

Table 1: Numerical results on Problem 1

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	22.2/92.8/0.006/8.09e-07	14.2/47.0/0.006/8.17e-07	34.0/111.2/0.006/6.88e-07	18.8/72.6/0.006/4.63e-07	13.8/48.2/0.003/6.79e-07
0.3	21.2/87.6/0.007/8.96e-07	14.4/47.6/0.005/8.60e-07	32.8/107.4/0.009/8.44e-07	17.0/68.4/0.007/4.74e-07	15.4/55.2/0.004/7.83e-07
0.5	22.2/92.4/0.008/9.05e-07	14.8/48.2/0.005/8.00e-07	33.8/110.4/0.011/7.40e-07	19.2/75.2/0.008/6.70e-07	14.8/53.2/0.005/6.91e-07
0.8	23.0/96.0/0.010/7.47e-07	15.0/48.4/0.007/8.36e-07	34.4/108.4/0.012/8.41e-07	17.0/69.6/0.009/4.80e-07	15.2/55.6/0.006/6.80e-07
1	19.0/80.0/0.010/8.13e-07	15.0/48.8/0.009/7.15e-07	30.0/96.0/0.012/9.81e-07	19.4/76.0/0.012/4.35e-07	15.8/57.8/0.008/6.33e-07
3	20.0/84.0/0.021/7.14e-07	15.0/49.0/0.017/8.44e-07	31.0/99.0/0.025/8.72e-07	19.8/79.0/0.023/3.33e-07	16.2/56.6/0.017/8.38e-07
5	26.0/109.0/0.037/7.70e-07	15.0/50.0/0.025/5.65e-07	32.0/102.0/0.036/5.78e-07	16.8/64.6/0.028/4.62e-07	16.0/56.0/0.023/7.64e-07
8	27.0/118.0/0.061/8.79e-07	15.0/50.0/0.039/6.97e-07	32.0/108.0/0.058/7.69e-07	19.2/77.0/0.056/6.19e-07	15.8/57.4/0.037/8.52e-07
10	27.0/118.0/0.073/9.71e-07	15.0/50.0/0.049/7.63e-07	33.0/112.0/0.072/5.75e-07	19.8/79.0/0.065/4.58e-07	17.0/62.4/0.047/5.32e-07

Table 2: Numerical results on Problem 2

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	29.8/136.6/0.005/6.91e-07	17.6/60.8/0.002/5.12e-07	52.0/205.6/0.006/7.80e-07	19.8/90.2/0.003/6.43e-07	12.8/42.4/0.002/5.89e-07
0.3	29.6/134.0/0.008/7.19e-07	17.8/59.8/0.005/6.47e-07	49.0/190.0/0.013/8.27e-07	16.6/76.4/0.006/6.15e-07	13.8/45.4/0.004/6.07e-07
0.5	29.8/138.0/0.014/8.16e-07	17.0/55.0/0.007/8.55e-07	50.0/194.0/0.022/7.66e-07	17.0/77.4/0.016/4.97e-07	14.2/46.4/0.011/6.76e-07
0.8	28.0/134.6/0.013/8.36e-07	19.2/64.4/0.009/5.42e-07	50.0/194.0/0.020/9.74e-07	17.4/80.2/0.009/6.41e-07	14.0/46.4/0.005/7.37e-07
1	32.6/143.8/0.017/9.28e-07	18.4/62.4/0.011/6.96e-07	51.0/198.0/0.026/7.84e-07	17.6/81.4/0.012/6.13e-07	13.4/44.4/0.006/5.00e-07
3	28.4/129.4/0.028/7.85e-07	20.2/68.2/0.022/7.45e-07	53.0/207.0/0.047/7.99e-07	19.4/90.0/0.024/5.34e-07	15.0/49.6/0.014/5.54e-07
5	27.8/129.8/0.041/7.39e-07	20.2/68.6/0.033/6.00e-07	52.0/206.0/0.068/9.01e-07	23.4/107.2/0.047/7.00e-07	14.6/49.8/0.021/5.47e-07
8	28.0/127.6/0.060/7.47e-07	18.6/61.6/0.047/6.45e-07	52.0/208.0/0.103/9.42e-07	18.0/83.6/0.050/5.44e-07	14.6/48.4/0.029/6.67e-07
10	36.4/156.6/0.094/5.77e-07	19.4/64.2/0.061/5.80e-07	55.8/225.2/0.129/7.83e-07	23.4/111.0/0.082/6.49e-07	15.0/49.2/0.037/7.81e-07

Table 3: Numerical results on Problem 3

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	67.2/383.6/0.018/7.58e-07	24.4/105.2/0.005/7.28e-07	114.6/512.4/0.023/9.25e-07	30.8/182.0/0.009/6.84e-07	45.0/192.0/0.009/6.78e-07
0.3	65.0/368.2/0.042/8.74e-07	28.0/123.0/0.016/7.95e-07	119.8/530.2/0.060/9.08e-07	31.2/173.0/0.021/6.50e-07	45.8/195.2/0.023/7.45e-07
0.5	67.2/380.6/0.064/7.80e-07	28.2/124.8/0.024/6.00e-07	123.0/545.0/0.094/7.80e-07	33.2/184.0/0.033/7.14e-07	46.0/196.0/0.035/8.57e-07
0.8	71.4/407.8/0.104/7.93e-07	26.4/115.6/0.033/5.84e-07	123.4/546.6/0.142/9.22e-07	30.2/170.4/0.047/6.24e-07	46.4/197.6/0.053/8.44e-07
1	67.6/382.8/0.127/8.29e-07	26.8/114.6/0.044/8.09e-07	124.8/552.6/0.189/8.62e-07	33.0/191.4/0.069/7.33e-07	47.0/200.0/0.070/7.32e-07
3	73.4/417.8/0.374/7.43e-07	28.8/123.6/0.123/6.49e-07	128.0/569.0/0.517/8.65e-07	32.8/180.4/0.172/5.71e-07	49.0/209.0/0.196/7.60e-07
5	75.0/431.0/0.632/8.14e-07	28.0/120.0/0.195/7.59e-07	130.0/578.0/0.855/8.81e-07	31.0/172.2/0.268/7.29e-07	49.0/209.0/0.320/9.62e-07
8	71.0/407.8/0.962/8.83e-07	27.4/117.2/0.307/6.92e-07	131.0/587.0/1.401/9.20e-07	31.8/176.6/0.448/7.50e-07	50.0/213.0/0.524/7.61e-07
10	68.6/390.6/1.136/8.56e-07	29.2/122.6/0.392/6.98e-07	132.0/591.0/1.728/8.71e-07	32.4/179.8/0.557/8.70e-07	50.0/213.0/0.640/8.32e-07

Table 4: Numerical results on Problem 4

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	89.4/456.6/0.016/9.06e-07	39.2/147.0/0.006/7.94e-07	237.4/994.6/0.033/9.61e-07	47.0/240.0/0.008/8.89e-07	66.8/270.6/0.009/8.66e-07
0.3	93.8/482.0/0.036/8.75e-07	40.0/152.6/0.014/8.06e-07	246.0/1030.2/0.080/9.68e-07	45.6/233.4/0.019/7.32e-07	63.8/257.8/0.021/7.73e-07
0.5	90.2/462.4/0.051/8.23e-07	45.0/168.2/0.022/8.95e-07	250.0/1047.0/0.117/9.69e-07	47.8/244.4/0.029/7.97e-07	57.2/229.4/0.027/8.31e-07
0.8	95.4/492.6/0.078/8.75e-07	45.0/169.8/0.032/8.11e-07	253.8/1063.2/0.172/9.37e-07	50.2/255.8/0.044/6.36e-07	73.6/298.6/0.051/9.18e-07
1	88.2/451.6/0.095/8.95e-07	45.0/168.2/0.043/8.23e-07	252.8/1059.2/0.229/9.52e-07	42.4/217.4/0.051/6.82e-07	63.2/254.4/0.057/8.51e-07
3	99.8/515.4/0.271/8.43e-07	41.6/165.6/0.102/8.90e-07	260.6/1093.4/0.586/9.79e-07	47.8/246.8/0.141/7.23e-07	76.6/310.6/0.176/8.65e-07
5	99.0/511.6/0.435/9.08e-07	44.6/178.6/0.178/8.00e-07	267.4/1123.6/0.971/9.65e-07	56.0/288.0/0.267/7.91e-07	62.4/250.8/0.230/7.71e-07
8	115.2/591.8/0.792/8.77e-07	43.8/173.4/0.272/9.09e-07	268.0/1126.0/1.515/9.91e-07	51.0/263.2/0.380/7.70e-07	72.2/291.8/0.422/9.41e-07
10	110.2/567.2/0.944/8.77e-07	44.6/180.0/0.352/8.26e-07	270.2/1136.8/1.900/9.86e-07	47.6/246.6/0.443/6.28e-07	78.0/316.4/0.568/8.99e-07

Table 5: Numerical results on Problem 5

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	137.4/1014.4/1.298/8.14e-07	38.6/133.6/0.172/7.32e-07	284.0/1715.0/2.190/9.24e-07	105.6/872.0/1.115/6.32e-07	47.0/158.0/0.203/7.54e-07
0.3	448.2/4920.2/46.905/8.57e-07	45.4/149.8/1.424/9.14e-07	879.0/8393.0/79.567/7.49e-07	430.4/4811.8/45.563/6.10e-07	51.0/170.0/1.609/8.62e-07
0.5	894.0/11054.0/272.805/7.01e-07	44.6/148.6/3.680/8.79e-07	1710.0/18879.0/467.292/7.70e-07	875.6/10904.8/270.588/8.90e-07	53.0/178.0/4.420/8.00e-07

Table 6: Numerical results on Problem 6

n	IRTTGPMN	IRTTGPMN	TTCGPM	FISAP	EIRCGPM
	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*	Itr/NF/Tcpu/  F*
0.1	12.0/49.0/0.006/9.65e-07	14.0/41.0/0.003/6.46e-07	26.0/78.0/0.006/9.66e-07	17.8/59.8/0.005/3.87e-07	8.0/25.0/0.002/6.13e-07
0.3	13.0/52.0/0.010/6.70e-07	14.0/42.0/0.009/8.82e-07	27.0/81.0/0.016/8.49e-07	15.6/52.6/0.011/4.91e-07	10.0/31.0/0.006/1.61e-07
0.5	13.0/52.0/0.016/8.57e-07	14.0/43.0/0.014/7.72e-07	28.0/84.0/0.025/5.43e-07	15.2/51.4/0.017/3.08e-07	10.0/31.0/0.010/2.05e-07
0.8	13.0/53.0/0.025/5.61e-07	15.0/46.0/0.023/9.48e-07	28.0/84.0/0.039/6.93e-07	18.0/60.6/0.029/6.54e-07	10.0/31.0/0.015/2.61e-07
1	14.0/57.0/0.033/6.48e-07	13.2/40.8/0.026/6.55e-07	29.0/88.0/0.053/5.78e-07	18.4/62.8/0.039/4.77e-07	10.0/31.0/0.019/2.90e-07
3	14.6/60.4/0.098/5.83e-07	16.0/48.0/0.084/8.71e-07	31.0/96.0/0.157/5.64e-07	27.0/90.8/0.154/5.71e-07	10.0/31.0/0.052/5.04e-07
5	15.0/64.0/0.171/5.65e-07	16.0/48.0/0.137/8.95e-07	32.2/101.8/0.272/0.00e+00	20.4/71.6/0.199/6.17e-07	10.0/31.0/0.085/6.50e-07
8	16.0/70.0/0.296/5.47e-07	16.0/49.0/0.222/7.50e-07	34.0/111.0/0.472/6.16e-07	25.2/88.0/0.387/5.29e-07	10.0/31.0/0.135/8.21e-07
10	17.0/74.0/0.393/6.24e-07	16.0/49.0/0.276/8.27e-07	33.0/109.0/0.577/3.34e-14	29.2/101.6/0.557/7.31e-07	10.0/31.0/0.169/9.19e-07

Table 7: Numerical results on Problem 7

n	IRTCGPM Itr/NF/Tcpu/ $\ F^*\ $	IRTCGPMN Itr/NF/Tcpu/ $\ F^*\ $	TTCGPM Itr/NF/Tcpu/ $\ F^*\ $	FISAP Itr/NF/Tcpu/ $\ F^*\ $	EIRCGPM Itr/NF/Tcpu/ $\ F^*\ $
0.1	35.6/220.2/0.010/8.32e-07	22.4/103.2/0.004/5.77e-07	64.2/318.8/0.012/7.28e-07	21.4/138.0/0.005/5.78e-07	25.8/119.2/0.005/6.70e-07
0.3	42.0/251.4/0.021/9.41e-07	19.0/90.8/0.008/7.91e-07	67.2/342.2/0.029/7.67e-07	24.6/159.4/0.014/7.05e-07	27.2/127.2/0.011/5.84e-07
0.5	43.4/265.4/0.033/7.37e-07	21.8/101.2/0.014/6.17e-07	73.2/373.4/0.046/6.91e-07	25.8/170.6/0.021/7.14e-07	27.4/131.4/0.017/6.88e-07
0.8	43.0/262.8/0.047/6.81e-07	22.8/110.2/0.022/5.98e-07	78.2/405.8/0.072/8.14e-07	30.2/207.2/0.038/6.97e-07	29.6/143.2/0.027/5.25e-07
1	44.2/272.8/0.065/8.39e-07	22.8/108.6/0.029/5.17e-07	75.0/388.0/0.092/7.04e-07	29.4/195.2/0.048/4.72e-07	30.4/146.4/0.036/7.12e-07
3	47.0/290.0/0.177/6.68e-07	23.2/116.8/0.077/5.29e-07	83.8/454.0/0.269/8.30e-07	37.2/268.2/0.165/6.38e-07	34.6/173.6/0.107/6.31e-07
5	46.2/289.6/0.287/8.03e-07	22.4/103.4/0.112/7.74e-07	97.2/540.0/0.516/8.09e-07	41.6/305.6/0.304/6.1313e-07	39.4/201.6/0.202/4.94e-07
8	44.2/264.4/0.409/6.49e-07	27.2/136.4/0.228/7.08e-07	78.0/394.0/0.591/7.47e-07	23.4/141.0/0.224/5.83e-07	40.2/204.4/0.322/7.07e-07
10	48.4/283.4/0.546/8.16e-07	23.8/112.2/0.235/6.45e-07	78.6/402.8/0.750/7.75e-07	23.6/144.6/0.283/6.57e-07	46.0/252.0/0.491/4.71e-07

Table 8: Numerical results on Problem 8

n	IRTCGPM Itr/NF/Tcpu/ $\ F^*\ $	IRTCGPMN Itr/NF/Tcpu/ $\ F^*\ $	TTCGPM Itr/NF/Tcpu/ $\ F^*\ $	FISAP Itr/NF/Tcpu/ $\ F^*\ $	EIRCGPM Itr/NF/Tcpu/ $\ F^*\ $
0.1	22.0/111.0/0.006/8.23e-07	20.0/75.0/0.003/6.08e-07	30.4/119.8/0.004/6.07e-07	16.2/76.4/0.002/3.25e-07	19.6/73.2/0.002/5.75e-07
0.3	23.0/116.4/0.008/8.38e-07	21.0/79.4/0.006/5.82e-07	31.8/125.4/0.009/5.54e-07	18.2/84.4/0.006/5.13e-07	21.4/79.6/0.005/5.87e-07
0.5	23.2/117.4/0.009/9.19e-07	18.0/65.4/0.007/5.09e-07	30.0/119.8/0.010/8.32e-07	17.0/81.0/0.008/6.07e-07	22.4/85.6/0.007/4.70e-07
0.8	25.4/128.4/0.013/7.53e-07	18.8/67.8/0.009/6.81e-07	31.0/121.2/0.013/8.58e-07	14.2/67.2/0.008/6.52e-07	23.2/95.0/0.010/5.16e-07
1	25.4/128.4/0.015/8.86e-07	20.6/77.6/0.013/5.85e-07	31.0/122.6/0.016/6.17e-07	14.0/66.6/0.010/6.85e-07	22.0/83.6/0.011/4.05e-07
3	26.2/133.0/0.029/8.48e-07	19.8/73.8/0.024/7.10e-07	30.6/120.4/0.028/4.58e-07	14.6/69.4/0.019/6.16e-07	26.4/117.6/0.030/7.76e-07
5	29.0/151.0/0.048/6.10e-07	21.6/80.4/0.040/8.56e-07	30.8/125.8/0.043/7.10e-07	22.4/104.4/0.043/4.95e-07	27.0/120.0/0.044/5.75e-07
8	29.0/151.0/0.072/7.76e-07	23.6/89.4/0.065/5.40e-07	34.6/142.0/0.070/5.30e-07	22.2/108.0/0.066/5.01e-07	27.0/123.0/0.068/5.83e-07
10	29.0/151.0/0.089/8.63e-07	24.6/95.8/0.087/6.47e-07	31.8/134.0/0.080/6.40e-07	24.2/112.4/0.084/4.99e-07	28.2/128.6/0.087/3.10e-07