

$$f(x) = e^x ; x_j = -1.0 ; 0.5 ; 1.5 ; 2.0$$

Lagrange		Hermite	
x	p(x)	x	p(x)
-5	-42.6514	-5	-33.5282
-4.9	-40.0341	-4.9	-29.1467
-4.8	-37.5262	-4.8	-25.2649
-4.7	-35.1253	-4.7	-21.8344
-4.6	-32.8289	-4.6	-18.8103
-4.5	-30.6348	-4.5	-16.1518
-4.4	-28.5404	-4.4	-13.8211
-4.3	-26.5434	-4.3	-11.7837
-4.2	-24.6415	-4.2	-10.0082
-4.1	-22.8322	-4.1	-8.4658
-4	-21.1131	-4	-7.13035
...
-1	0.367879	-1	0.367879
-0.9	0.476417	-0.9	0.406525
-0.8	0.57128	-0.8	0.449196
-0.7	0.654862	-0.7	0.496367
-0.6	0.729555	-0.6	0.548533
-0.5	0.79775	-0.5	0.606226
-0.4	0.861842	-0.4	0.670021
-0.3	0.924221	-0.3	0.740551
-0.2	0.987282	-0.2	0.81851
-0.1	1.05341	-0.1	0.90467
0.0	1.12501	0.0	0.999885
0.1	1.20447	0.1	1.1051
0.2	1.29418	0.2	1.22137
0.3	1.39653	0.3	1.34984
0.4	1.51391	0.4	1.49182
0.5	1.64872	0.5	1.64872
0.6	1.80335	0.6	1.82212
0.7	1.9802	0.7	2.01375
0.8	2.18165	0.8	2.22553
0.9	2.41009	0.9	2.45959
1	2.66793	1	2.71827
1.1	2.95755	1.1	3.00415
1.2	3.28134	1.2	3.32011
1.3	3.6417	1.3	3.66929
1.4	4.04102	1.4	4.0552
1.5	4.48169	1.5	4.48169
1.6	4.9661	1.6	4.95303
1.7	5.49666	1.7	5.47395
1.8	6.07574	1.8	6.04964
1.9	6.70574	1.9	6.68589
2	7.38906	2	7.38906
...

$f(x) = 1/(1+x^2)$; $x_j = -5.0 ; -4.0 ; -3.0 ; \dots ; 4.0 ; 5.0$

Lagrange		Hermite	
x	p(x)	x	p(x)
-5	0.0384615	-5	0.0384615
-4.9	1.23032	-4.9	1.51589
-4.8	1.80439	-4.8	3.28389
-4.7	1.95895	-4.7	3.87912
-4.6	1.84585	-4.6	3.44096
-4.5	1.57872	-4.5	2.5089
-4.4	1.24021	-4.4	1.54111
-4.3	0.888081	-4.3	0.789366
-4.2	0.560444	-4.2	0.325051
-4.1	0.280218	-4.1	0.109342
-4	0.0588235	-4	0.0588235
...
-2	0.2	-2	0.2
-1.9	0.191159	-1.9	0.217767
-1.8	0.188778	-1.8	0.238749
-1.7	0.194618	-1.7	0.262319
-1.6	0.209914	-1.6	0.287906
-1.5	0.235347	-1.5	0.315252
-1.4	0.271024	-1.4	0.34458
-1.3	0.316505	-1.3	0.376605
-1.2	0.370833	-1.2	0.412414
-1.1	0.432596	-1.1	0.453211
-1	0.5	-1	0.5
-0.9	0.570954	-0.9	0.553248
-0.8	0.643163	-0.8	0.612616
-0.7	0.714228	-0.7	0.676786
-0.6	0.781747	-0.6	0.743446
-0.5	0.843407	-0.5	0.809421
-0.4	0.89708	-0.4	0.870956
-0.3	0.940902	-0.3	0.924103
-0.2	0.973346	-0.2	0.965163
-0.1	0.993278	-0.1	0.991119
0.0	1	0.0	1
...

