Eliton Machado da Silva

10)

Usado o Algoritmo de Richardson

Questão 1:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	-0.8414711657725327	-0.8373845858168072	-0.8415612982761268
0.05	-0.8414709996005202	-0.8404460631618665	-0.8414760256460218
0.025	-0.8414709858560717	-0.8412145534866711	-0.8414712906281198
0.0125	-0.8414709848774018	-0.8414068645250072	-0.8414710037781957

Questão 2:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	0.5403022984947043	0.5407521639231044	0.5403005070032606
0.05	0.5403023054177906	0.5404148442269974	0.540302193338656
0.025	0.5403023058403754	0.5403304450743152	0.5403022988334759
0.0125	0.540302305866346	0.5403093409582427	0.540302305428446

Questão 3:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	0.5403021044241627	0.5415125832616963	0.5402663631130586
0.05	0.5403022951306387	0.5406063588505672	0.5403000445577247
0.025	0.5403023052557566	0.5403784120108357	0.5403021643022908
0.0125	0.5403023058317388	0.5403213382125749	0.5403022970166111

Questão 4:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	-0.7357588919078223	-0.7369872604079301	-0.7357680241529193
0.05	-0.7357588838577213	-0.7360655821543394	-0.7357594849270432
0.025	-0.7357588824653838	-0.7358355322677879	-0.7357589204984263
0.0125	-0.7357588823513564	-0.7357780432542471	-0.7357588847353493