1. Use three point Gauss formula to evaluate $\int_1^2 \dfrac{dx}{x}$.

2. Apply Gauss two point formula to evaluate $\int_{-1}^1 \dfrac{dx}{1+x^2}$.

3. Using three point Gauss formula, evaluate $\int_0^1 \dfrac{dx}{1+x^2}$.

4. Evaluate $\int_0^2 \dfrac{(x^2+2x+1)}{1+(x+1)^4} \, dx$ by Gauss three point formula.

5. Using the three point Gauss quadrature, evaluate $\int_0^1 \dfrac{dx}{\sqrt{1+x^4}}$.

6. Evaluate $\int_{0.2}^{1.5} e^{-x^2} \, dx$ using the three point Gauss quadrature.

7. Use two point and three point Gauss formula to evaluate $I = \int_0^2 \dfrac{dx}{3+4x}$. Compare with the exact solution.

8. Use two point and three point Gauss formula to evaluate $\int_0^2 \dfrac{dx}{x^2+2x+10}$.

9. Find the value of the integral $I = \int_2^3 \dfrac{\cos 2x}{1+\sin x} \, dx$, using two point and three point Gauss formulas.

10. In problem 7, write $I = I_1 + I_2 = \int_0^1 f(x) \, dx + \int_1^2 f(x) \, dx$. Then, evaluate each of the integrals by two point and three point Gauss formulas. Compare with the exact solution.