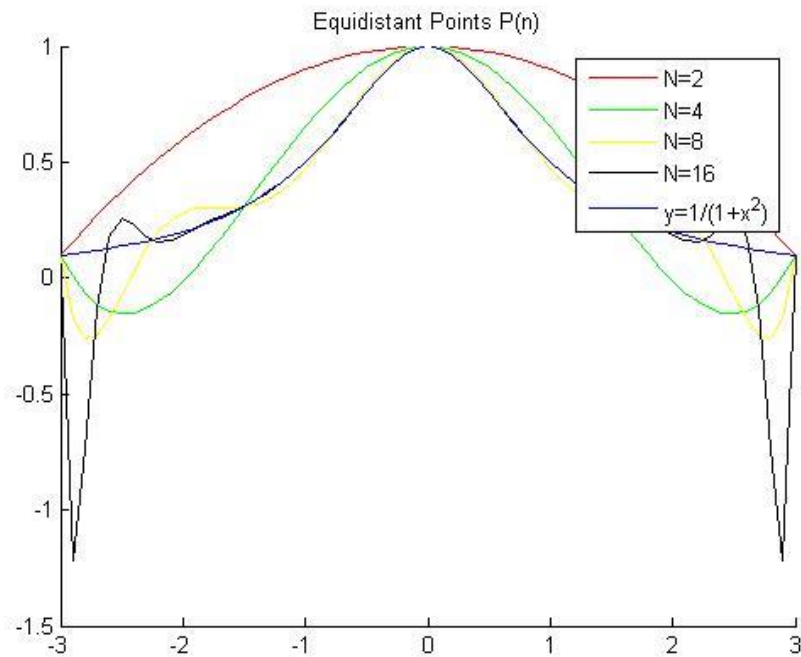


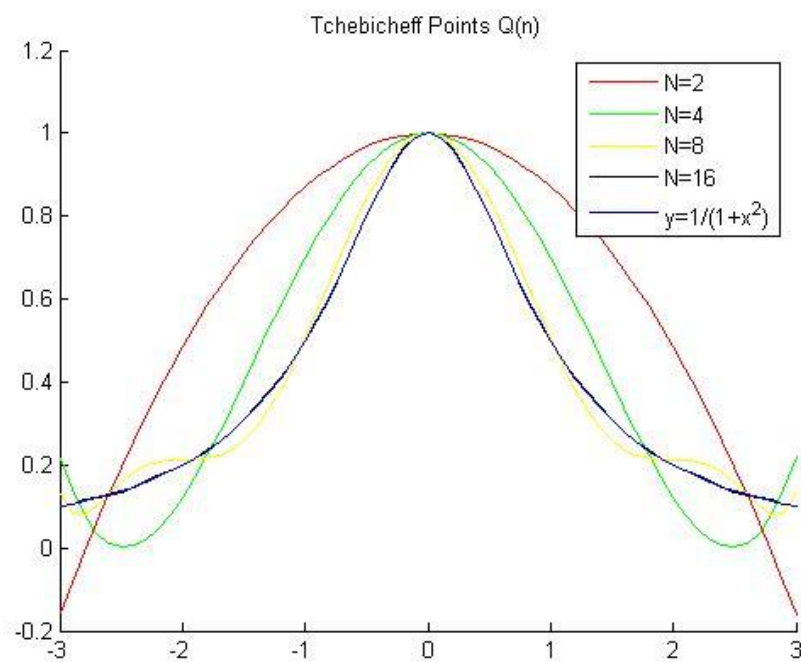
Solution for Homework 7 due on 3/11

Problem 20

Equidistant interpolation

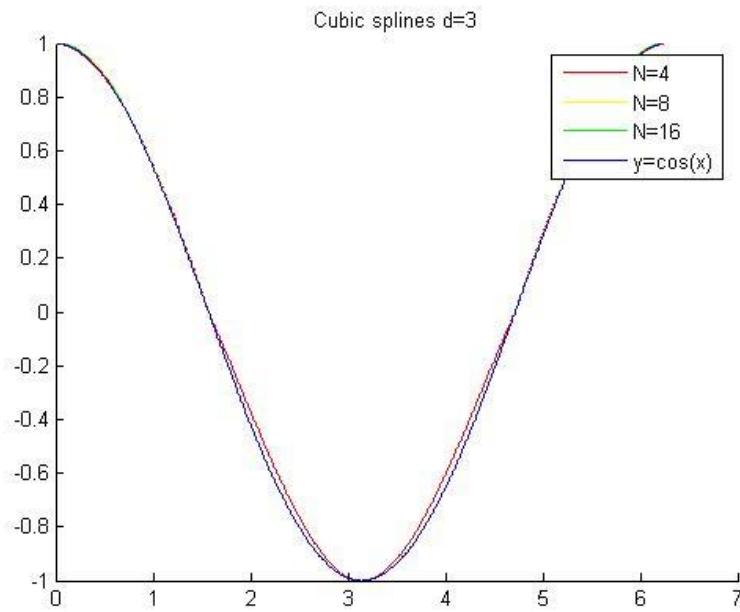


Tchebicheff interpolation

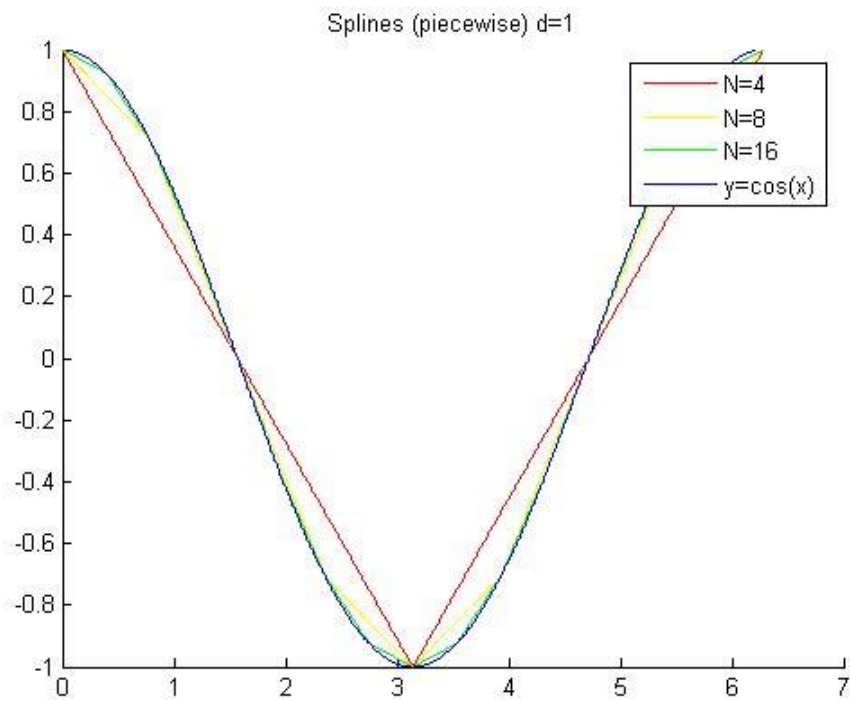


Problem 21

Cubic splines $d=3$



Splines (piecewise) $d=1$



Problem 22

i	x_i bisection	x_i newton
1	1.5	2
2	1.75	1.935951152
3	1.875	1.933756376
4	1.9375	1.933753763
5	1.90625	1.933753763
6	1.921875	1.933753763
7	1.9296875	1.933753763
8	1.93359375	1.933753763
9	1.935546875	1.933753763
10	1.934570313	1.933753763
11	1.934082031	1.933753763
12	1.933837891	1.933753763
13	1.93371582	1.933753763
14	1.933776855	1.933753763
15	1.933746338	1.933753763
16	1.933761597	
17	1.933753967	
18	1.933750153	

In order to get 6 digits of precision, Newton method needs 3 iterations, Bisection needs 17 iterations

