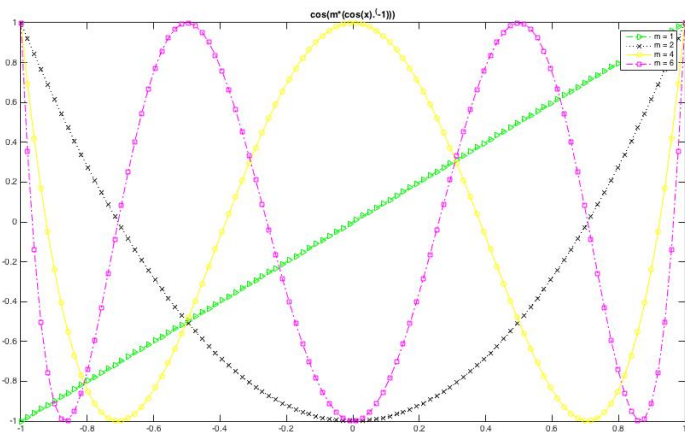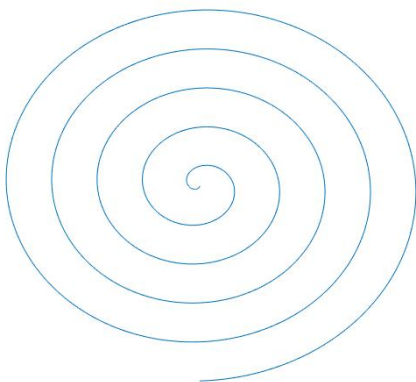Answer (for reference only)

1
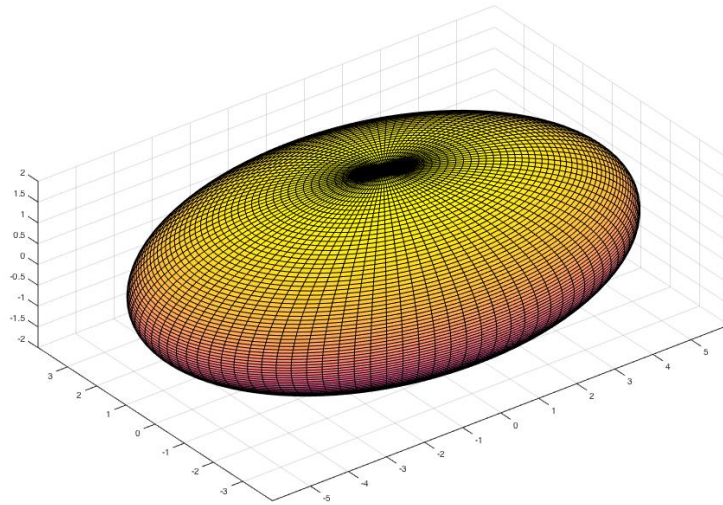


```
%% 1
m = 1;
x = linspace(-1, 1);
%y = cos(m*(cos(x).^(-1)));
tmp = plot(x,cos(1*(acos(x))),'g-.>',x,cos(2*(acos(x))),'k:x',...
    x,cos(4*(acos(x))),'y-o',x,cos(6*(acos(x))),'m-.s');
legend('m = 1','m = 2','m = 4','m = 6');
title('cos(m*(cos(x).^(-1)))');
```

2


```
%% 2
t = linspace(-10*pi, 0, 5000);
plot(t.*cos(t+0.5*pi),
t.*sin(t+0.5*pi));
axis off square
figure;
```

3

```
hw2Q3plot(6, 4, 2)


function [ output_args ] = hw2Q3plot( a,b,c )
colormap('spring');
[theta,phi] = meshgrid(linspace(0,pi),linspace(0,2*pi));
x = a*sin(theta).*cos(phi);
y = b*sin(theta).*sin(phi);
z = c*cos(theta);
surf(x,y,z);
axis equal
end
```