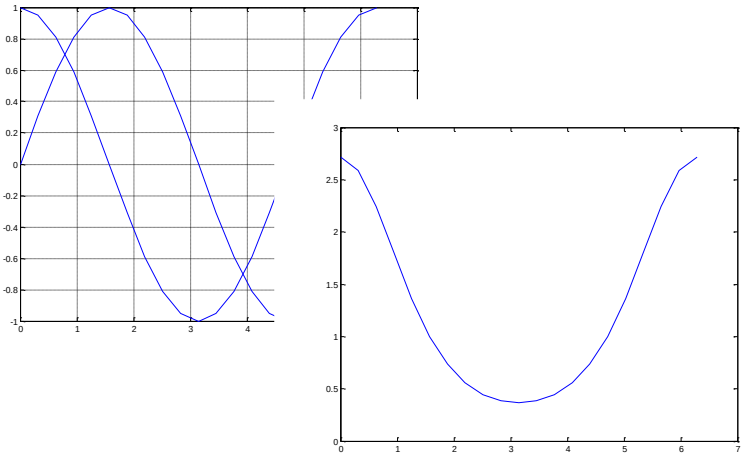
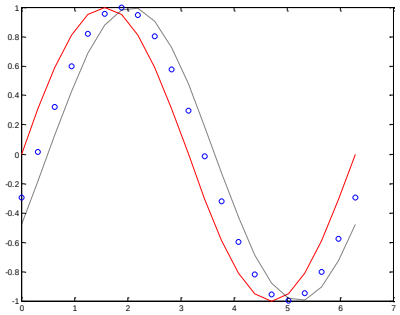
Ex 1.1

```
x=0:pi/10:2*pi;
y1=sin(x);
plot(x,y1);
grid on;
hold on;
y2=cos(x);
plot(x,y2);
figure ;
y3=exp(cos(x));
plot(x,y3);
```



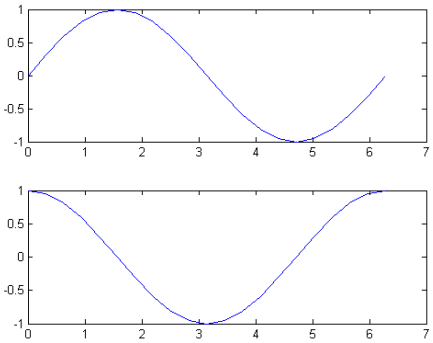
Ex 1.2

```
x=0:pi/10:2*pi;
y1=sin(x);
y2=sin(x-0.3);
y3=sin(x-0.5);
plot(x,y1,'-r',x,y2,'ob',x,y3,':k') ;
```

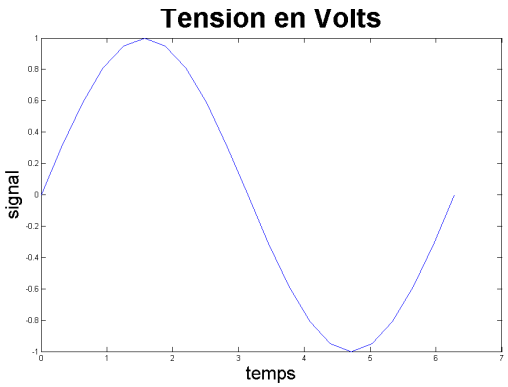


Ex. 1.3

```
x=0:pi/10:2*pi;
y1=sin(x);
y2=cos(x) ;
subplot(2,1,1) ;
plot(x,y1);
subplot(2,1,2) ;
plot(x,y2);
```

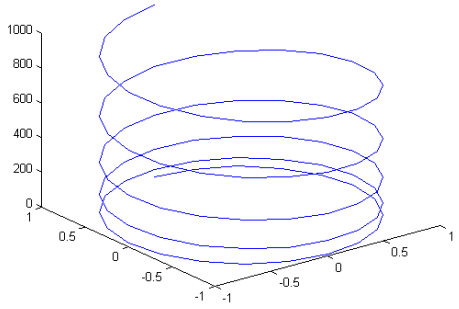


Ex. 1.4




```
x=0:pi/10:2*pi;
y1=sin(x);
plot(x,y1);
xlabel('temps','FontSize',24);
ylabel('signal','FontSize',24);
title('Tension en Volts','FontName','helvetica','FontSize',36,'FontWeight','bold');
```

Ex. 1.5



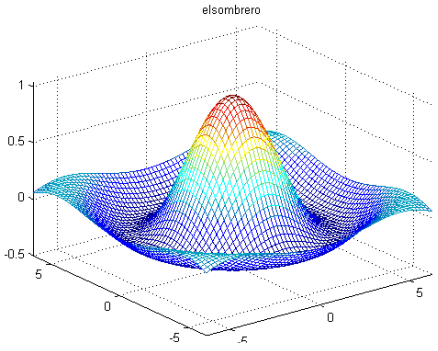
```
t=0:pi/10:10*pi;
x=sin(t);
y=cos(t);
z=t.^2;
plot3(x,y,z);
```

Ex. 1.6
Dans elsombrero.m :

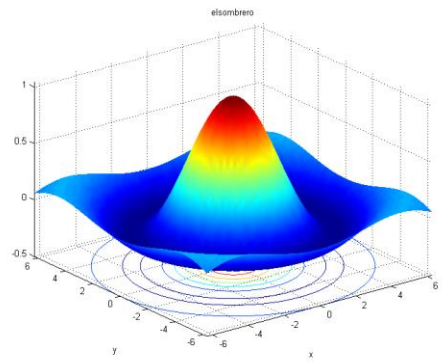
```
function z= elsombrero(x,y)
r = sqrt(x.^2 + y.^2);
z = sin(r)./r;
```

à partir de la fenêtre de commande :

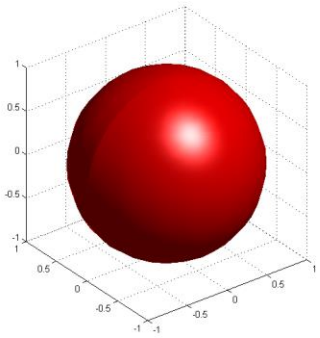
```
ezmesh( @elsombrero );
```



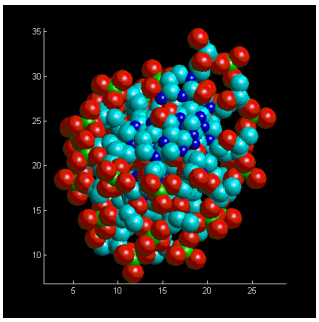

```
ezsurfc( @elsombrero ) ;
shading interp;
```



Ex. 2.1



```
[X, Y, Z] = sphere(20) ;
surf (X,Y,Z,'FaceColor','red','EdgeColor','none');
axis equal ;
lighting phong ;
camlight right ;
```



Ex. 2.2

Rôle de chaque appel de uicontrol :

h1 : titre ‘’ ENSTA IN103 VIEW MOL’
h2: case ou l’on peut écrire le nom du fichier
h3 : bouton load qui en le cliquant fait exécuter « close(b); prinmol; »

A la fin du fichier intermol.m, taper:

```
   h4 = uicontrol(a,...
 'Units','characters',...
 'Callback','close(a); close(b);',...
 'ListboxTop',0,...
  'Position',[60 4 14 2],...
  'String','Quit',...
  'Tag','Quit');
```