Eliton Machado da Silva

8)

Usado o Algoritmo de Diferenças Finitas com $p = 1$

Questão 1:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	-0.7381240949060053	-0.8496589053044501	-0.8415612982761268
0.05	-0.7878935990431524	-0.8435217455606286	-0.8414760256460218
0.025	-0.8141874565698748	-0.8419839043612476	-0.8414712906281198
0.0125	-0.8277032149599695	-0.8415992289239593	-0.8414710037781957

Questão 2:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	0.5814407518041309	0.53940225216976	0.5403005070032606
0.05	0.5611096003704552	0.5400772080464322	0.540302193338656
0.025	0.5507638656255542	0.5402460261367148	0.5403022988334759
0.0125	0.5455473607818373	0.540288235605515	0.540302305428446

Questão 3:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	0.6339453451314703	0.5378749671497829	0.5402663631130586
0.05	0.5879145857912582	0.5396937752057396	0.5403000445577247
0.025	0.564283765667799	0.5401500670281534	0.5403021643022908
0.0125	0.552334003349344	0.5402642395194945	0.5403022970166111

Questão 4:

h	erro $O(h)$	erro $O(h^2)$	erro $O(h^4)$
0.1	-0.7697862505149877	-0.7333039339652688	-0.7357680241529193
0.05	-0.7535012778375649	-0.7351455971865994	-0.7357594849270432
0.025	-0.7447977865208766	-0.7356055896704694	-0.7357589204984263
0.0125	-0.7403184552503506	-0.7357205609691286	-0.7357588847353493