

MA 428: Project 3: Numerical Integration - Gaussian Quadrature

Reading: Section 6.6

Your presentation will focus on material on pages 483 – 487. In your presentation, you should address the following questions

1. Clearly explain the problem that you are trying to solve – provide motivation for the problem.
2. What is Gaussian quadrature and how does it compare to the Newton-Cotes quadrature we covered in class?
3. Explain how Gaussian quadrature rules are obtained - illustrate with examples.
4. Read and understand the examples given in section and include them in your presentation.
5. Do problems 22 and 24 in Section 6.6 and include the results in your presentation.