



As is evident from the data, the RK4 solution is measurably closer to the exact solution than both RK1 and RK2.

#	x	RK1	RK2	RK4	Exact
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1.1000	-0.3000	-0.3450	-0.3465	-0.3465	-0.3465
1.2000	-0.6903	-0.7889	-0.7920	-0.7920	-0.7920
1.3000	-1.1798	-1.3407	-1.3455	-1.3455	-1.3455
1.4000	-1.7775	-2.0094	-2.0160	-2.0160	-2.0160
1.5000	-2.4925	-2.8039	-2.8125	-2.8125	-2.8125
1.6000	-3.3337	-3.7334	-3.7440	-3.7440	-3.7440
1.7000	-4.3100	-4.8067	-4.8195	-4.8195	-4.8195
1.8000	-5.4306	-6.0330	-6.0480	-6.0480	-6.0480
1.9000	-6.7043	-7.4212	-7.4385	-7.4385	-7.4385
2.0000	-8.1401	-8.9803	-9.0000	-9.0000	-9.0000
2.1000	-9.7471	-10.7193	-10.7415	-10.7415	-10.7415
2.2000	-11.5343	-12.6473	-12.6720	-12.6720	-12.6720
2.3000	-13.5106	-14.7732	-14.8005	-14.8005	-14.8005
2.4000	-15.6850	-17.1060	-17.1360	-17.1360	-17.1360
2.5000	-18.0665	-19.6548	-19.6875	-19.6875	-19.6875
2.6000	-20.6642	-22.4285	-22.4640	-22.4640	-22.4640
2.7000	-23.4870	-25.4361	-25.4745	-25.4745	-25.4745
2.8000	-26.5438	-28.6867	-28.7280	-28.7280	-28.7280
2.9000	-29.8438	-32.1893	-32.2335	-32.2335	-32.2335
3.0000	-33.3959	-35.9528	-36.0000	-36.0000	-36.0000
3.1000	-37.2091	-39.9862	-40.0365	-40.0365	-40.0365
3.2000	-41.2924	-44.2986	-44.3520	-44.3520	-44.3520
3.3000	-45.6548	-48.8989	-48.9555	-48.9555	-48.9555
3.4000	-50.3053	-53.7962	-53.8560	-53.8560	-53.8560
3.5000	-55.2529	-58.9995	-59.0625	-59.0625	-59.0625
3.6000	-60.5065	-64.5177	-64.5840	-64.5840	-64.5840
3.7000	-66.0753	-70.3599	-70.4295	-70.4295	-70.4295
3.8000	-71.9681	-76.5350	-76.6080	-76.6080	-76.6080
3.9000	-78.1940	-83.0521	-83.1285	-83.1285	-83.1285