

Problem Set 5
Numerical Analysis, MATH 3377/6577
Due Wednesday, November 20, 2024

Do the following problems from the text, *Numerical Analysis*, 10th edition, by Burden, Faires and Burden.

Each item is worth 10 points.

1. Section 4.5: 1c,d and 3c,d You may generate a table using ALG042
2. Section 4.5: 7
3. Section 4.5: 15 How do you estimate the error is less than 10^{-4} ? You may use ALG042.
4. Section 4.6: 7a Use ALG043
5. MATLAB Exercise:
 - a) Solve problem 9 of Section 4.6 using ALG043.
 - b) Plot graphs of the functions on the given domains using MATLAB.
6. Section 4.7: 1a,b and 5a,b
7. Section 4.7: 9
8. Section 4.8: 1b, 2b
9. Section 4.8: 3b, 4b
10. Section 4.8: 11c, 13c

For Graduate Students:

11. Section 4.7: 12
12. Section 4.8: 17