Table 1: Test results of the six methods for problems 3.1-3.2

TP	DIM	ISP	NDKM1				NDKM2				ACGD				SCGP				TTMDY				HCGP			
			#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm
3.1	5000	x_0^1	3	7	0.8977	0	4	9	0.0387	0	19	48	0.0653	5.8575E-10	2	6	0.0884	0	45	191	0.1434	8.8689E-10	17	38	0.0833	8.3688E-10
	5000	x_0^2	3	7	0.0206	0	4	9	0.0175	0	20	59	0.0613	4.7625E-10	3	10	0.0171	0	50	216	0.1623	6.0668E-10	3	10	0.0231	0
	5000	x_0^3	3	8	0.0133	0	4	10	0.0158	0	19	56	0.0639	6.5736E-10	2	8	0.0104	0	54	244	0.1748	8.8715E-10	19	42	0.0533	8.3426E-10
	5000	x_0^4	5	7	0.0141	0	6	8	0.0146	0	19	41	0.0568	7.0236E-10	32	115	0.0996	1.4486E-10	69	282	0.2044	7.7707E-10	17	35	0.0365	6.7910E-10
	5000	x_0^5	5	7	0.0164	0	6	8	0.0177	0	19	41	0.0591	7.0005E-10	24	73	0.0690	0	74	302	0.2214	6.6563E-10	17	35	0.0436	6.7866E-10
	5000	x_0^6	5	7	0.0159	0	6	8	0.0157	0	19	41	0.0502	7.0005E-10	24	73	0.0697	0	74	302	0.2151	6.6563E-10	17	35	0.0485	6.7866E-10
	5000	x_0^7	5	7	0.0143	0	6	8	0.0157	0	17	40	0.0534	3.9053E-10	14	32	0.0327	8.5720E-10	42	174	0.1479	7.4894E-10	15	31	0.0482	7.3444E-10
	25000	x_0^1	3	7	0.0989	0	4	9	0.0448	0	20	50	0.1838	3.4075E-10	2	6	0.0260	0	50	207	0.4440	9.7741E-10	18	38	0.1633	9.3567E-10
	25000	x_0^2	3	7	0.0290	0	4	9	0.0406	0	22	61	0.1951	2.6139E-10	3	10	0.0337	0	52	224	0.4742	3.4491E-10	3	10	0.0366	0
	25000	x_0^3	3	8	0.0403	0	4	10	0.0514	0	21	58	0.2126	3.8315E-10	2	8	0.0267	0	56	252	0.5234	5.0491E-10	19	44	0.1703	9.3273E-10
	25000	x_0^4	5	7	0.0574	0	5	7	0.0524	0	20	43	0.1585	4.2915E-10	24	69	0.1925	0	73	298	0.6002	5.0661E-10	17	37	0.1442	7.5906E-10
	25000	x_0^5	5	7	0.0472	0	5	7	0.0475	0	20	43	0.1681	4.2886E-10	32	106	0.2752	4.2207E-10	80	322	0.6624	9.0684E-10	17	37	0.1507	7.5896E-10
	25000	x_0^6	5	7	0.0463	0	5	7	0.0542	0	20	43	0.1562	4.2886E-10	24	70	0.2011	0	80	322	0.6574	9.0683E-10	17	37	0.1448	7.5896E-10
	25000	x_0^7	5	7	0.0471	0	6	8	0.0509	0	17	40	0.1370	3.9047E-10	3	12	0.0397	0	46	190	0.4004	3.8120E-10	15	31	0.1272	7.3492E-10
	50000	x_0^1	3	7	0.1374	0	4	9	0.0877	0	20	50	0.2994	4.8193E-10	2	6	0.0481	0	50	211	0.8949	2.5272E-10	18	40	0.2409	6.6160E-10
	50000	x_0^2	3	7	0.0689	0	4	9	0.0739	0	21	61	0.3729	3.6439E-10	3	10	0.0644	0	52	224	0.9613	4.8782E-10	3	10	0.0674	0
	50000	x_0^3	3	8	0.0638	0	4	10	0.0848	0	20	58	0.3270	5.4214E-10	2	8	0.0477	0	56	252	1.0177	7.1408E-10	20	44	0.2594	6.5953E-10
	50000	x_0^4	5	7	0.0888	0	5	7	0.0900	0	20	43	0.2975	6.1619E-10	24	69	0.3403	0	77	310	1.2967	8.1239E-10	18	37	0.2440	5.3672E-10
	50000	x_0^5	5	7	0.0771	0	5	7	0.0855	0	20	43	0.2840	6.1598E-10	32	85	0.4244	6.6612E-10	81	326	1.3223	9.6291E-10	18	37	0.2475	5.3669E-10
	50000	x_0^6	5	7	0.0842	0	5	7	0.0799	0	20	43	0.2850	6.1598E-10	31	85	0.4277	5.2162E-10	81	326	1.3314	9.6291E-10	18	37	0.2484	5.3669E-10
	50000	x_0^7	5	7	0.0818	0	6	8	0.1044	0	17	40	0.2587	3.9046E-10	3	13	0.0734	0	42	174	0.7525	9.8343E-10	15	31	0.2046	7.3498E-10
3.2	5000	x_0^1	9	19	0.0620	1.0041E-10	7	18	0.0263	0	17	73	0.0754	2.8178E-10	20	72	0.0701	3.4695E-11	97	588	0.3749	9.5036E-10	23	66	0.0698	5.1459E-10
	5000	x_0^2	6	14	0.0280	1.4200E-11	6	14	0.0209	0	16	74	0.0682	2.4515E-10	2	8	0.0108	0	96	590	0.3670	9.8843E-10	15	48	0.0446	4.7412E-10
	5000	x_0^3	6	15	0.0229	7.7028E-11	6	15	0.0268	0	18	82	0.0758	2.3270E-10	2	9	0.0118	0	87	547	0.3353	4.7132E-10	19	59	0.0766	3.8532E-10
	5000	x_0^4	1	3	0.0395	0	1	3	0.0072	0	16	66	0.0767	3.7411E-10	32	184	0.1397	0	97	589	0.3687	5.2488E-10	16	51	0.0659	4.8215E-11
	5000	x_0^5	1	3	0.0069	0	1	3	0.0067	0	16	66	0.0632	3.7453E-10	35	210	0.1710	0	102	613	0.4024	8.4380E-10	21	59	0.0665	6.7163E-10
	5000	x_0^6	1	3	0.0071	0	1	3	0.0054	0	16	66	0.0738	3.7453E-10	35	210	0.1493	0	102	613	0.4087	8.4380E-10	21	59	0.0807	6.7163E-10
	5000	x_0^7	1	3	0.0053	0	1	3	0.0068	0	15	61	0.0727	3.3464E-10	78	526	0.3255	6.3464E-10	68	407	0.2638	7.1894E-10	22	58	0.0820	2.1895E-10
	25000	x_0^1	9	19	0.1315	4.8700E-10	7	18	0.0987	0	17	73	0.2127	6.3019E-10	21	73	0.2374	9.8647E-10	101	612	1.3133	9.2314E-10	24	69	0.2407	4.0531E-10
	25000	x_0^2	6	14	0.0759	3.1690E-12	6	14	0.0653	0	17	74	0.2347	5.6009E-10	2	8	0.0374	0	102	627	1.3451	7.7535E-10	16	51	0.1721	2.0744E-10
	25000	x_0^3	6	15	0.0798	1.7505E-11	6	15	0.0768	0	17	82	0.2341	5.2295E-10	2	9	0.0332	0	105	649	1.4014	7.9802E-10	20	62	0.2155	1.6763E-10
	25000	x_0^4	1	3	0.0263	0	1	3	0.0170	0	16	66	0.2079	8.5745E-10	23	114	0.2855	0	106	637	1.3429	7.3824E-10	18	55	0.2017	9.0689E-10
	25000	x_0^5	1	3	0.0134	0	1	3	0.0162	0	16	66	0.2123	8.5764E-10	23	120	0.3139	0	101	613	1.3312	3.9582E-10	23	65	0.2064	9.1829E-11
	25000	x_0^6	1	3	0.0128	0	1	3	0.0152	0	16	66	0.2093	8.5764E-10	23	120	0.3061	0	101	613	1.3005	3.9582E-10	23	65	0.2104	9.1827E-11
	25000	x_0^7	1	3	0.0134	0	1	3	0.0151	0	15	61	0.1973	3.3485E-10	106	708	1.5470	0	63	383	0.8369	6.1257E-10	22	58	0.2092	2.1896E-10
	50000	x_0^1	9	19	0.2043	4.2318E-10	7	16	0.1759	0	16	73	0.3892	8.9117E-10	21	76	0.4386	6.9513E-10	102	618	2.6118	8.6051E-10	24	69	0.4194	5.8327E-10
	50000	x_0^2	6	14	0.1428	1.8121E-12	6	14	0.1427	0	17	74	0.3916	7.9420E-10	2	8	0.0652	0	100	621	2.6332	5.3533E-10	17	54	0.3496	9.0964E-11
	50000	x_0^3	6	15	0.1388	9.0148E-12	6	15	0.1434	0	18	82	0.4419	7.4042E-10	2	9	0.0804	0	107	661	2.8087	7.9156E-10	21	65	0.4448	7.2625E-11
	50000	x_0^4	1	3	0.0269	0	1	3	0.0264	0	17	70	0.3640	2.3149E-10	23	114	0.5154	0	107	643	2.7611	9.5604E-10	18	58	0.3423	6.4125E-10
	50000	x_0^5	1	3	0.0274	0	1	3	0.0297	0	17	70	0.3760	2.3152E-10	20	95	0.4669	0	101	613	2.7271	5.6353E-10	23	65	0.4160	1.1385E-10
	50000	x_0^6	1	3	0.0274	0	1	3	0.0260	0	17	70	0.3877	2.3152E-10	20	95	0.4789	0	101	613	2.6345	5.6353E-10	23	65	0.4074	1.1385E-10
	50000	x_0^7	1	3	0.0292	0	1	3	0.0270	0	15	61	0.3278	3.3487E-10	58	382	1.5689	6.6334E-11	63	383	1.6137	6.1012E-10	22	58	0.3696	2.1897E-10

Table 2: Test results of the six methods for problems 3.3-3.4

TP	DIM	ISP	NDKM1				NDKM2				ACGD				SCGP				TTMDY				HCGP			
			#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm
3.3	5000	x_0^1	3	4	0.0710	0	3	4	0.0119	0	19	46	0.0739	1.3132E-11	2	3	0.0075	0	47	189	0.1864	3.6649E-10	2	3	0.0091	0
	5000	x_0^2	3	4	0.0123	0	3	4	0.0111	0	12	21	0.0448	2.1586E-10	2	3	0.0088	0	52	206	0.2064	7.8074E-10	2	3	0.0081	0
	5000	x_0^3	4	5	0.0159	0	3	4	0.0111	0	13	22	0.0417	6.4222E-10	16	31	0.0540	7.3942E-11	52	204	0.1993	4.4483E-10	7	11	0.0188	0
	5000	x_0^4	2	3	0.0102	0	2	3	0.0090	0	15	27	0.0468	2.3164E-11	27	68	0.0892	6.0928E-10	79	314	0.2879	5.8703E-10	8	14	0.0212	0
	5000	x_0^5	2	3	0.0096	0	2	3	0.0082	0	13	25	0.0484	8.8107E-12	26	67	0.0778	2.5174E-10	79	314	0.2710	5.8079E-10	8	14	0.0303	0
	5000	x_0^6	2	3	0.0092	0	2	3	0.0093	0	13	25	0.0438	8.8108E-12	27	68	0.0904	6.1786E-10	79	314	0.2704	5.8079E-10	8	14	0.0227	0
	5000	x_0^7	4	5	0.0156	0	13	28	0.0482	0	9	35	0.0456	0	26	111	0.1064	3.8626E-11	61	246	0.2422	5.9076E-10	9	16	0.0260	0
	25000	x_0^1	3	4	0.0445	0	3	4	0.0425	0	19	37	0.2058	3.7560E-10	2	3	0.0269	0	47	189	0.6016	8.1497E-10	2	3	0.0228	0
	25000	x_0^2	3	4	0.0367	0	3	4	0.0475	0	17	32	0.1872	6.9262E-10	2	3	0.0252	0	54	214	0.6954	9.4518E-10	2	3	0.0207	0
	25000	x_0^3	4	5	0.0530	0	4	5	0.0534	0	19	75	0.2826	0	22	81	0.2728	0	52	204	0.6794	9.9202E-10	17	34	0.1972	6.3731E-10
	25000	x_0^4	2	3	0.0244	0	2	3	0.0252	0	23	70	0.2885	2.9180E-10	28	50	0.2724	6.3402E-10	81	322	1.0554	7.2141E-10	17	35	0.1915	8.4511E-10
	25000	x_0^5	2	3	0.0270	0	2	3	0.0287	0	14	49	0.2105	0	31	93	0.3532	0	81	322	1.0571	7.2043E-10	17	35	0.1904	8.4507E-10
	25000	x_0^6	2	3	0.0271	0	2	3	0.0265	0	14	49	0.2029	0	37	107	0.4015	1.6215E-10	81	322	0.9967	7.2043E-10	17	35	0.1921	8.4507E-10
	25000	x_0^7	4	5	0.0474	0	13	28	0.1635	0	10	42	0.1541	0	41	209	0.6300	4.9957E-10	61	246	0.7728	5.9807E-10	15	31	0.1621	7.3051E-10
	50000	x_0^1	3	4	0.0691	0	3	4	0.0736	0	19	37	0.3884	4.7924E-10	2	3	0.0463	0	49	197	1.2607	2.9282E-10	2	3	0.0434	0
	50000	x_0^2	3	4	0.0776	0	3	4	0.0839	0	17	32	0.3537	9.9633E-10	2	3	0.0438	0	57	226	1.4326	2.4722E-10	2	3	0.0500	0
	50000	x_0^3	4	5	0.1027	0	4	5	0.0906	0	20	38	0.3893	7.4072E-10	18	34	0.3396	8.4595E-10	54	212	1.3186	3.5655E-10	17	34	0.9900	9.0866E-10
	50000	x_0^4	2	3	0.0458	0	2	3	0.0501	0	29	116	0.7820	5.1298E-10	37	107	0.7803	9.9607E-11	83	330	2.1031	5.6836E-10	18	35	0.5716	6.0442E-10
	50000	x_0^5	2	3	0.0450	0	2	3	0.0468	0	21	105	0.6746	0	37	108	0.7884	1.7198E-10	86	338	2.1001	8.0686E-10	18	35	0.5168	6.0440E-10
	50000	x_0^6	2	3	0.0549	0	2	3	0.0462	0	26	100	0.7400	8.7113E-10	30	82	0.6612	0	83	330	2.0682	5.6799E-10	18	35	0.5074	6.0440E-10
	50000	x_0^7	4	5	0.0895	0	13	28	0.2900	0	18	50	0.3933	6.1519E-10	29	158	0.8732	3.9361E-11	61	246	1.4678	5.9787E-10	15	31	0.4763	7.6284E-10
3.4	5000	x_0^1	4	6	0.0546	0	4	6	0.0144	0	18	40	0.0707	8.0222E-10	18	48	0.0653	8.5046E-11	57	233	0.2066	6.0879E-10	18	37	0.0749	8.3352E-10
	5000	x_0^2	3	5	0.0153	0	3	5	0.0117	0	19	43	0.0687	3.5287E-10	18	37	0.0512	9.2930E-10	56	237	0.1948	5.3432E-10	18	39	0.1218	6.5455E-10
	5000	x_0^3	3	5	0.0111	0	3	5	0.0122	0	19	43	0.0638	4.2325E-10	2	5	0.0093	0	42	183	0.1752	9.5386E-10	19	42	0.1116	7.7614E-10
	5000	x_0^4	1	2	0.0069	0	2	4	0.0095	0	18	39	0.0639	2.8540E-10	16	34	0.0565	1.2384E-10	45	186	0.1640	4.8273E-10	17	37	0.0751	8.4765E-10
	5000	x_0^5	1	2	0.0065	0	2	4	0.0082	0	18	39	0.0579	2.8529E-10	18	48	0.0573	3.0011E-11	50	205	0.1810	7.2745E-10	17	37	0.1073	8.4752E-10
	5000	x_0^6	1	2	0.0057	0	2	4	0.0081	0	18	39	0.0541	2.8529E-10	16	34	0.0490	1.1755E-10	50	205	0.1775	7.2745E-10	17	37	0.0820	8.4752E-10
	5000	x_0^7	1	2	0.0061	0	2	4	0.0077	0	22	77	0.0873	6.0670E-10	28	100	0.0915	9.2527E-10	37	154	0.1428	4.7713E-10	15	31	0.0724	8.4505E-10
	25000	x_0^1	4	6	0.0460	0	4	6	0.0419	0	19	42	0.1939	4.6698E-10	17	36	0.1564	2.5527E-10	59	241	0.6255	6.3276E-10	18	39	0.2367	9.3190E-10
	25000	x_0^2	3	5	0.0361	0	3	5	0.0327	0	19	43	0.1848	7.8971E-10	29	101	0.3086	7.1171E-10	58	247	0.6228	5.0626E-10	19	39	0.2334	7.3181E-10
	25000	x_0^3	3	5	0.0317	0	3	5	0.0383	0	19	43	0.2013	9.4749E-10	2	5	0.0299	0	44	192	0.5290	8.7485E-10	20	42	0.2724	8.6775E-10
	25000	x_0^4	1	2	0.0102	0	2	4	0.0277	0	18	39	0.1788	6.3961E-10	27	87	0.2785	7.4313E-10	50	204	0.5224	9.9113E-10	18	37	0.2724	9.4764E-10
	25000	x_0^5	1	2	0.0141	0	2	4	0.0272	0	18	39	0.1795	6.3956E-10	26	75	0.2625	9.1380E-10	55	224	0.5611	4.8352E-10	18	37	0.3007	9.4761E-10
	25000	x_0^6	1	2	0.0105	0	2	4	0.0212	0	18	39	0.1773	6.3956E-10	21	72	0.2363	0	55	224	0.5646	4.8352E-10	18	37	0.2499	9.4761E-10
	25000	x_0^7	1	2	0.0139	0	2	4	0.0272	0	15	87	0.2214	0	23	60	0.2248	8.0118E-10	44	180	0.4619	7.7250E-10	15	31	0.2057	8.4513E-10
	50000	x_0^1	4	6	0.0837	0	4	6	0.1063	0	19	42	0.3577	6.6061E-10	29	99	0.5816	6.1198E-10	59	241	1.2432	8.9377E-10	19	39	0.4351	6.5895E-10
	50000	x_0^2	3	5	0.0699	0	3	5	0.0638	0	20	45	0.3739	2.9052E-10	31	92	0.5312	6.8610E-10	60	254	1.2898	3.8481E-10	19	41	0.5044	5.1747E-10
	50000	x_0^3	3	5	0.0705	0	3	5	0.0693	0	20	45	0.3540	3.4848E-10	2	5	0.0496	0	43	187	1.0866	5.4241E-10	20	44	0.4648	6.1359E-10
	50000	x_0^4	1	2	0.0234	0	2	4	0.0454	0	18	39	0.3124	9.0506E-10	20	60	0.3705	0	45	185	0.9938	8.2498E-10	18	39	0.4638	6.7008E-10
	50000	x_0^5	1	2	0.0241	0	2	4	0.0464	0	18	39	0.3254	9.0503E-10	30	82	0.5331	5.8087E-10	50	204	1.0641	8.9909E-10	18	39	0.4534	6.7007E-10
	50000	x_0^6	1	2	0.0229	0	2	4	0.0495	0	18	39	0.3269	9.0503E-10	16	34	0.2644	8.9985E-10	50	204	1.0614	8.9908E-10	18	39	0.4518	6.7007E-10
	50000	x_0^7	1	2	0.0242	0	2	4	0.0443	0	21	73	0.4241	4.0276E-10	17	39	0.3048	8.6157E-10	47	192	0.9496	9.0225E-10	15	31	0.3367	8.4514E-10

Table 3: Test results of the six methods for problems 3.5-3.6

TP	DIM	ISP	NDKM1				NDKM2				ACGD				SCGP				TTMDY				HCGP			
			#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm
3.5	5000	x_0^1	1	2	0.0170	0	1	2	0.0058	0	1	2	0.0060	0	1	2	0.0057	0	1	2	0.0056	0	1	2	0.0060	0
	5000	x_0^2	1	2	0.0059	0	1	2	0.0061	0	1	2	0.0060	0	1	2	0.0045	0	1	2	0.0061	0	1	2	0.0076	0
	5000	x_0^3	1	2	0.0055	0	1	2	0.0098	0	1	2	0.0056	0	1	2	0.0052	0	1	2	0.0058	0	1	2	0.0067	0
	5000	x_0^4	1	2	0.0059	0	1	2	0.0091	0	1	2	0.0056	0	1	2	0.0054	0	1	2	0.0055	0	1	2	0.0166	0
	5000	x_0^5	1	2	0.0059	0	1	2	0.0059	0	1	2	0.0056	0	1	2	0.0053	0	1	2	0.0050	0	1	2	0.0066	0
	5000	x_0^6	1	2	0.0059	0	1	2	0.0055	0	1	2	0.0053	0	1	2	0.0053	0	1	2	0.0062	0	1	2	0.0161	0
	5000	x_0^7	1	2	0.0052	0	1	2	0.0055	0	1	2	0.0050	0	1	2	0.0057	0	1	2	0.0058	0	1	2	0.0078	0
	25000	x_0^1	1	2	0.0156	0	1	2	0.0111	0	1	2	0.0118	0	1	2	0.0108	0	1	2	0.0108	0	1	2	0.0152	0
	25000	x_0^2	1	2	0.0122	0	1	2	0.0122	0	1	2	0.0126	0	1	2	0.0124	0	1	2	0.0114	0	1	2	0.0169	0
	25000	x_0^3	1	2	0.0122	0	1	2	0.0137	0	1	2	0.0131	0	1	2	0.0123	0	1	2	0.0124	0	1	2	0.0159	0
	25000	x_0^4	1	2	0.0114	0	1	2	0.0125	0	1	2	0.0110	0	1	2	0.0115	0	1	2	0.0104	0	1	2	0.0296	0
	25000	x_0^5	1	2	0.0107	0	1	2	0.0126	0	1	2	0.0105	0	1	2	0.0105	0	1	2	0.0095	0	1	2	0.0339	0
	25000	x_0^6	1	2	0.0113	0	1	2	0.0124	0	1	2	0.0114	0	1	2	0.0103	0	1	2	0.0172	0	1	2	0.0160	0
	25000	x_0^7	1	2	0.0145	0	1	2	0.0103	0	1	2	0.0110	0	1	2	0.0105	0	1	2	0.0118	0	1	2	0.0152	0
	50000	x_0^1	1	2	0.0219	0	1	2	0.0234	0	1	2	0.0209	0	1	2	0.0218	0	1	2	0.0209	0	1	2	0.0258	0
	50000	x_0^2	1	2	0.0211	0	1	2	0.0228	0	1	2	0.0229	0	1	2	0.0234	0	1	2	0.0205	0	1	2	0.0519	0
	50000	x_0^3	1	2	0.0241	0	1	2	0.0228	0	1	2	0.0215	0	1	2	0.0190	0	1	2	0.0203	0	1	2	0.0271	0
	50000	x_0^4	1	2	0.0219	0	1	2	0.0211	0	1	2	0.0182	0	1	2	0.0184	0	1	2	0.0184	0	1	2	0.0410	0
	50000	x_0^5	1	2	0.0244	0	1	2	0.0209	0	1	2	0.0203	0	1	2	0.0167	0	1	2	0.0199	0	1	2	0.0233	0
	50000	x_0^6	1	2	0.0224	0	1	2	0.0214	0	1	2	0.0207	0	1	2	0.0204	0	1	2	0.0195	0	1	2	0.0260	0
	50000	x_0^7	1	2	0.0210	0	1	2	0.0220	0	1	2	0.0186	0	1	2	0.0188	0	1	2	0.0200	0	1	2	0.0298	0
3.6	5000	x_0^1	13	14	0.0766	7.3929E-10	15	27	0.0781	2.6000E-10	18	39	0.1028	7.1365E-10	25	72	0.1219	1.9331E-10	31	127	0.1764	9.5756E-10	18	39	0.1215	6.7745E-10
	5000	x_0^2	13	14	0.0573	4.9128E-10	14	27	0.0917	8.6625E-10	18	39	0.0955	4.7427E-10	26	83	0.1375	6.4230E-10	31	127	0.1963	7.4582E-10	18	37	0.1696	9.0043E-10
	5000	x_0^3	12	14	0.0619	8.7482E-10	14	25	0.0648	5.5530E-10	18	39	0.0939	2.9570E-10	26	88	0.1343	3.6834E-11	30	123	0.1753	9.7458E-10	18	37	0.1317	5.6137E-10
	5000	x_0^4	13	15	0.0518	5.0232E-10	15	29	0.0788	7.8181E-10	19	41	0.0988	3.1513E-10	28	81	0.1457	1.1041E-10	33	135	0.1713	3.9371E-10	19	39	0.0890	5.7533E-10
	5000	x_0^5	13	15	0.0569	5.0237E-10	15	29	0.0754	7.8204E-10	19	41	0.0983	3.1516E-10	28	81	0.1447	8.6449E-11	33	135	0.1721	3.9374E-10	19	39	0.1318	5.7538E-10
	5000	x_0^6	13	15	0.0503	5.0237E-10	15	29	0.0679	7.8204E-10	19	41	0.0833	3.1516E-10	28	81	0.1492	2.1510E-11	33	135	0.1805	3.9374E-10	19	39	0.1404	5.7538E-10
	5000	x_0^7	13	15	0.0522	6.1003E-10	15	26	0.0659	2.4563E-10	19	41	0.0794	3.8271E-10	18	43	0.0731	6.8524E-10	32	131	0.2001	7.4803E-10	19	39	0.1176	6.9869E-10
	25000	x_0^1	13	15	0.2044	6.6105E-10	15	26	0.2197	2.9713E-10	19	41	0.2888	4.1495E-10	27	105	0.5291	9.2897E-11	30	123	0.5769	6.2872E-10	19	39	0.4195	7.5749E-10
	25000	x_0^2	13	15	0.1704	4.3934E-10	15	29	0.2357	5.0124E-10	19	41	0.2913	2.7577E-10	26	74	0.4281	3.7847E-11	30	123	0.5265	6.2497E-10	19	39	0.3782	5.0340E-10
	25000	x_0^3	13	14	0.1739	6.8469E-10	15	27	0.2228	1.9601E-10	18	39	0.2466	6.6118E-10	26	84	0.4481	5.9912E-10	30	123	0.5354	3.7282E-10	18	39	0.3861	6.2763E-10
	25000	x_0^4	14	15	0.2012	3.9303E-10	15	26	0.2358	9.2446E-10	19	41	0.3000	7.0485E-10	27	77	0.4627	4.8520E-11	31	127	0.5828	9.8679E-10	19	41	0.3983	6.4333E-10
	25000	x_0^5	14	15	0.2026	3.9304E-10	15	26	0.2430	9.2449E-10	19	41	0.2823	7.0486E-10	28	79	0.4505	2.2195E-10	31	127	0.5527	9.8681E-10	19	41	0.4304	6.4334E-10
	25000	x_0^6	14	15	0.1848	3.9304E-10	15	26	0.2537	9.2449E-10	19	41	0.3125	7.0486E-10	28	79	0.4591	6.9837E-10	31	127	0.5714	9.8681E-10	19	41	0.3940	6.4334E-10
	25000	x_0^7	14	15	0.1937	4.7753E-10	15	28	0.2277	7.9457E-10	19	41	0.3022	8.5638E-10	18	41	0.2733	8.1646E-10	28	115	0.5260	4.2186E-10	19	41	0.4891	7.8164E-10
	50000	x_0^1	13	15	0.3405	9.3487E-10	15	26	0.4200	6.3864E-10	19	41	0.5437	5.8683E-10	26	82	0.8372	7.0158E-10	31	127	1.1558	3.5988E-10	19	41	0.8299	5.3556E-10
	50000	x_0^2	13	15	0.3380	6.2132E-10	15	26	0.4208	2.5672E-10	19	41	0.5481	3.8999E-10	29	92	0.9669	6.5608E-10	30	123	1.1235	8.2236E-10	19	39	0.7512	7.1192E-10
	50000	x_0^3	13	14	0.3167	9.6820E-10	15	27	0.4106	6.7435E-10	18	39	0.5167	9.3503E-10	25	72	0.7795	4.1726E-10	30	123	1.1266	8.7222E-10	18	39	0.7556	8.8760E-10
	50000	x_0^4	14	15	0.3336	5.5583E-10	16	28	0.4564	8.7604E-11	19	41	0.5397	9.9681E-10	30	82	0.9188	4.7764E-11	29	119	1.0825	6.9356E-10	19	41	0.7767	9.0981E-10
	50000	x_0^5	14	15	0.3538	5.5583E-10	16	28	0.5031	8.7607E-11	19	41	0.5422	9.9682E-10	31	84	0.9340	8.2927E-10	29	119	1.0649	6.9357E-10	19	41	0.7895	9.0982E-10
	50000	x_0^6	14	15	0.3483	5.5583E-10	16	28	0.4651	8.7607E-11	19	41	0.5613	9.9682E-10	31	84	0.9365	5.3722E-11	29	119	1.1049	6.9357E-10	19	41	0.7671	9.0982E-10
	50000	x_0^7	14	15	0.3451	6.7538E-10	16	28	0.4503	1.8616E-10	20	43	0.5878	3.1490E-10	18	40	0.5151	4.2262E-10	27	111	1.0597	8.2007E-10	20	41	0.7783	5.5273E-10

Table 4: Test results of the six methods for problem 3.7

TP	DIM	ISP	NDKM1				NDKM2				ACGD				SCGP				TTMDY				HCGP			
			#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm	#IT	FV	PT	Norm
3.7	5000	x_0^1	12	23	0.0515	4.5147E-10	12	24	0.0364	5.2238E-10	20	80	0.0798	3.1109E-10	78	418	0.3002	2.3254E-10	40	240	0.1902	3.1828E-10	23	53	0.0973	4.8906E-12
	5000	x_0^2	10	22	0.0428	5.0848E-10	10	22	0.0419	5.0848E-10	21	79	0.0880	9.2029E-10	37	117	0.1478	7.8214E-10	35	208	0.1606	9.4582E-10	22	53	0.1091	2.2027E-10
	5000	x_0^3	11	22	0.0488	2.1320E-10	11	22	0.0375	2.1320E-10	18	73	0.0956	4.4267E-10	40	103	0.1383	7.8951E-10	45	271	0.2370	6.1649E-10	22	55	0.1407	9.9265E-10
	5000	x_0^4	9	21	0.0372	8.1722E-10	9	21	0.0433	8.1722E-10	17	73	0.0879	3.2815E-10	58	344	0.2427	1.1578E-10	37	227	0.1875	8.2939E-10	15	39	0.0748	1.1250E-10
	5000	x_0^5	9	21	0.0314	8.1660E-10	9	21	0.0377	8.1660E-10	17	73	0.0827	3.2823E-10	53	277	0.2137	1.7557E-10	40	245	0.1789	3.2568E-10	15	39	0.0971	1.1421E-10
	5000	x_0^6	9	21	0.0482	8.1660E-10	9	21	0.0405	8.1660E-10	17	73	0.0826	3.2823E-10	55	273	0.2188	8.1089E-10	40	245	0.2000	3.2568E-10	15	39	0.0993	1.1421E-10
	5000	x_0^7	9	19	0.0274	4.9734E-10	9	19	0.0297	4.9734E-10	18	74	0.0847	7.4873E-10	39	130	0.1510	9.7080E-10	41	249	0.1914	7.9042E-10	19	47	0.0814	2.9294E-10
	25000	x_0^1	12	23	0.1299	8.8782E-10	12	26	0.1440	4.9660E-10	20	80	0.2367	6.9939E-10	61	344	0.7938	6.6582E-10	40	240	0.5296	7.1151E-10	23	53	0.3320	1.0653E-11
	25000	x_0^2	11	22	0.1179	1.8015E-10	11	22	0.1512	1.8015E-10	22	83	0.2675	4.9872E-10	56	269	0.6708	7.1871E-11	36	214	0.4929	2.5093E-10	22	53	0.3343	4.9254E-10
	25000	x_0^3	11	22	0.1248	4.2982E-10	11	22	0.1553	4.2982E-10	18	73	0.2424	9.9088E-10	38	107	0.3418	6.1155E-10	46	277	0.6759	4.2178E-10	25	62	0.3678	6.4223E-11
	25000	x_0^4	10	21	0.1053	2.7654E-10	10	21	0.1120	2.7654E-10	17	73	0.2233	7.3683E-10	37	131	0.3831	2.9247E-10	41	251	0.5373	7.7236E-10	15	39	0.2193	2.5334E-10
	25000	x_0^5	10	21	0.1198	2.7650E-10	10	21	0.1136	2.7650E-10	17	73	0.2292	7.3686E-10	55	253	0.6433	5.8680E-10	46	281	0.6149	5.7053E-10	15	39	0.2284	2.5410E-10
	25000	x_0^6	10	21	0.1334	2.7650E-10	10	21	0.1109	2.7650E-10	17	73	0.2393	7.3686E-10	42	171	0.4573	9.1138E-10	46	281	0.6437	5.7054E-10	15	39	0.2525	2.5410E-10
	25000	x_0^7	9	21	0.1077	4.9460E-10	9	21	0.1140	4.9460E-10	17	72	0.2219	3.9729E-10	41	104	0.4028	3.1409E-10	36	220	0.5160	6.4593E-10	16	37	0.2736	4.1984E-10
	50000	x_0^1	12	25	0.2387	5.2034E-10	12	26	0.2524	6.9040E-10	20	80	0.4457	9.9035E-10	77	395	1.8086	2.0487E-10	41	246	1.1335	4.9668E-10	23	53	0.6073	1.5588E-11
	50000	x_0^2	11	22	0.2190	2.5811E-10	11	22	0.2210	2.5811E-10	22	83	0.5074	7.0603E-10	41	142	0.8101	2.5606E-11	36	214	1.0093	5.8921E-10	22	53	0.5975	6.9655E-10
	50000	x_0^3	11	22	0.2242	5.8204E-10	11	22	0.2124	5.8204E-10	19	77	0.4471	3.3823E-10	46	119	0.7620	4.1111E-10	46	277	1.2469	5.9178E-10	25	62	0.6447	9.0825E-11
	50000	x_0^4	10	21	0.2051	3.8893E-10	10	21	0.2029	3.8893E-10	18	77	0.4528	2.5171E-10	45	198	1.0008	7.4229E-10	42	257	1.1770	3.0532E-10	15	39	0.3966	3.5855E-10
	50000	x_0^5	10	21	0.1989	3.8890E-10	10	21	0.2026	3.8890E-10	18	77	0.4447	2.5172E-10	59	266	1.3281	3.1759E-10	43	263	1.1866	5.6109E-10	15	39	0.4430	3.5909E-10
	50000	x_0^6	10	21	0.1973	3.8890E-10	10	21	0.2037	3.8890E-10	18	77	0.4293	2.5172E-10	92	518	2.3223	5.8842E-10	43	263	1.2210	5.6108E-10	15	39	0.4386	3.5910E-10
	50000	x_0^7	9	21	0.1925	7.0096E-10	9	21	0.2105	7.0096E-10	17	72	0.3849	4.9460E-10	39	124	0.7371	9.9933E-10	38	232	1.0835	4.1033E-10	21	52	0.5375	1.1229E-10