Table 1: Reported results for problems 5.1-5.2

PN	VAR	SP	NHZ1				NHZ2				Algorithm 3				Algorithm 4				Algorithm 5			
			NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$
5.1	1000	x_0^1	9	15	0.1735	1.654E-09	8	13	0.1523	6.146E-09	192	435	0.1415	9.808E-09	22	35	0.0677	6.668E-09	**	**	**	**
	1000	x_0^2	9	15	0.0576	1.654E-09	8	13	0.0247	6.146E-09	175	469	0.1419	9.856E-09	22	35	0.0488	6.668E-09	**	**	**	**
	1000	x_0^3	60	99	0.0763	9.904E-09	14	21	0.0163	6.343E-09	190	429	0.1383	8.408E-09	**	**	**	**	**	**	**	**
	1000	x_0^4	9	15	0.0251	1.654E-09	8	13	0.0126	6.146E-09	54	56	0.0368	9.268E-09	22	35	0.0389	6.668E-09	51	106	0.0709	7.717E-09
	1000	x_0^5	9	15	0.0276	1.654E-09	8	13	0.0097	6.146E-09	54	56	0.0615	9.268E-09	22	35	0.0255	6.668E-09	51	106	0.1075	7.717E-09
	1000	x_0^6	9	15	0.0166	1.654E-09	8	13	0.0107	6.146E-09	54	56	0.0633	9.268E-09	22	35	0.0260	6.668E-09	51	106	0.0892	7.716E-09
	1000	x_0^7	9	15	0.0137	1.654E-09	8	13	0.0119	6.146E-09	211	476	0.1607	9.945E-09	22	35	0.0244	6.668E-09	**	**	**	**
	1000	x_0^8	9	15	0.0587	1.654E-09	8	13	0.0098	6.146E-09	54	56	0.0344	9.268E-09	22	35	0.0215	6.668E-09	51	106	0.0872	7.717E-09
	10000	x_0^1	6	26	0.0869	4.085E-10	7	36	0.0715	1.145E-09	44	46	0.2134	9.484E-09	13	28	0.1206	6.593E-09	57	119	0.4134	9.853E-09
	10000	x_0^2	6	26	0.1502	4.085E-10	7	36	0.0728	1.145E-09	44	46	0.2068	9.484E-09	13	28	0.1081	6.593E-09	57	119	0.5235	9.853E-09
	10000	x_0^3	17	74	0.2568	6.557E-10	17	84	0.1585	1.771E-09	48	50	0.2364	9.051E-09	**	**	**	**	76	161	0.6076	9.225E-09
	10000	x_0^4	6	26	0.0830	4.085E-10	7	36	0.0708	1.145E-09	24	26	0.1445	7.032E-09	13	28	0.0975	6.593E-09	26	57	0.2442	9.468E-09
	10000	x_0^5	6	26	0.0842	4.085E-10	7	36	0.0860	1.145E-09	24	26	0.1374	7.032E-09	13	28	0.1034	6.593E-09	26	57	0.2576	9.468E-09
	10000	x_0^6	6	26	0.1069	4.085E-10	7	36	0.0670	1.145E-09	24	26	0.1407	7.032E-09	13	28	0.1025	6.593E-09	26	57	0.2333	9.468E-09
	10000	x_0^7	6	26	0.0714	4.085E-10	7	36	0.0856	1.145E-09	48	50	0.2269	9.037E-09	13	28	0.1239	6.593E-09	75	159	0.5724	9.675E-09
	10000	x_0^8	6	26	0.0925	4.085E-10	7	36	0.0711	1.145E-09	24	26	0.1395	7.032E-09	13	28	0.1155	6.593E-09	26	57	0.2485	9.468E-09
	100000	x_0^1	7	74	1.0955	2.286E-09	6	69	0.7397	4.106E-10	**	**	**	**	**	**	**	**	**	**	**	**
	100000	x_0^2	7	74	1.1253	2.286E-09	6	69	0.7219	4.106E-10	**	**	**	**	**	**	**	**	**	**	**	**
	100000	x_0^3	13	131	1.7790	7.707E-09	21	226	2.0659	2.911E-09	**	**	**	**	**	**	**	**	**	**	**	**
	100000	x_0^4	7	74	1.0823	2.286E-09	6	69	0.6999	4.106E-10	6	24	0.3997	1.690E-09	12	45	0.9529	8.886E-09	83	249	4.8813	9.834E-09
	100000	x_0^5	7	74	1.1144	2.286E-09	6	69	0.7377	4.106E-10	6	24	0.3818	1.690E-09	12	45	0.9749	8.886E-09	83	249	4.8041	9.834E-09
	100000	x_0^6	7	74	1.1402	2.286E-09	6	69	0.6969	4.106E-10	6	24	0.3675	1.690E-09	12	45	0.9926	8.886E-09	83	249	4.8423	9.834E-09
	100000	x_0^7	7	74	1.0864	2.286E-09	6	69	0.6553	4.106E-10	**	**	**	**	12	45	1.0115	8.886E-09	**	**	**	**
	100000	x_0^8	7	74	1.1204	2.286E-09	6	69	0.6832	4.106E-10	6	24	0.3236	1.690E-09	**	**	**	**	83	249	5.3526	9.834E-09
5.2	1000	x_0^1	6	8	0.0256	7.762E-10	6	8	0.0076	1.254E-09	84	86	0.0629	9.965E-09	**	**	**	**	92	186	0.0942	8.399E-09
	1000	x_0^2	8	10	0.0226	3.473E-09	8	10	0.0101	3.788E-09	94	96	0.0599	7.630E-09	**	**	**	**	100	202	0.1296	9.725E-09
	1000	x_0^3	6	8	0.0227	9.075E-09	7	9	0.0109	2.318E-11	79	81	0.0618	8.597E-09	**	**	**	**	87	176	0.1173	8.970E-09
	1000	x_0^4	4	6	0.0088	4.374E-10	4	6	0.0069	4.374E-10	78	80	0.0566	8.658E-09	2	3	0.0084	0.000E+00	85	172	0.0945	8.510E-09
	1000	x_0^5	5	7	0.0194	3.599E-11	5	7	0.0068	3.599E-11	82	84	0.0557	7.625E-09	**	**	**	**	89	180	0.1392	8.313E-09
	1000	x_0^6	4	6	0.0112	1.463E-11	4	6	0.0116	1.464E-11	75	77	0.0597	8.526E-09	24	32	0.0262	6.072E-09	81	164	0.0973	8.100E-09
	1000	x_0^7	6	8	0.0196	9.109E-09	7	9	0.0102	2.276E-11	79	81	0.0553	8.613E-09	**	**	**	**	87	176	0.1364	8.981E-09
	1000	x_0^8	6	8	0.0182	1.741E-11	6	8	0.0072	1.741E-11	86	88	0.0653	8.526E-09	**	**	**	**	93	188	0.1580	8.548E-09
	10000	x_0^1	6	8	0.0662	1.223E-10	6	8	0.0396	6.919E-11	89	91	0.3885	7.729E-09	**	**	**	**	95	192	0.7242	8.654E-09
	10000	x_0^2	8	10	0.0759	1.782E-10	8	10	0.0432	1.854E-10	98	100	0.4270	7.775E-09	**	**	**	**	103	208	0.8440	9.914E-09
	10000	x_0^3	7	9	0.0643	4.605E-09	7	9	0.0452	3.864E-09	83	85	0.3688	8.814E-09	**	**	**	**	90	182	0.7202	9.445E-09
	10000	x_0^4	4	6	0.0638	9.725E-12	5	9	0.0352	2.191E-09	82	84	0.3388	8.872E-09	**	**	**	**	88	178	0.6669	9.097E-09
	10000	x_0^5	4	6	0.0491	3.618E-09	4	6	0.0262	3.618E-09	86	88	0.3645	7.803E-09	**	**	**	**	92	186	0.7322	8.638E-09
	10000	x_0^6	3	5	0.0307	9.975E-10	3	5	0.0230	9.975E-10	79	81	0.3331	8.745E-09	**	**	**	**	84	170	0.5731	9.339E-09
	10000	x_0^7	7	9	0.0639	4.609E-09	7	9	0.0441	3.870E-09	83	85	0.3588	8.815E-09	**	**	**	**	90	182	0.6878	9.446E-09
	10000	x_0^8	5	7	0.0489	1.236E-09	5	7	0.0450	1.236E-09	90	92	0.3997	8.708E-09	**	**	**	**	96	194	0.7523	8.792E-09
	100000	x_0^1	6	8	0.3912	2.840E-11	12	22	0.4705	5.325E-09	93	95	3.4185	8.073E-09	**	**	**	**	98	198	5.1783	9.084E-09
	100000	x_0^2	8	10	0.5689	5.094E-11	14	24	0.5370	7.933E-09	102	104	3.7897	8.119E-09	**	**	**	**	107	216	5.5918	8.304E-09
	100000	x_0^3	8	10	0.4968	1.060E-09	13	23	0.4719	2.103E-09	87	89	3.1560	9.208E-09	**	**	**	**	93	188	4.8975	9.977E-09
	100000	x_0^4	4	6	0.2533	4.213E-13	9	18	0.3685	4.792E-09	86	88	3.2716	9.269E-09	**	**	**	**	91	184	4.7635	9.669E-09
	100000	x_0^5	4	6	0.2660	9.273E-10	8	15	0.3186	6.943E-09	90	92	3.2739	8.151E-09	**	**	**	**	95	192	5.0370	9.091E-09
	100000	x_0^6	3	5	0.2646	2.107E-10	7	14	0.2909	1.595E-09	83	85	3.0371	9.137E-09	**	**	**	**	88	178	4.5816	8.204E-09
	100000	x_0^7	8	10	0.4918	1.060E-09	13	23	0.4592	2.103E-09	87	89	3.1709	9.209E-09	**	**	**	**	93	188	4.9214	9.977E-09
	100000	x_0^8	5	7	0.3350	2.705E-10	9	16	0.3576	2.047E-09	94	96	3.5406	9.095E-09	**	**	**	**	99	200	5.2468	9.226E-09

Table 2: Reported results for problems 5.3-5.4

PN	VAR	SP	NHZ1				NHZ2				Algorithm 3				Algorithm 4				Algorithm 5			
			NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$
5.3	1000	x_0^1	15	51	0.0183	5.622E-09	12	40	0.0132	8.12E-09	77	79	0.0618	8.774E-09	31	59	0.0547	6.857E-09	89	181	0.0624	9.326E-09
	1000	x_0^2	2	25	0.0127	0	1	13	0.0056	0	2	25	0.0083	0	4	40	0.0100	0	94	197	0.0812	9.200E-09
	1000	x_0^3	19	54	0.0201	6.066E-09	22	84	0.0208	2.435E-09	76	78	0.0497	7.756E-09	30	50	0.0349	6.377E-09	88	179	0.0704	8.979E-09
	1000	x_0^4	11	26	0.0127	4.881E-09	10	24	0.0158	5.122E-09	76	78	0.0365	7.881E-09	29	43	0.0256	8.160E-09	88	179	0.1265	9.110E-09
	1000	x_0^5	11	27	0.0318	1.801E-09	11	28	0.0115	1.896E-09	77	79	0.0559	8.891E-09	2	15	0.0080	0	89	181	0.0816	9.194E-09
	1000	x_0^6	10	23	0.0118	8.712E-09	10	23	0.0201	1.520E-09	74	76	0.0433	7.996E-09	19	27	0.0215	8.731E-09	87	177	0.0574	8.136E-09
	1000	x_0^7	18	49	0.0308	2.840E-09	24	119	0.0184	3.088E-09	76	78	0.0658	7.765E-09	30	50	0.0274	6.378E-09	88	179	0.1039	8.985E-09
	1000	x_0^8	11	31	0.0326	8.001E-09	10	30	0.0127	9.130E-09	78	80	0.0398	7.876E-09	2	16	0.0131	0	89	181	0.0769	9.618E-09
	10000	x_0^1	16	53	0.1441	3.022E-09	17	69	0.0937	2.457E-09	81	83	0.2669	9.187E-09	2	16	0.0328	0	92	187	0.4734	9.939E-09
	10000	x_0^2	2	25	0.0495	0	1	13	0.0126	0	2	25	0.0309	0	3	33	0.0602	0	95	200	0.5007	9.344E-09
	10000	x_0^3	21	59	0.1334	4.112E-09	62	498	0.3679	4.424E-09	80	82	0.3034	8.126E-09	29	45	0.1638	6.494E-09	91	185	0.5624	9.546E-09
	10000	x_0^4	12	28	0.0863	2.624E-09	11	26	0.0499	2.430E-09	80	82	0.2724	8.253E-09	2	15	0.0301	0	91	185	0.5118	9.679E-09
	10000	x_0^5	11	27	0.0887	5.695E-09	11	28	0.0494	5.997E-09	81	83	0.2649	9.310E-09	2	15	0.0326	0	92	187	0.4884	9.748E-09
	10000	x_0^6	11	25	0.0731	4.683E-09	10	23	0.0507	4.806E-09	78	80	0.2622	8.372E-09	27	42	0.1730	9.176E-09	90	183	0.5716	8.691E-09
	10000	x_0^7	21	58	0.1763	2.929E-09	65	477	0.3784	2.241E-09	80	82	0.2724	8.127E-09	29	45	0.1774	6.537E-09	91	185	0.5505	9.547E-09
	10000	x_0^8	12	33	0.1030	4.301E-09	11	32	0.0806	4.331E-09	82	84	0.2837	8.248E-09	2	16	0.0363	0	93	189	0.6171	8.157E-09
	100000	x_0^1	16	53	0.8698	9.557E-09	17	74	0.7756	2.182E-09	85	87	2.3077	9.620E-09	2	16	0.2478	0	96	195	3.5194	8.406E-09
	100000	x_0^2	2	25	0.2794	0	1	13	0.1183	0	2	25	0.2332	0	2	21	0.2954	0	98	206	3.6395	9.865E-09
	100000	x_0^3	22	60	0.9023	3.702E-09	30	157	1.2450	2.346E-09	84	86	2.2885	8.509E-09	2	15	0.2237	0	95	193	3.4536	8.066E-09
	100000	x_0^4	12	28	0.6622	8.297E-09	11	26	0.3427	7.683E-09	84	86	2.2397	8.641E-09	2	15	0.2108	0	95	193	3.4296	8.175E-09
	100000	x_0^5	12	29	0.6049	3.061E-09	12	30	0.3827	2.845E-09	85	87	2.2802	9.749E-09	2	15	0.2024	0	96	195	3.5631	8.229E-09
	100000	x_0^6	12	27	0.6048	2.518E-09	11	25	0.3405	2.280E-09	82	84	2.2080	8.767E-09	2	15	0.2178	0	93	189	3.4922	9.192E-09
	100000	x_0^7	22	60	0.8992	7.454E-09	33	120	1.1290	1.611E-09	84	86	2.2794	8.509E-09	2	15	0.2347	0	95	193	3.4540	8.066E-09
	100000	x_0^8	13	35	0.7265	2.312E-09	12	34	0.4251	2.054E-09	86	88	2.3451	8.637E-09	2	16	0.2416	0	96	195	3.5071	8.606E-09
5.4	1000	x_0^1	1	2	0.0056	0	1	2	0.0276	0	1	2	0.0038	0	1	2	0.0083	0	1	2	0.0093	0
	1000	x_0^2	1	2	0.0048	0	1	2	0.0031	0	1	2	0.0038	0	1	2	0.0058	0	1	2	0.0074	0
	1000	x_0^3	1	2	0.0076	0	1	2	0.0043	0	1	2	0.0090	0	1	2	0.0054	0	1	2	0.0051	0
	1000	x_0^4	1	2	0.0092	0	1	2	0.0039	0	1	2	0.0036	0	1	2	0.0046	0	1	2	0.0063	0
	1000	x_0^5	1	2	0.0055	0	1	2	0.0031	0	1	2	0.0034	0	1	2	0.0048	0	1	2	0.0081	0
	1000	x_0^6	1	2	0.0062	0	1	2	0.0040	0	1	2	0.0048	0	1	2	0.0061	0	1	2	0.0093	0
	1000	x_0^7	1	2	0.0062	0	1	2	0.0044	0	1	2	0.0034	0	1	2	0.0046	0	1	2	0.0065	0
	1000	x_0^8	1	2	0.0120	0	1	2	0.0036	0	1	2	0.0044	0	1	2	0.0103	0	1	2	0.0077	0
	10000	x_0^1	1	2	0.0215	0	1	2	0.0077	0	1	2	0.0079	0	1	2	0.0137	0	1	2	0.0141	0
	10000	x_0^2	1	2	0.0111	0	1	2	0.0175	0	1	2	0.0077	0	1	2	0.0198	0	1	2	0.0150	0
	10000	x_0^3	1	2	0.0112	0	1	2	0.0146	0	1	2	0.0080	0	1	2	0.0097	0	1	2	0.0105	0
	10000	x_0^4	1	2	0.0210	0	1	2	0.0068	0	1	2	0.0059	0	1	2	0.0198	0	1	2	0.0141	0
	10000	x_0^5	1	2	0.0148	0	1	2	0.0072	0	1	2	0.0174	0	1	2	0.0121	0	1	2	0.0158	0
	10000	x_0^6	1	2	0.0178	0	1	2	0.0075	0	1	2	0.0074	0	1	2	0.0118	0	1	2	0.0099	0
	10000	x_0^7	1	2	0.0141	0	1	2	0.0081	0	1	2	0.0083	0	1	2	0.0131	0	1	2	0.0183	0
	10000	x_0^8	1	2	0.0138	0	1	2	0.0141	0	1	2	0.0128	0	1	2	0.0099	0	1	2	0.0129	0
	100000	x_0^1	1	2	0.0791	0	1	2	0.0456	0	1	2	0.0525	0	1	2	0.0760	0	1	2	0.0573	0
	100000	x_0^2	1	2	0.0778	0	1	2	0.0434	0	1	2	0.0427	0	1	2	0.0483	0	1	2	0.0770	0
	100000	x_0^3	1	2	0.0524	0	1	2	0.0413	0	1	2	0.0463	0	1	2	0.0765	0	1	2	0.0693	0
	100000	x_0^4	1	2	0.0617	0	1	2	0.0438	0	1	2	0.0410	0	1	2	0.0610	0	1	2	0.0430	0
	100000	x_0^5	1	2	0.0519	0	1	2	0.0354	0	1	2	0.0419	0	1	2	0.0621	0	1	2	0.0610	0
	100000	x_0^6	1	2	0.0591	0	1	2	0.0416	0	1	2	0.0432	0	1	2	0.0467	0	1	2	0.0637	0
	100000	x_0^7	1	2	0.0644	0	1	2	0.0413	0	1	2	0.0443	0	1	2	0.0483	0	1	2	0.0509	0
	100000	x_0^8	1	2	0.0587	0	1	2	0.0357	0	1	2	0.0511	0	1	2	0.0743	0	1	2	0.0497	0

Table 3: Reported results for problems 5.5-5.6

PN	VAR	SP	NHZ1				NHZ2				Algorithm 3				Algorithm 4				Algorithm 5			
			NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$
5.5	1000	x_0^1	14	65	0.0472	4.196E-09	12	54	0.0183	7.989E-10	43	70	0.0324	9.015E-09	25	67	0.0404	6.207E-09	46	95	0.0701	6.637E-09
	1000	x_0^2	19	79	0.0301	2.874E-09	18	74	0.0294	1.910E-09	55	85	0.0691	8.144E-09	**	**	**	**	50	103	0.0709	6.707E-09
	1000	x_0^3	10	56	0.0299	9.113E-09	11	62	0.0125	3.802E-10	35	37	0.0233	9.992E-09	23	54	0.0190	1.846E-09	42	87	0.0598	9.094E-09
	1000	x_0^4	8	46	0.0225	1.702E-09	4	26	0.0066	3.642E-09	30	32	0.0249	7.672E-09	16	21	0.0286	4.580E-09	38	79	0.0363	7.353E-09
	1000	x_0^5	9	51	0.0419	5.480E-09	6	37	0.0085	3.416E-10	36	38	0.0264	8.855E-09	16	38	0.0267	5.095E-09	43	89	0.0482	7.340E-09
	1000	x_0^6	9	51	0.0313	5.590E-09	5	31	0.0101	5.241E-09	35	37	0.0252	8.780E-09	14	29	0.0236	5.307E-09	42	87	0.0509	8.485E-09
	1000	x_0^7	10	56	0.0259	9.121E-09	11	62	0.0128	3.808E-10	35	37	0.0246	9.987E-09	23	56	0.0372	4.801E-09	42	87	0.0645	9.090E-09
	1000	x_0^8	10	52	0.0361	4.260E-09	7	38	0.0129	2.870E-10	40	42	0.0331	8.459E-09	20	40	0.0381	4.729E-09	43	88	0.0699	6.667E-09
	10000	x_0^1	15	70	0.1680	1.478E-09	12	54	0.0986	1.661E-09	45	72	0.1969	8.561E-09	25	74	0.2673	3.046E-09	47	97	0.2999	8.055E-09
	10000	x_0^2	21	89	0.2616	1.827E-09	15	63	0.1011	6.953E-10	57	87	0.2680	7.733E-09	33	158	0.4385	4.769E-09	51	105	0.4112	8.109E-09
	10000	x_0^3	11	61	0.1437	4.050E-09	11	62	0.0940	9.535E-09	37	39	0.1774	9.486E-09	23	62	0.2237	5.581E-09	44	91	0.3346	6.857E-09
	10000	x_0^4	8	46	0.1261	5.382E-09	5	31	0.0549	2.610E-10	32	34	0.1586	7.285E-09	16	23	0.0952	5.167E-09	40	83	0.2847	6.576E-09
	10000	x_0^5	10	56	0.1398	1.931E-09	6	37	0.0597	1.080E-09	38	40	0.1837	8.409E-09	22	65	0.2265	6.362E-09	44	91	0.3723	8.854E-09
	10000	x_0^6	10	56	0.1489	1.970E-09	6	36	0.0584	3.756E-10	37	39	0.1682	8.337E-09	18	35	0.1329	4.961E-09	44	91	0.3497	6.390E-09
	10000	x_0^7	11	61	0.1471	4.049E-09	11	62	0.0859	9.691E-09	37	39	0.1672	9.486E-09	20	55	0.1804	4.863E-09	44	91	0.3293	6.857E-09
	10000	x_0^8	11	57	0.1444	1.501E-09	7	38	0.0683	9.075E-10	42	44	0.1867	8.033E-09	22	61	0.2810	9.109E-09	44	90	0.3634	8.126E-09
	100000	x_0^1	15	70	1.1964	4.676E-09	13	59	0.7042	2.363E-10	47	74	1.7005	8.130E-09	**	**	**	**	48	99	2.2623	9.729E-09
	100000	x_0^2	19	80	1.3456	3.403E-09	14	58	0.7018	1.148E-09	59	89	2.1872	7.343E-09	**	**	**	**	52	107	2.4299	9.782E-09
	100000	x_0^3	12	66	1.0548	1.464E-09	14	76	0.8358	4.369E-09	39	41	1.3522	9.008E-09	**	**	**	**	45	93	2.1195	8.259E-09
	100000	x_0^4	9	51	0.7830	1.897E-09	5	31	0.3217	8.253E-10	34	36	1.1422	6.918E-09	18	29	1.0317	4.285E-09	41	85	2.0224	8.289E-09
	100000	x_0^5	10	56	0.8594	6.108E-09	6	37	0.3934	3.416E-09	40	42	1.3452	7.985E-09	35	186	2.9243	4.675E-09	46	95	2.2119	6.674E-09
	100000	x_0^6	10	56	0.8812	6.230E-09	6	36	0.3699	1.188E-09	39	41	3.9596	7.917E-09	22	55	1.2606	4.754E-09	45	93	2.1665	7.689E-09
	100000	x_0^7	12	66	1.0590	1.464E-09	14	76	0.8730	4.093E-09	39	41	1.7244	9.008E-09	37	163	2.6329	6.450E-09	45	93	2.1736	8.259E-09
	100000	x_0^8	11	57	0.9026	4.748E-09	7	38	0.4272	2.870E-09	44	46	1.9603	7.629E-09	22	86	1.5802	4.365E-09	45	92	2.1189	9.824E-09
5.6	1000	x_0^1	20	129	0.0849	9.930E-10	22	164	0.0277	1.983E-09	196	710	0.2200	4.193E-09	28	92	0.0370	2.413E-09	38	80	0.0454	4.785E-09
	1000	x_0^2	19	110	0.0548	3.272E-09	20	130	0.0308	1.597E-09	166	701	0.2594	6.861E-09	30	134	0.0567	5.228E-09	41	84	0.0339	9.064E-09
	1000	x_0^3	9	71	0.0396	2.108E-09	9	81	0.0117	4.397E-09	323	1008	0.4651	9.146E-09	22	76	0.0326	2.179E-09	29	63	0.0464	4.667E-09
	1000	x_0^4	7	57	0.0147	2.027E-09	8	73	0.0215	1.353E-09	18	20	0.0271	5.168E-09	17	47	0.0241	4.829E-09	22	47	0.0200	8.356E-09
	1000	x_0^5	7	57	0.0255	1.660E-09	8	73	0.0111	1.429E-09	18	20	0.0253	9.327E-09	18	54	0.0329	8.251E-09	22	47	0.0250	9.175E-09
	1000	x_0^6	7	57	0.0305	8.527E-09	8	73	0.0210	5.223E-09	19	21	0.0375	4.425E-09	20	60	0.0421	6.204E-09	23	49	0.0227	5.335E-09
	1000	x_0^7	9	71	0.0310	2.118E-09	9	81	0.0119	4.412E-09	38	124	0.0584	3.941E-09	23	81	0.0550	2.501E-09	29	63	0.0320	4.619E-09
	1000	x_0^8	10	62	0.0361	6.543E-10	10	70	0.0120	4.893E-09	27	29	0.0265	6.399E-09	20	59	0.0211	7.596E-09	26	54	0.0516	8.727E-09
	10000	x_0^1	20	134	0.2366	7.746E-10	25	192	0.2229	8.104E-10	163	477	1.3805	4.647E-09	30	111	0.3087	3.542E-09	42	89	0.2851	5.971E-09
	10000	x_0^2	17	118	0.2701	1.074E-09	20	130	0.1602	4.553E-09	133	496	1.2497	3.542E-09	47	245	0.4870	3.631E-09	48	98	0.4227	7.284E-09
	10000	x_0^3	10	78	0.1571	8.644E-10	10	89	0.0927	1.200E-09	141	382	1.1470	9.463E-09	26	105	0.2656	8.353E-09	29	62	0.2775	8.938E-09
	10000	x_0^4	7	57	0.1103	6.410E-09	8	73	0.0957	4.278E-09	19	21	0.1369	4.952E-09	20	64	0.1876	4.221E-09	23	49	0.1932	5.233E-09
	10000	x_0^5	7	57	0.1390	5.249E-09	8	73	0.0908	4.519E-09	19	21	0.1254	8.937E-09	26	117	0.2845	6.942E-09	23	49	0.1606	6.040E-09
	10000	x_0^6	8	64	0.1243	1.512E-09	9	81	0.0949	1.230E-09	20	22	0.1249	4.240E-09	24	101	0.3051	6.723E-09	23	49	0.2390	8.307E-09
	10000	x_0^7	10	78	0.1940	8.652E-10	10	89	0.1060	1.201E-09	68	238	0.5487	8.548E-09	27	109	0.3096	9.727E-09	29	62	0.2432	9.128E-09
	10000	x_0^8	10	62	0.1380	2.069E-09	11	78	0.1169	1.152E-09	28	30	0.2071	6.131E-09	21	67	0.2246	4.095E-09	27	56	0.2065	6.457E-09
	100000	x_0^1	24	160	2.0691	6.294E-09	26	199	1.8556	1.566E-09	187	470	10.7231	9.840E-09	67	424	5.8384	8.451E-09	44	93	2.1694	4.945E-09
	100000	x_0^2	17	118	1.5888	7.690E-09	21	138	1.3099	1.082E-09	147	385	8.7421	4.787E-09	**	**	**	**	50	101	2.4080	6.794E-09
	100000	x_0^3	10	78	1.0637	7.967E-09	10	89	0.8225	5.955E-09	310	838	19.1408	7.936E-09	**	**	**	**	31	66	1.6880	5.417E-09
	100000	x_0^4	8	64	0.9124	1.137E-09	9	81	0.8058	1.007E-09	20	22	1.0708	4.744E-09	24	107	1.7004	6.818E-09	23	49	1.3109	8.253E-09
	100000	x_0^5	8	64	1.0207	9.309E-10	9	81	0.7461	1.064E-09	20	22	1.0076	8.563E-09	**	**	**	**	23	49	1.2879	9.789E-09
	100000	x_0^6	8	64	0.9030	4.782E-09	9	81	0.7217	3.889E-09	21	23	1.0641	4.062E-09	24	100	1.5233	5.404E-09	24	51	1.3022	5.637E-09
	100000	x_0^7	10	78	1.1214	7.967E-09	10	89	0.8450	5.955E-09	96	397	6.3706	5.765E-09	**	**	**	**	31	66	1.6017	5.415E-09
	100000	x_0^8	10	62	0.9562	6.543E-09	11	78	0.7855	3.643E-09	29	31	1.4542	5.875E-09	21	72	1.4170	6.350E-09	28	58	1.4988	4.579E-09

Table 4: Reported results for problems 5.7-5.8

PN	VAR	SP	NHZ1				NHZ2				Algorithm 3				Algorithm 4				Algorithm 5			
			NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$
5.7	1000	x_0^1	10	72	0.0339	1.382E-09	13	100	0.0151	1.649E-09	47	49	0.0651	8.893E-09	2	17	0.0248	0	62	127	0.0960	8.489E-09
	1000	x_0^2	5	51	0.0139	0	9	107	0.0248	0	**	**	**	**	5	50	0.0166	0	71	153	0.1176	9.139E-09
	1000	x_0^3	12	71	0.0352	3.131E-09	22	153	0.0255	5.687E-09	49	51	0.0654	8.649E-09	25	68	0.0273	3.388E-09	63	129	0.0730	8.441E-09
	1000	x_0^4	7	42	0.0194	2.158E-09	10	68	0.0122	1.205E-09	45	47	0.0557	9.909E-09	19	39	0.0251	4.612E-09	59	121	0.0758	8.626E-09
	1000	x_0^5	7	43	0.0314	2.903E-09	10	69	0.0118	1.946E-09	46	48	0.0423	9.560E-09	2	16	0.0103	0	57	117	0.0607	9.144E-09
	1000	x_0^6	7	42	0.0272	1.833E-09	9	61	0.0188	3.238E-09	44	46	0.0347	8.271E-09	17	33	0.0506	6.558E-09	59	121	0.0817	8.000E-09
	1000	x_0^7	12	71	0.0400	2.106E-09	15	102	0.0196	2.399E-09	33	35	0.0497	7.147E-09	26	70	0.0458	1.290E-09	39	81	0.0346	9.334E-09
	1000	x_0^8	7	45	0.0220	2.784E-09	10	71	0.0124	1.774E-09	46	48	0.0522	8.435E-09	2	17	0.0155	0	56	115	0.0747	9.483E-09
	10000	x_0^1	10	73	0.1645	4.928E-09	15	116	0.1605	6.194E-09	43	45	0.2898	9.706E-09	2	17	0.0406	0	56	115	0.3906	9.695E-09
	10000	x_0^2	10	71	0.1648	3.014E-09	17	117	0.1605	2.212E-09	9	92	0.1836	0	5	52	0.0957	0	57	125	0.4619	9.998E-09
	10000	x_0^3	13	76	0.1926	9.872E-09	16	108	0.1367	5.988E-09	45	47	0.3288	8.672E-09	2	16	0.0396	0	57	117	0.4255	9.367E-09
	10000	x_0^4	7	42	0.1097	6.440E-09	10	68	0.0986	3.737E-09	42	44	0.2964	8.316E-09	2	16	0.0501	0	53	109	0.3888	9.232E-09
	10000	x_0^5	7	43	0.0858	8.908E-09	10	69	0.0950	6.060E-09	43	45	0.3548	7.926E-09	2	16	0.0329	0	51	105	0.3439	9.764E-09
	10000	x_0^6	7	42	0.0976	5.624E-09	9	61	0.0739	7.664E-09	40	42	0.2892	9.720E-09	29	63	0.2535	2.637E-09	53	109	0.4390	8.486E-09
	10000	x_0^7	13	76	0.1379	9.301E-09	20	137	0.1520	3.186E-09	35	37	0.2472	6.039E-09	2	16	0.0551	0	41	85	0.3062	6.790E-09
	10000	x_0^8	7	45	0.1140	8.897E-09	10	71	0.0834	3.545E-09	42	44	0.3403	9.756E-09	2	17	0.0332	0	51	105	0.4224	9.315E-09
	100000	x_0^1	11	77	0.9991	6.843E-10	17	131	1.2893	1.137E-09	41	43	1.9106	7.933E-09	2	17	0.2325	0	51	105	2.3721	8.906E-09
	100000	x_0^2	10	70	1.0117	1.004E-09	13	140	1.2671	0	8	82	1.1973	0	14	64	1.0505	3.756E-09	53	117	2.4548	9.571E-09
	100000	x_0^3	17	98	1.2738	5.102E-09	41	380	2.7918	3.467E-09	42	44	1.9244	8.103E-09	2	16	0.3439	0	52	107	2.3603	8.281E-09
	100000	x_0^4	8	47	0.7553	1.029E-09	11	74	0.7904	1.328E-09	40	42	1.8253	7.146E-09	2	16	0.2743	0	48	99	2.4023	8.366E-09
	100000	x_0^5	8	48	0.8748	1.428E-09	11	75	0.8069	2.153E-09	40	42	1.8079	9.592E-09	2	16	0.2616	0	46	95	2.1727	9.622E-09
	100000	x_0^6	8	47	1.2827	9.013E-10	10	67	0.6675	2.634E-09	38	40	1.7480	9.340E-09	2	16	0.3145	0	47	97	2.1923	9.614E-09
	100000	x_0^7	17	98	1.3382	5.023E-09	23	222	1.7663	0	36	38	1.7223	9.876E-09	2	16	0.2728	0	42	87	2.0082	8.021E-09
	100000	x_0^8	8	50	0.8688	1.429E-09	11	77	0.7544	1.171E-09	40	42	1.8486	9.064E-09	2	17	0.2784	0	46	95	2.2088	9.556E-09
5.8	1000	x_0^1	13	31	0.0363	4.810E-09	12	31	0.0109	5.322E-09	80	82	0.0768	8.340E-09	25	42	0.0382	9.589E-09	91	185	0.1319	9.805E-09
	1000	x_0^2	13	34	0.0258	1.799E-09	12	31	0.0182	7.628E-09	81	83	0.0906	9.627E-09	2	16	0.0200	0	92	187	0.1409	9.818E-09
	1000	x_0^3	14	29	0.0158	5.433E-09	13	28	0.0097	2.731E-09	77	79	0.0816	8.808E-09	28	43	0.0465	9.458E-09	89	181	0.1137	9.498E-09
	1000	x_0^4	11	25	0.0209	7.333E-09	11	25	0.0121	1.568E-09	77	79	0.1089	7.954E-09	27	37	0.0250	6.295E-09	89	181	0.1075	8.897E-09
	1000	x_0^5	11	25	0.0244	4.159E-09	10	23	0.0118	2.780E-09	79	81	0.0810	8.459E-09	28	44	0.0374	5.339E-09	91	185	0.1502	8.358E-09
	1000	x_0^6	11	25	0.0190	4.367E-09	10	23	0.0213	6.428E-09	74	76	0.0805	9.311E-09	28	36	0.0247	9.325E-09	87	177	0.1377	9.062E-09
	1000	x_0^7	14	29	0.0227	5.505E-09	13	28	0.0131	2.817E-09	77	79	0.1173	8.820E-09	29	44	0.0319	6.960E-09	89	181	0.1152	9.506E-09
	1000	x_0^8	12	29	0.0260	4.095E-09	11	27	0.0122	2.760E-09	81	83	0.0969	7.713E-09	2	15	0.0215	0	92	187	0.1401	8.789E-09
	10000	x_0^1	14	33	0.1228	2.586E-09	13	33	0.0716	2.524E-09	84	86	0.5574	8.733E-09	2	15	0.0270	0	95	193	0.5834	8.266E-09
	10000	x_0^2	13	34	0.1513	5.690E-09	13	33	0.0921	3.618E-09	86	88	0.5673	7.647E-09	2	16	0.0572	0	96	195	0.7353	8.282E-09
	10000	x_0^3	15	31	0.1395	2.781E-09	14	30	0.0701	1.937E-09	81	83	0.5328	9.229E-09	28	47	0.2079	6.659E-09	93	189	0.6382	8.037E-09
	10000	x_0^4	12	27	0.1061	3.942E-09	11	25	0.0556	4.959E-09	81	83	0.4771	8.329E-09	26	41	0.2090	8.512E-09	92	187	0.5861	9.417E-09
	10000	x_0^5	12	27	0.1074	2.236E-09	10	23	0.0599	8.792E-09	83	85	0.5438	8.858E-09	2	15	0.0455	0	94	191	0.6984	8.818E-09
	10000	x_0^6	12	27	0.1083	2.347E-09	11	25	0.0678	3.049E-09	78	80	0.4427	9.750E-09	29	44	0.2296	7.285E-09	90	183	0.5840	9.652E-09
	10000	x_0^7	15	31	0.1030	2.786E-09	14	30	0.0710	1.943E-09	81	83	0.5711	9.230E-09	28	47	0.2066	6.212E-09	93	189	0.6109	8.038E-09
	10000	x_0^8	13	31	0.1286	2.202E-09	11	27	0.0616	8.728E-09	85	87	0.5356	8.077E-09	2	15	0.0499	0	95	193	0.6098	9.259E-09
	100000	x_0^1	14	33	0.7721	8.177E-09	13	33	0.4617	7.982E-09	88	90	3.6734	9.145E-09	2	15	0.3027	0	98	199	4.1987	8.702E-09
	100000	x_0^2	14	36	1.0303	3.059E-09	14	35	0.5087	1.716E-09	90	92	3.7941	8.008E-09	2	16	0.3478	0	99	201	4.3761	8.720E-09
	100000	x_0^3	15	31	0.7630	8.245E-09	14	30	0.4221	6.276E-09	85	87	3.4928	9.664E-09	2	15	0.3015	0	96	195	4.1281	8.470E-09
	100000	x_0^4	13	29	0.7741	2.119E-09	12	27	0.4324	2.352E-09	85	87	3.5156	8.722E-09	2	15	0.2667	0	95	193	4.0664	9.927E-09
	100000	x_0^5	12	27	0.6818	7.070E-09	11	25	0.4162	4.170E-09	87	89	3.5530	9.276E-09	2	15	0.2804	0	97	197	4.2658	9.285E-09
	100000	x_0^6	12	27	0.7679	7.423E-09	11	25	0.3907	9.642E-09	83	85	3.5684	7.745E-09	28	43	1.4554	9.966E-09	94	191	4.1013	8.156E-09
	100000	x_0^7	15	31	0.7763	8.249E-09	14	30	0.4258	6.277E-09	85	87	3.4706	9.664E-09	2	15	0.2461	0	96	195	4.1220	8.470E-09
	100000	x_0^8	13	31	0.8058	6.962E-09	12	29	0.4577	4.140E-09	89	91	3.6911	8.458E-09	2	15	0.3148	0	98	199	4.2457	9.746E-09

Table 5: Reported results for problems 5.9-5.10

PN	VAR	SP	NHZ1				NHZ2				Algorithm 3				Algorithm 4				Algorithm 5			
			NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$	NIT	FE	PT	$\|F_k\|$
5.9	1000	x_0^1	12	27	0.0360	4.111E-09	11	25	0.0269	5.384E-09	80	82	0.1239	9.403E-09	28	43	0.0415	5.826E-09	92	187	0.1754	8.553E-09
	1000	x_0^2	12	27	0.0242	7.281E-09	11	25	0.0182	9.537E-09	82	84	0.1269	9.575E-09	27	46	0.0651	5.748E-09	93	189	0.2235	9.795E-09
	1000	x_0^3	12	27	0.0307	6.980E-09	11	25	0.0138	9.141E-09	82	84	0.1307	9.190E-09	30	50	0.0345	8.487E-09	93	189	0.2152	9.544E-09
	1000	x_0^4	12	27	0.0352	6.920E-09	11	25	0.0126	9.062E-09	82	84	0.1245	9.111E-09	30	50	0.0543	7.220E-09	93	189	0.1306	9.492E-09
	1000	x_0^5	12	27	0.0377	5.360E-09	11	25	0.0229	7.019E-09	81	83	0.1059	9.304E-09	27	45	0.0316	5.629E-09	93	189	0.1374	8.086E-09
	1000	x_0^6	12	27	0.0221	7.700E-09	12	27	0.0120	1.512E-09	83	85	0.1128	7.690E-09	30	48	0.0977	7.409E-09	94	191	0.1298	8.120E-09
	1000	x_0^7	12	27	0.0307	6.977E-09	11	25	0.0179	9.137E-09	82	84	0.1290	9.186E-09	30	50	0.0674	8.441E-09	93	189	0.1233	9.541E-09
	1000	x_0^8	12	27	0.0231	2.240E-09	11	25	0.0132	2.934E-09	78	80	0.1642	8.909E-09	24	35	0.0453	8.609E-09	90	183	0.2014	9.117E-09
	10000	x_0^1	13	29	0.1577	2.217E-09	12	27	0.1064	2.563E-09	84	86	0.7429	9.859E-09	31	65	0.3063	9.999E-09	95	193	0.9125	9.031E-09
	10000	x_0^2	13	29	0.1978	3.922E-09	12	27	0.1193	4.533E-09	87	89	0.8060	7.612E-09	**	**	**	**	97	197	0.9580	8.261E-09
	10000	x_0^3	13	29	0.1777	3.767E-09	12	27	0.1106	4.354E-09	86	88	0.7574	9.637E-09	55	259	0.6564	9.096E-09	97	197	1.0538	8.055E-09
	10000	x_0^4	13	29	0.1994	3.735E-09	12	27	0.1220	4.317E-09	86	88	0.8334	9.557E-09	**	**	**	**	97	197	1.0002	8.013E-09
	10000	x_0^5	13	29	0.1980	2.893E-09	12	27	0.1021	3.344E-09	85	87	0.7702	9.758E-09	**	**	**	**	96	195	0.9996	8.535E-09
	10000	x_0^6	13	29	0.1821	4.156E-09	12	27	0.1167	4.803E-09	87	89	0.7733	8.066E-09	**	**	**	**	97	197	1.0303	8.567E-09
	10000	x_0^7	13	29	0.1788	3.766E-09	12	27	0.1064	4.353E-09	86	88	0.8452	9.637E-09	**	**	**	**	97	197	0.9493	8.055E-09
	10000	x_0^8	12	27	0.7244	7.114E-09	11	25	0.1001	9.319E-09	82	84	0.7901	9.345E-09	30	50	0.2322	8.845E-09	93	189	0.9262	9.649E-09
	100000	x_0^1	13	29	1.2544	7.012E-09	12	27	0.8744	8.105E-09	89	91	6.0053	7.832E-09	57	295	6.9667	6.965E-09	98	199	7.5806	9.509E-09
	100000	x_0^2	14	31	1.3889	2.108E-09	13	29	0.9534	2.150E-09	91	93	6.2147	7.970E-09	27	109	3.0644	6.335E-09	100	203	8.1277	8.696E-09
	100000	x_0^3	14	31	1.2989	2.025E-09	13	29	0.8527	2.065E-09	91	93	6.1778	7.655E-09	**	**	**	**	100	203	7.7410	8.479E-09
	100000	x_0^4	14	31	1.2511	2.008E-09	13	29	0.8985	2.048E-09	91	93	6.1816	7.591E-09	27	77	2.5256	6.120E-09	100	203	7.8205	8.435E-09
	100000	x_0^5	13	29	1.2870	9.149E-09	13	29	0.9124	1.586E-09	90	92	6.1885	7.752E-09	39	144	3.9695	6.474E-09	99	201	7.6171	8.986E-09
	100000	x_0^6	14	31	1.3655	2.234E-09	13	29	0.9366	2.279E-09	91	93	6.2236	8.447E-09	28	73	2.4862	7.063E-09	100	203	7.9046	9.018E-09
	100000	x_0^7	14	31	1.3510	2.025E-09	13	29	0.9352	2.065E-09	91	93	6.1852	7.655E-09	**	**	**	**	100	203	7.7820	8.479E-09
	100000	x_0^8	13	29	1.1727	3.825E-09	12	27	0.8537	4.421E-09	86	88	5.8558	9.786E-09	27	98	2.9429	8.711E-09	97	197	7.5628	8.133E-09
5.10	1000	x_0^1	2	14	0.0069	0	2	14	0.0064	0	2	14	0.0096	0	2	25	0.0827	0	**	**	**	**
	1000	x_0^2	2	14	0.0083	0	2	14	0.0051	0	2	14	0.0106	0	2	14	0.0086	0	**	**	**	**
	1000	x_0^3	2	14	0.0110	0	2	14	0.0047	0	2	14	0.0101	0	3	26	0.0303	0	**	**	**	**
	1000	x_0^4	2	14	0.0096	0	2	14	0.0075	0	2	14	0.0095	0	3	26	0.0161	0	**	**	**	**
	1000	x_0^5	2	14	0.0068	0	2	14	0.0051	0	2	14	0.0096	0	2	25	0.0153	0	**	**	**	**
	1000	x_0^6	2	14	0.0067	0	2	14	0.0051	0	2	14	0.0088	0	3	26	0.0196	0	**	**	**	**
	1000	x_0^7	2	14	0.0069	0	2	14	0.0065	0	2	14	0.0166	0	2	25	0.0242	0	**	**	**	**
	1000	x_0^8	2	14	0.0124	0	2	14	0.0068	0	2	14	0.0123	0	2	25	0.0116	0	**	**	**	**
	10000	x_0^1	2	14	0.0398	0	2	14	0.0263	0	2	14	0.0349	0	2	14	0.0348	0	**	**	**	**
	10000	x_0^2	2	14	0.0318	0	2	14	0.0241	0	2	14	0.0572	0	2	14	0.0417	0	**	**	**	**
	10000	x_0^3	2	14	0.0324	0	2	14	0.0273	0	2	14	0.0509	0	2	14	0.0356	0	**	**	**	**
	10000	x_0^4	2	14	0.0368	0	2	14	0.0256	0	2	14	0.0401	0	2	14	0.1888	0	**	**	**	**
	10000	x_0^5	2	14	0.0299	0	2	14	0.0237	0	2	14	0.0480	0	2	14	0.0549	0	**	**	**	**
	10000	x_0^6	2	14	0.0514	0	2	14	0.0264	0	2	14	0.0437	0	2	14	0.0395	0	**	**	**	**
	10000	x_0^7	2	14	0.0467	0	2	14	0.0213	0	2	14	0.0421	0	2	14	0.0527	0	**	**	**	**
	10000	x_0^8	2	14	0.0413	0	2	14	0.0276	0	2	14	0.0358	0	2	14	0.0528	0	**	**	**	**
	100000	x_0^1	2	14	0.2697	0	2	14	0.1723	0	2	14	0.2728	0	2	14	0.2603	0	**	**	**	**
	100000	x_0^2	2	14	0.3084	0	2	14	0.1967	0	2	14	0.2928	0	2	14	0.2763	0	**	**	**	**
	100000	x_0^3	2	14	0.2807	0	2	14	0.1839	0	2	14	0.2914	0	2	14	0.2783	0	**	**	**	**
	100000	x_0^4	2	14	0.2558	0	2	14	0.1560	0	2	14	0.3208	0	2	14	0.2672	0	118	1291	15.0303	0
	100000	x_0^5	2	14	0.2682	0	2	14	0.1756	0	2	14	0.2726	0	2	14	0.2654	0	115	1258	15.0420	0
	100000	x_0^6	2	14	0.2588	0	2	14	0.1689	0	2	14	0.2682	0	2	14	0.2409	0	120	1313	15.6154	0
	100000	x_0^7	2	14	0.2754	0	2	14	0.2047	0	2	14	0.2673	0	2	14	0.2808	0	**	**	**	**
	100000	x_0^8	2	14	0.2505	0	2	14	0.1792	0	2	14	0.2849	0	2	14	0.2825	0	113	1236	14.5594	0