myNR.m

function [R, nitr] = myNR(f,df,x0,tol,nmax)

 nitr = 0;

 xnew = x0;

 x = xnew + 2\*tol;

 while abs(xnew-x) > tol && nitr < nmax

 x = xnew;

 xnew = x - f(x)/df(x); disp([nitr xnew]);

 nitr = nitr + 1;

 end

 if nitr >= nmax

 disp('Maximum number of iterations reached. NR may not have converged to a root.')

 end

 R = xnew;

end