

MACM 316 – Homework 4

- Problems are not to be submitted. The related quiz will be given in class.
- Feel free to use Canvas discussions but please keep in mind that these forums are open.

A. Bisection

Section 2.1, Ex 3

Section 2.1, Ex 17

Section 2.1, Ex 20

B. Newton's method

Section 2.3, Ex 1

Section 2.3, Ex 5*

Section 2.3, Ex 15*

C. Modified Newton's method

Section 2.4, Ex 1*

Section 2.4, Ex 3*

Section 2.4, Ex 5*

Section 2.4, Discussion question 2

D. Convergence

Section 2.4, Ex 7

Section 2.4, Ex 8

Section 2.4, Ex 14

*: Use $|p_n - p_{n-1}| < \text{tol}$ as your stopping criteria, with tol provided in the question.