

Preparation guide for Quiz 06

As usual, you need to go over your homework problems first. When you are done, check if you have reached the following:

1. Know how to find degree of precision for a given set of nodes and weights, and how to increase degree of precision by varying the nodes and weights.
2. Know how to find nodes and weights of Gaussian Quadratures. Know how to generalize the quadrature to weighted integrations.
3. Know the source of “loss of accuracy” for standard quadrature rules applied to improper integrals and know standard treatment such as removing the singular part manually and proper change of variable.
4. Review the procedures of Gaussian elimination and similar schemes. Understand how to calculate number of multiplications/divisions and additions/subtractions needed for these schemes.