Alexandre Dufresne – Nappert 20948586

Section 2

Q1

The first method I would use to compare the results is by comparing it to a analytical solution, if the difference between the values at each point are small enough/ below a certain tolerance I would deem it an accurate solution.

The Second method would cover the case where we do not have a analytical solution to compare to, in this case, I would run the solver for multiple step sizes where each next step size is ½ the previous. I would then compare the values for the subsequent points together and check for convergence, once a certain tolerance is met between 2 step sizes solutions I would deem it accurate enough.