Table 5.1
Algorithmic Performance on Several Test Problems

		Interior Point Algorithm		Osborne-Watson Algorithm		Busovaca Algorithm	
Example	Starting Point	Optimal Objective	Number of Iterations	Optimal Objective	Number of Iterations	Optimal Objective	Number of Iterations
1.Wormersley	(0,0)	3.032542	3	5.234825	3	NA	
2.Bard	(1,1,1)	0.1243383	7	0.1243383	5	0.1243406	13
3.Beale	(1,0.1)	0.0	6	0.1547611e-06	6	0.3695488e-05	8
4.a.Biggs	(1,1,1,1,1,1)	F		F		F	
b.Biggs	(1,8,2,2,2,2)	0.0	10	0.7289559	45	NA	
5.Brown&Dennis	(25,5,-5,-1)	905.528	30	903.2406	113	903.2343	2
6.El-Attar 5.1	(1,2)	0.4704242	8	0.4704267	6	0.4704247	8
7.El-Attar 5.2	(1,1,1)	7.914516	100	7.904731	22	7.894227	5
8.Madsen	(3,1)	1.0	14	1.000010	11	1.000002	13
9.Osborne 1	(0.5,1.5,-1,0.01,0.02)	0.0293912	11	0.0293914	10	0.8203727	55
10.Osborne 2	(1.3,0.65,0.65,0.7,0.6, 3,5,7,2,4.5,5.5)	2.570152	3	F		F	
11.Powell	(3,-1,0,1)	0.25423e-07	14	F		0.29039e-08	3
12.Rosenbrock	(-1.2,1)	0.0	13	F		0.506642e-06	51
13.Watson	(1,1,1,1)	0.623611	12	1.278432	5	0.6018584	24
14.Wood	(0,0,0,0)	0.0	7	0.000003	10	0.0	25

See Appendix A for a detailed description of the test problems. F indicates the algorithm failed to meet convergence criteria for the problem. NA indicates results are not available for this entry. All interior point results are based on two Meketon iterations per step with the exception of Problem 13 (Watson) where we use one.