Table 1: Results of test examples 1-3

5000 x2 1 4 0.0065 0 82 17 0.2612 9.26E-11 1 4 0.0137 0 1 4 0.0093 0 1 4 0.0181	N I	Pdim		DFPRP					MPRP1]	MZPRP			ITTCGP			DFDFP				
Second Name				Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm
Second Nation	1 5	5000	x1	1	3	0.0064	0	67	135	0.3243	7.40E-11	1	3	0.1229	0	11	18	0.1959	9.92E-13	1	3	0.1432	0
5000 xi		5000	x2	1	3	0.0092	0	72	146	0.2874	9.24E-11	1	3	0.0411	0	3	6	0.0363	0	1	3	0.0852	0
5000				-			-												-				0
1000 1																							0
10000 x1																			-				0
10000 x2 1 3 0.0107 0 73 148 0.3897 9.32E-11 1 3 0.0248 0 3 6 0.0343 0 1 8 0.0439																							0
10000 x3															-								0
1000 1 3 0.0103 0 75 15 0.4656 8.87E-11 1 3 0.0123 0 11 18 0.073 1.77E-21 1 3 0.0124 1 1 1 1 1 1 1 1 1																			-				0
1000 1							-								-				-				0
1																							0
50000																			-				0
50000 x2																							0
Section Sect																							0
Second S															-				-				0
Section Sect							-								-				-				0
Section Property												-			-						-		0
2 5000 x1 1 3 0.0058 0 63 131 0.2193 9.27E-11 2 5 0.0176 0 10 16 0.05 4.74E-13 5 9 0.0377																							0
5000 x2 1 4 0.0065 0 82 171 0.2612 9.26E-11 1 4 0.0137 0 1 4 0.0093 0 1 4 0.0081																							5.95E-11
Soundary Soundary				1	4	0.0065	0	82	171	0.2612		1	4		0	1		0.0093	0		4	0.0181	0
5000 x5 1 3 0.0076 0 78 159 0.2577 8.72E-11 1 3 0.0185 0 5 10 0.0449 0 1 3 0.0185			х3	1		0.0069	2.22E-16		167				8		0	1	5		0		12		5.11E-13
5000 x6 3 6 0.0101 0 81 168 0.2596 9.5E-11 2 5 0.0237 0 4 8 0.0269 0 5 9 0.0221		5000	x4	3	6	0.0112	0	82	170	0.2425	7.48E-11	2	5	0.0102	0	4	8	0.0376	0	5	9	0.0260	0
10000 x1 1 3 0.0101 0 63 131 0.2886 9.44E-11 2 5 0.0180 0 **** **** **** **** **** 5 9 0.0511		5000	x5	1	3	0.0076	0	78	159	0.2577	8.72E-11	1	3	0.0185	0	5	10	0.0449	0	1	3	0.0188	0
10000 x2 1 4 0.0085 0 83 173 0.4109 9.38E-11 1 4 0.0110 0 1 4 0.0169 0 1 4 0.0134		5000	x6	3	6	0.0101	0	81	168	0.2596	9.95E-11	2	5	0.0237	0	4	8	0.0269	0	5	9	0.0221	0
10000 x3 1 3 0.0157 2.22E-16 77 169 0.3826 9.20E-11 2 8 0.0330 0 1 5 0.0143 0 6 12 0.0457	1	10000	x1	1	3	0.0101	0	63	131	0.2886	9.34E-11	2	5	0.0180	0	****	***	***	****	5	9	0.0511	5.96E-11
10000 x4 3 6 0.0199 0 83 172 0.3598 7.45E-11 2 5 0.0217 0 4 8 0.0256 0 5 9 0.0365 10000 x5 1 3 0.0073 0 79 161 0.3450 8.80E-11 1 3 0.0248 0 5 10 0.0299 0 1 3 0.0264 10000 x6 3 6 0.0189 0 83 172 0.3745 7.25E-11 2 5 0.0183 0 4 8 0.0259 0 5 9 0.0452 50000 x1 1 3 0.0284 0 63 131 1.0637 9.40E-11 2 5 0.0183 0 4 8 0.0259 0 5 9 0.0452 50000 x2 1 4 0.0510 0 86 179 1.5451 7.59E-11 2 7 0.1101 0 1 4 0.0466 0 1 4 0.0548 50000 x3 1 3 0.0265 2.22E-16 80 175 1.4462 7.48E-11 2 6 0.0704 0 4 8 0.0875 0 5 9 0.1469 50000 x4 3 6 0.0740 0 85 176 1.513 8.39E-11 2 6 0.0704 0 4 8 0.0875 0 5 9 0.1479 50000 x4 3 6 0.0635 0 85 176 1.4440 7.15E-11 1 3 0.0400 0 5 10 0.1103 0 1 3 0.0715 50000 x6 3 6 0.0635 0 85 176 1.4440 7.15E-11 1 3 0.0400 0 5 10 0.1103 0 1 3 0.0715 50000 x1 1 4 0.0074 0 75 376 0.3845 9.5E-11 6 14 0.0448 0 4 9 0.0407 0 5 11 0.0296 50000 x2 3 8 0.0180 0 89 448 0.4554 8.89E-11 1 4 0.0126 0 1 4 0.0209 0 1 4 0.0166 5000 x3 5 12 0.0191 4.4E-16 41 2.16 0.2337 7.6E-11 3 11 0.0355 0 3 11 0.0238 0 8 16 0.0470 5000 x5 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.019 0 1 4 0.0166 5000 x5 1 4 0.0085 0 78 376 0.6016 9.5E-11 3 10 0.0528 0 1 4 0.0176 0 1 4 0.0246 5000 x1 1 4 0.0121 0 75 376 0.6016 9.5E-11 3 10 0.0528 0 1 4 0.0176 0 1 4 0.0246 0 0 3 9 0.019 0 1 4 0.0246 0 0 0 0 0 0 0 0 0	1	10000	x2	1	4	0.0087	0	83	173	0.4109	9.35E-11	1	4	0.0110	0	1	4	0.0169	0	1	4	0.0134	0
10000 x5 1 3 0.0073 0 79 161 0.3450 8.80E-11 1 3 0.0248 0 5 10 0.0299 0 1 3 0.0264	1	10000	х3	1	3			77			9.20E-11				0	1			0				7.22E-13
10000 x6 3 6 0.0189 0 83 172 0.3745 7.25E-11 2 5 0.0183 0 4 8 0.0259 0 5 9 0.0452	1	10000	x4	3		0.0199	0		172	0.3598	7.45E-11	2		0.0217	0		8	0.0256				0.0365	0
50000 x1 1 3 0.0284 0 63 131 1.0637 9.40E-11 2 5 0.0597 0 **** **** **** **** **** **** 5 9 0.1469															-								0
50000 x2 1 4 0.0501 0 86 179 1.5451 7.59E-11 2 7 0.1101 0 1 4 0.0466 0 1 4 0.0548 50000 x3 1 3 0.0265 2.22E-16 80 175 1.4462 7.59E-11 2 6 0.0704 0 4 8 0.0875 0 6 12 0.1779 50000 x4 3 6 0.0740 0 85 176 1.5131 8.39E-11 2 6 0.0704 0 4 8 0.0875 0 5 9 0.1208 50000 x5 1 3 0.0297 0 82 167 1.4440 7.15E-11 1 3 0.0400 0 5 10 0.1103 0 1 3 0.0715 50000 x6 3 6 0.0635 0 85 176 1.4440 7.15E-11 1 3 0.0400 0 5 10 0.1103 0 1 3 0.0715 50000 x1 1 4 0.0074 0 75 376 0.845 9.52E-11 6 14 0.0448 0 4 9 0.0407 0 5 9 0.1474 50000 x2 3 8 0.0180 0 89 448 0.4554 8.89E-11 1 4 0.0126 0 1 4 0.0296 0 1 4 0.0106 5000 x3 5 1 2 0.0191 4.44E-16 4 216 0.2337 7.65E-11 3 11 0.0335 0 3 11 0.0238 0 8 16 0.0470 5000 x4 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x5 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x6 1 4 0.0085 0 78 392 0.4999 8.06E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x6 1 4 0.0085 0 78 392 0.4999 8.06E-11 1 4 0.0240 0 3 9 0.0176 0 1 4 0.0171 10000 x1 1 4 0.0121 0 75 376 0.6016 9.52E-11 3 10 0.0528 0 1 4 0.0176 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x5 1 4 0.0114 0 87 437 0.6990 8.43E-11 1 4 0.02516 0 3 9 0.0269 0 1 4 0.0256 50000 x1 1 4 0.0143 0 75 376 0.6016 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774 50000																			-				0
\$\begin{array}{c c c c c c c c c c c c c c c c c c c							-																5.96E-11
50000 x4 x4 x4 x4 x4 x4 x4				-			-					_			-						-		0
50000 x5															-								1.61E-12
50000 x6 3 6 0.0635 0 85 176 1.4949 8.35E-11 2 6 0.0948 0 4 8 0.0912 0 5 9 0.1474 3 5000 x1 1 4 0.0074 0 75 376 0.3845 5.5E-11 6 14 0.0448 0 4 9 0.0407 0 5 11 0.0296 5000 x2 3 8 0.0180 0 89 448 0.4554 8.89E-11 1 4 0.0126 0 1 4 0.0209 0 1 4 0.0106 5000 x3 5 12 0.0191 4.44E-16 41 216 0.2337 7.65E-11 3 11 0.0335 0 3 11 0.0238 0 8 16 0.0470 5000 x4 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x5 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0220 0 3 9 0.019 0 1 4 0.0175 5000 x6 1 4 0.0087 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0121 10000 x1 1 4 0.0121 0 75 376 0.6016 9.5EE-11 6 14 0.0572 0 4 9 0.0314 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0215 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0251 0 3 9 0.0269 0 1 4 0.0156 10000 x6 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0251 0 3 9 0.0269 0 1 4 0.0166 5000 x6 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0251 0 3 9 0.0269 0 1 4 0.0166 5000 x6 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0251 0 3 9 0.0269 0 1 4 0.0166 5000 x6 1 4 0.0114 0 87 437 0.6599 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0166 5000 x2 3 8															-								0
3 5000 x1 1 4 0.0074 0 75 376 0.3845 9.52E-11 6 14 0.0448 0 4 9 0.0407 0 5 11 0.0296 5000 x2 3 8 0.0180 0 89 448 0.4554 8.89E-11 1 4 0.0126 0 1 4 0.0299 0 1 4 0.0106 5000 x3 5 12 0.0191 4.44E-16 41 216 0.2337 7.65E-11 3 11 0.0335 0 3 11 0.0238 0 8 16 0.0470 5000 x4 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x5 1 4 0.0085 0 78 392 0.4099 8.80E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0246 5000 x5 1 4 0.0085 0 78 392 0.4099 8.80E-11 1 4 0.0240 0 3 9 0.019 0 1 4 0.0245 5000 x6 1 4 0.0085 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0175 5000 x6 1 4 0.0121 0 75 376 0.6016 9.52E-11 6 14 0.0572 0 4 9 0.0314 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0215 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6599 8.44E-11 1 4 0.0251 0 3 9 0.0238 0 1 4 0.0166 50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 6 14 0.02314 0 4 9 0.1168 0 5 11 0.1684 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774 50000 x2																							0
5000 x2 3 8 0.0180 0 89 448 0.4554 8.99E-11 1 4 0.0126 0 1 4 0.0209 0 1 4 0.0106																							0
5000 x3 5 12 0.0191 4.44E-16 41 216 0.2337 7.65E-11 3 11 0.0325 0 3 11 0.0238 0 8 16 0.0470 5000 x4 1 4 0.0085 0 86 432 0.4299 8.03E-11 1 4 0.0220 0 3 9 0.019 0 1 4 0.0245 5000 x6 1 4 0.0087 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0121 10000 x1 1 4 0.0121 0 75 376 0.6016 9.5EE-11 6 14 0.0572 0 0 1 4 0.014 0 5 11 0.014 10000 x2 3 8 0.0229 0 9 453 0																			-				0
5000 x4 1 4 0.0085 0 86 432 0.4553 8.03E-11 1 4 0.0240 0 3 9 0.0429 0 1 4 0.0245 5000 x5 1 4 0.0085 0 78 392 0.4099 8.80E-11 1 4 0.0220 0 3 9 0.019 0 1 4 0.0175 5000 x6 1 4 0.0087 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0121 10000 x1 1 4 0.0121 0 75 376 0.6016 9.52E-11 6 14 0.0572 0 4 9 0.0314 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0250 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0104 0 79 397 0.6599 8.43E-11 1 4 0.0215 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0104 0 79 397 0.6599 8.44E-11 1 4 0.0251 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6599 8.44E-11 1 4 0.0251 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6590 8.44E-11 1 4 0.0251 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.043 0 75 376 2.3644 9.52E-11 6 14 0.0353 0 2 6 0.0388 0 1 4 0.0159 50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 2 9 0.1138 0 1 4 0.0681 0 5 1 4 0.0774																							0
5000 x5 1 4 0.0085 0 78 392 0.4099 8.80E-11 1 4 0.0220 0 3 9 0.019 0 1 4 0.0175 5000 x6 1 4 0.0087 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0121 10000 x1 1 4 0.0271 1 4 0.0121 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 <td></td> <td>0</td>																							0
5000 x6 1 4 0.0087 0 86 432 0.4291 8.06E-11 1 4 0.0097 0 2 6 0.0176 0 1 4 0.0121 1000 x1 1 4 0.0121 0 75 376 0.6016 9.52E-11 6 14 0.0572 0 4 9 0.0314 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 1 2 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0270 10000 x4 1 4 0.0114 0 87 437 0.659 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 1000 x5 1 4 0.0114 0 87 437 0.659 8.43E-11 1 4 0.0215 0 3 9 0.0269 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.690 8.44E-11 1 4 0.0215 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0166 10000 x6 1 4 0.0434 0 75 376 2.3644 9.52E-11 6 14 0.0353 0 2 6 0.0388 0 1 4 0.0159 50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774							-								-				-		-		0
10000 x1 1 4 0.0121 0 75 376 0.6016 9.52E-11 6 14 0.0572 0 4 9 0.0314 0 5 11 0.0614 10000 x2 3 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0215 0 3 9 0.0269 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0215 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0166 10000 x6 1 1 4 0.0143 0 75 376 2.3644 9.52E-11 6 14 0.0353 0 2 6 0.0388 0 1 1 4 0.0159 50000 x1 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774															-								0
10000 x2 3 8 8 0.0259 0 90 453 0.7202 8.91E-11 3 10 0.0528 0 1 4 0.0146 0 1 4 0.0274 10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0104 0 79 397 0.6059 9.21E-11 1 4 0.0255 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0169 50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774																							0
10000 x3 5 12 0.0313 4.44E-16 5 53 0.0931 0 4 16 0.0510 0 3 11 0.0385 0 8 16 0.0720 10000 x4 1 4 0.0114 0 87 437 0.659 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 10000 x5 1 4 0.0114 0 79 397 0.6059 9.21E-11 1 4 0.0215 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0156 50000 x1 1 4 0.0435 50000 x2 3 8 0.0917 0 75 376 2.3644 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774																							0
10000 x4 1 4 0.0114 0 87 437 0.6599 8.43E-11 1 4 0.0270 0 3 9 0.0269 0 1 4 0.0250 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																							0
10000 x5 1 4 0.0104 0 79 397 0.6059 9.21E-11 1 4 0.0215 0 3 9 0.0238 0 1 4 0.0166 10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0159 50000 x1 1 4 0.0443 0 75 376 2.364 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774																							0
10000 x6 1 4 0.0114 0 87 437 0.6900 8.44E-11 1 4 0.0353 0 2 6 0.0388 0 1 4 0.0159 50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774															0		-		-		-		0
50000 x1 1 4 0.0443 0 75 376 2.3644 9.52E-11 6 14 0.2314 0 4 9 0.1168 0 5 11 0.1942 50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774													-		-		-		-		-		0
50000 x2 3 8 0.0917 0 93 468 3.0061 7.62E-11 2 9 0.1138 0 1 4 0.0681 0 1 4 0.0774																							0
50000 x3 5 12 01249 4.44F-16 26 135 0.9206 5.47F-12 6 28 0.3620 0 3 11 0.1067 0 8 16 0.2842			x2	3	8	0.0917	0	93	468	3.0061		2	9	0.1138	0	1	4		0	1	4	0.0774	0
50000 NO 0 11 0.121 1.121 10 20 100 0.7400 5.711 0 20 0.0020 0 5 11 0.1007 0 0 10 0.2042	5	50000	х3	5	12	0.1249	4.44E-16	26	135	0.9206	5.47E-12	6	28	0.3620	0	3	11	0.1067	0	8	16	0.2842	0
50000 x4 1 4 0.0406 0 90 452 2.9726 7.69E-11 1 4 0.0554 0 3 9 0.1366 0 1 4 0.0627	5	50000	x4	1	4	0.0406	0	90	452	2.9726	7.69E-11	1	4	0.0554	0	3	9	0.1366	0	1	4	0.0627	0
50000 x5 1 4 0.0418 0 82 412 2.8233 8.37E-11 1 4 0.0621 0 3 9 0.1036 0 1 4 0.0569	5	50000	x5	1	4	0.0418	0	82	412	2.8233	8.37E-11	1	4	0.0621	0	3	9	0.1036	0	1	4	0.0569	0
50000 x 6 1 4 0.0468 0 90 452 3.088 7.70E-11 1 4 0.0569 0 2 6 0.0788 0 1 4 0.0575	5	50000	x6	1	4	0.0468	0	90	452	3.0088	7.70E-11	1	4	0.0569	0	2	6	0.0788	0	1	4	0.0575	0

Table 2: Results of test examples 4-6

N	Pdim				DFPRP			MPRP1			,	MZPRP			F	ITTCGP		DFDFP				
			Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm
4	5000	x1	1	2	0.0069	0	67	132	0.2475	8.23E-11	7	9	0.0348	0	3	5	0.0242	0	2	4	0.0157	0
	5000	x2	2	3	0.0104	0	76	148	0.2860	8.40E-11	2	3	0.0263	0	5	8	0.0506	0	2	4	0.0199	0
	5000	x3	6	9	0.0244	2.22E-16	5	6	0.0413	0	3	4	0.0187	0	3	4	0.0276	0	3	7	0.0290	0
	5000	x4	5	8	0.0178	7.78E-23	73	136	0.2907	9.25E-11	11	16	0.0860	7.19E-11	5	8	0.0353	0	2	4	0.0142	0
	5000	x5	2	3	0.0103	0	82	155	0.3593	8.72E-11	11	16	0.0784	0	7	11	0.0708	0	2	4	0.0114	0
	5000	x6	5	8	0.0197	7.79E-23	73	136	0.3600	8.12E-11	11	16	0.0605	7.20E-11	5	8	0.0465	0	2	4	0.0211	0
	10000	x1	1	2	0.0095	0	67	132	0.4670	8.32E-11	11	15	0.0867	0	3	5	0.0359	0	2	4	0.0377	0
	10000	x2	2	3	0.0149	0	77	150	0.5006	8.59E-11	2	3	0.0198	0	5	8	0.0523	0	2	4	0.0492	0
	10000	х3	6	9	0.0344	3.14E-16	5	6	0.0602	0	7	10	0.0653	0	3	4	0.0445	0	3	7	0.0693	0
	10000	x4	5	8	0.0355	2.82E-23	71	132	0.4232	8.25E-11	11	16	0.0919	7.71E-11	5	8	0.0611	0	2	4	0.0223	0
	10000	x5	2	3	0.0162	0	83	157	0.5413	9.06E-11	11	16	0.0912	0	7	11	0.0627	0	2	4	0.0195	0
	10000	х6	5	8	0.0348	2.82E-23	70	130	0.4783	9.56E-11	11	16	0.0903	7.71E-11	5	8	0.0415	0	2	4	0.0309	0
	50000	x1	1	2	0.0300	0	67	132	1.6621	8.39E-11	11	15	0.3239	0	3	5	0.0955	0	2	4	0.1016	0
	50000	x2	2	3	0.0577 0.1316	0 2.14F.16	79	154	2.0168 0.1257	9.89E-11	2	4	0.0999	0	5	8	0.1592	0	2	4 7	0.0837	0
	50000 50000	x3	6 5	8	0.1316	3.14E-16 2.59E-24	5 78	6	1.8919	0 9.30E-11	13	19	0.1685	0 1.41E-13	3 5	8	0.0927	0	3	4	0.1327	0
	50000	x4 x5	2	3	0.1369	2.59E-24 0	78 85	146 161	2.1297	9.30E-11 9.13E-11	11	16	0.4500	0 0	7	8 11	0.1572	0	2	4	0.0844	0
	50000	x6	5	8	0.1305	2.6E-24	78	146	1.9374	9.13E-11 9.11E-11	13	19	0.3298	1.40E-13	5	8	0.2030	0	2	4	0.0940	0
-5	5000	x1	1	3	0.0075	0	39	80	0.1558	7.42E-11	13	3	0.0123	0	13	21	0.0668	1.77E-15	1	3	0.0170	0
,	5000	x2	1	3	0.0073	0	41	85	0.1336	8.44E-11	1	3	0.0125	0	3	6	0.0034	0	1	3	0.0170	0
	5000	x3	1	3	0.0075	0	37	80	0.1429	5.88E-11	11	20	0.0572	7.39E-11	4	10	0.0234	0	6	12	0.0605	0
	5000	x4	1	3	0.0059	0	42	86	0.1494	7.32E-11	1	3	0.0372	0	11	18	0.0516	2.77E-16	1	3	0.0003	0
	5000	x5	1	3	0.0058	0	25	52	0.0989	4.28E-11	1	3	0.0185	0	3	6	0.0212	0	1	3	0.0090	0
	5000	x6	1	3	0.0073	0	32	65	0.1193		1	3	0.0092	0	11	18	0.0629	2.77E-16	1	3	0.0202	0
	10000	x1	1	3	0.0103	0	42	85	0.2387	4.16E-11	1	3	0.0141	0	13	21	0.0789	1.78E-15	1	3	0.0165	0
	10000	x2	1	3	0.0193	0	43	89	0.2367	2.12E-11	1	3	0.0151	0	3	6	0.0272	0	1	3	0.0184	0
	10000	х3	1	3	0.0104	0	37	80	0.2229	8.32E-11	2	7	0.0287	0	4	10	0.0396	0	6	12	0.0560	0
	10000	x4	1	3	0.0084	0	44	90	0.2367	6.19E-11	1	3	0.0150	0	11	18	0.0693	3.91E-16	1	3	0.0155	0
	10000	x5	1	3	0.0104	0	25	52	0.1819	6.05E-11	1	3	0.0186	0	3	6	0.0231	0	1	3	0.0185	0
	10000	x6	1	3	0.0101	0	44	90	0.2587	9.70E-12	1	3	0.0173	0	11	18	0.0725	3.92E-16	1	3	0.0102	0
	50000	x1	1	3	0.0309	0	44	91	0.8592	4.59E-11	1	3	0.0485	0	13	21	0.2937	1.77E-15	1	3	0.0480	0
	50000	x2	1	3	0.0348	0	43	89	0.9464	4.73E-11	2	5	0.0951	0	3	6	0.1318	0	1	3	0.0636	0
	50000	x3	1	3	0.0361	0	39	84	0.8672	6.54E-11	13	28	0.4407	0	4	10	0.1695	0	6	12	0.2274	0
	50000	x4	1	3	0.0415	0	43	88	0.9077	8.24E-11	1	3	0.0563	0	11	18	0.2594	8.75E-16	1	3	0.0599	0
	50000	x5	1	3	0.0338	0	27	56	0.6246	6.27E-11	1	3	0.0680	0	3	6	0.0879	0	1	3	0.0427	0
	50000	х6	1	3	0.0423	0	41	84	0.8872	1.84E-11	1	3	0.0690	0	11	18	0.2716	8.76E-16	1	3	0.0569	0
6	5000	x1	6	13	0.0376	1.85E-11	9	19	0.0491	5.05E-11	14	24	0.0993	7.30E-11	****	****	****	****	11	23	0.0934	1.61E-11
	5000	x2	6	13	0.0343	1.49E-11	10	21	0.0662	7.48E-11	14	24	0.1107	4.00E-13	****	****	****	****	11	23	0.1290	1.06E-11
	5000	x3	6	13	0.0347	2.26E-11	15	31	0.0969	8.64E-11	14	24	0.1189	8.79E-12	****	****	****	****	10	21	0.0933	8.74E-11
	5000	x4	6	13	0.0364	1.86E-11	9	19	0.0755	9.84E-11	15	26	0.1183	5.99E-12	****	****	****	****	11	23		1.33E-11
	5000	x5	6	13	0.0400	1.86E-11	9	19	0.0502	5.49E-11	14	24	0.1359	4.91E-11	****	****	****	****	11	23		1.33E-11
	5000	х6	6	13		1.86E-11	-	19	0.0489	9.84E-11	15	26	0.1174	5.99E-12	****	****	****	****	11	23		1.33E-11
	10000	x1	6	13	0.0544	2.61E-11	9	19	0.0922	7.12E-11	19	33	0.2748	2.78E-11	****	****	****	****	11 11	23 23	0.1574	
	10000	x2	6	13 13	0.0690		10	19 21	0.0889	6.38E-11	16 13	26 23	0.2401		****	****	****	****	11	23		1.50E-11 1.03E-11
	10000 10000	x3 x4	6	13	0.0620	3.20E-11 2.63E-11	9	19	0.1162	4.73E-11 6.56E-11	18	31	0.1937 0.2008	1.76E-11 3.24E-11	****	****	****	****	11	23		1.03E-11 1.88E-11
	10000	x4 x5	6	13		2.63E-11 2.63E-11	9	19	0.0788	5.98E-11	19	32	0.2008	3.24E-11 4.22E-11	****	****	****	****	11	23		1.87E-11
	10000	x5 x6	6	13	0.0705	2.63E-11 2.63E-11	9	19	0.1101	6.56E-11	19	31	0.2156	4.22E-11 3.23E-11	****	****	****	****	11	23		1.87E-11 1.88E-11
	50000	x1	6	13		5.84E-11	10	21	0.1303	6.33E-11	23	42		2.13E-11	****	****	****	****	11	23	0.1722	5.11E-11
	50000	x2	6	13	0.2433	4.71E-11	10	21	0.4160	4.19E-12	19	36		1.14E-11	****	***	****	****	11	23		3.36E-11
	50000	x3	6	13	0.2357		9	19	0.3867	7.27E-11	17	30	0.9049	5.27E-12	****	***	****	****	11	23		2.31E-11
	50000	x4	6	13	0.2484	5.88E-11	10	21	0.5163	5.27E-11	20	36		2.79E-11	****	***	****	****	11	23		4.20E-11
	50000	x5	6	13	0.2574	5.87E-11	11	22	0.4441		20	37		1.97E-11	****	***	****	****	11	23	0.6391	4.20E-11
	50000	x6	6	13		5.88E-11	10	21		5.27E-12	20	36		2.79E-11	****	***	****	****	11	23	0.5666	4.20E-11
			-				/															

Table 3: Results of test examples 7-8

N	Pdim				DFPRP		MPRP1						MZPRP			H	TTCGP		DFDFP				
			Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	Nit	Fval	Ptime	Norm	
7	5000	x1	8	15	0.0333	2.23E-12	65	308	0.3780	9.30E-11	27	68	0.1844	4.57E-11	****	****	****	***	13	27	0.0904	1.11E-11	
	5000	x2	10	18	0.0477	6.04E-11	62	307	0.3465	9.11E-11	21	53	0.1423	3.96E-11	****	****	****	****	12	29	0.0924	2.26E-11	
	5000	x3	13	24	0.0531	6.16E-12	70	341	0.3636	8.67E-11	27	68	0.1632	8.33E-11	****	****	****	****	13	27	0.1109	5.01E-11	
	5000	x4	17	30	0.0668	1.91E-12	66	330	0.4004	9.85E-11	26	66	0.1696	9.39E-11	****	****	****	****	13	27	0.0717	5.23E-11	
	5000	x5	13	22	0.0512	8.99E-11	65	325	0.3834	9.90E-11	27	68	0.1703	8.58E-11	****	****	****	****	12	25	0.0702	6.36E-11	
	5000	x6	17	30	0.0715	1.75E-12	66	330	0.3814	9.86E-11	26	66	0.1574	9.42E-11	****	****	****	****	13	27	0.0811	5.22E-11	
	10000	x1	8	15	0.0566	3.14E-12	62	300	0.5641	9.92E-11	26	66	0.2402	7.10E-11	****	****	****	****	13	27	0.1331	1.58E-11	
	10000	x2	10	18	0.0665	8.54E-11	63	312	0.5805	8.57E-11	21	53	0.2528	5.60E-11	****	****	****	****	12	29	0.1590	3.20E-11	
	10000	х3	17	30	0.1189	7.31E-12	71	346	0.6121	8.15E-11	29	73	0.3219	1.49E-11	****	****	****	****	13	27	0.1488	7.09E-11	
	10000	x4	17	30	0.1024	2.64E-12	67	335	0.6144	9.26E-11	28	71	0.2963	1.68E-11	****	****	****	****	13	27	0.1369	7.39E-11	
	10000	x5	13	24	0.0875	9.80E-13	66	330	0.6009	9.31E-11	29	73	0.2961	1.53E-11	****	****	****	****	12	25	0.1078	8.99E-11	
	10000	x6	17	30	0.1257	2.53E-12	67	335	0.6335	9.27E-11	28	71	0.2793	1.68E-11	****	****	****	****	13	27	0.1330	7.39E-11	
	50000	x1	8	15	0.2434	7.01E-12	62	306	2.4507	7.34E-11	28	71	1.0639	1.91E-11	****	****	****	****	13	27	0.4771	3.53E-11	
	50000	x2	10	20	0.3103	1.48E-12	65	322	2.3498	8.47E-11	23	58	0.8830	1.07E-11	****	****	****	****	12	29	0.5017	7.15E-11	
	50000	x3	18	30	0.5034	5.14E-11	73	356	2.6905	8.06E-11	28	71	1.0180	4.14E-11	****	****	****	****	14	29		1.40E-11	
	50000	x4	17	30	0.4261	5.81E-12	69	345	2.5694	9.16E-11	28	71	1.1128	3.75E-11	****	****	****	****	14	29		1.47E-11	
	50000	х5	13	24	0.3545	2.19E-12	68	340	2.4487	9.21E-11	29	73	1.0658	3.41E-11	****	****	****	****	13	27	0.4865	1.78E-11	
	50000	х6	17	30	0.4056	5.76E-12	69	345	2.6462	9.16E-11	28	71	1.0644	3.76E-11	****	****	****	****	14	29	0.5404	1.47E-11	
8	5000	x1	11	23	0.0656	8.65E-11	31	81	0.1768	4.89E-11	20	41	0.1674	2.57E-11	****	****	****	****	14	26	0.1007	2.41E-11	
	5000	x2	11	25	0.0664	8.60E-11	30	77	0.1985	1.00E-10	20	41	0.1701	5.33E-11	****	****	****	***	14	27	0.1158	1.49E-11	
	5000	х3	12	25	0.0698	4.63E-11	32	86	0.2016	9.86E-11	18	37	0.1570	3.80E-11	****	****	****	***	13	25	0.0934	9.74E-11	
	5000	x4	11	25	0.0623	7.91E-11	31	83	0.1822	8.10E-11	18	37	0.1444	4.01E-11	****	****	****	****	14	27	0.1139	2.89E-11	
	5000	x5	11	23	0.0658	7.22E-11	35	88	0.2038	7.57E-11	20	41	0.1385	3.76E-11	****	****	****	****	13	25	0.0799	5.90E-11	
	5000	х6	11	25	0.0690	4.86E-11	37	97	0.2103	9.24E-11	19	39	0.1510	9.34E-11	****		****		13	25	0.0943	6.64E-11	
	10000	x1	12	27	0.1246	6.04E-11	36	92	0.3391	1.00E-11	24	48	0.2866	5.33E-11	****	****	****	****	15	28	0.1935	1.75E-11	
	10000	x2	11	23	0.1175	6.57E-11	31	77	0.2883	5.75E-11	20	41	0.2415	7.80E-11	****	****	****	****	14	27	0.2080	1.54E-11	
	10000	х3	12	27	0.1226	3.16E-11	38	90	0.3372	7.73E-11	19	39	0.2394	3.14E-11	****	****	****	****	11	22	0.1365	8.63E-11	
	10000	x4	12 12	27	0.1161	8.13E-11	38	93	0.3352	8.93E-12 9.34E-11	23	46	0.2646	2.13E-11 1.61E-11	****	****	****	****	13	26	0.1617	1.82E-11 3.17E-11	
	10000	x5		27	0.1249	6.58E-11	34	95	0.3693		24	48	0.3068		****	****	****	****	17	30	0.1967		
	10000	x6	12	27	0.1211	7.45E-11	46	114	0.4468	1.44E-11	25	49	0.2734	7.59E-11	****	****	****	****	14	27	0.1548	1.06E-12 9.82E-12	
	50000 50000	x1 x2	14 13	29 29	0.5131	3.13E-11 9.21E-11	44 54	104 123	1.6574 2.0339	6.22E-11 7.96E-12	25 26	54 52	1.3137 1.2781	3.69E-11 2.03E-11	****	****	****	****	16 15	30 28	0.7808	9.82E-12 2.49E-11	
															****	****	****	****					
	50000 50000	x3	14	29	0.5097	3.77E-11 4.56E-11	35	92 111	1.4072 1.6541	9.00E-11 3.25E-11	22	45	1.1048 1.2013	7.40E-11 3.68E-11	****	****	****	****	16	30	0.7757	2.34E-11 6.79E-11	
	50000	x4	14 14	29	0.5242	4.56E-11 3.69E-11	42		2.0033	3.25E-11 2.72E-11	23	49	1.1925	7.09E-11	****	****	****	****	13	25 29	0.6777	6.79E-11 3.23E-11	
	50000	x5		29 29	0.5297	3.69E-11 4.24E-11	51 34	134 89		2.72E-11 2.60E-11	24 25	50 52	1.1925	7.09E-11 5.53E-11	****	****	****	****	16	29	0.7447		
	20000	х6	14	29	0.4961	4.24E-11	34	89	1.3974	2.00E-11	25	52	1.2234	3.33E-11					16	29	0.7791	2.20E-11	