

4.3

4.3.a

Exterior:

- Max Penalty: 2167979.329
- Distance to optimum: 1.17e-06
- Optimal point: Optimal point is slightly infeasible
- Starting points tried (all managed to converge)
 - [-2, -1]
 - [-2, -2]
 - [2, 1]
 - [2, 2]

Interior:

- Min Penalty parameter: 1.79e-07
- Closeness to optimum: 2.53e-07
- Optimal point: Optimal point is feasible
- Starting points tried (all managed to converge)
 - [-1, 0]
 - [0, 0.5]
 - [-1, -0.5]
 - [0, 0]

4.3.b

Solutions:

- Exterior: ~0.014 (14cm)
- Interior: ~0.005 (5cm)

Solutions are the same as the analytical solutions