Computational Physics / PHYS-UA 2000 / Problem Set #4
Due October 1, 2024

You *must* label all axes of all plots, including giving the *units*!!

1. Exercise 5.9 in Newman. Then: (c) Test the convergence by evaluating the choices $N = 10, 20, 30, 40, 50, 60, 70$.

2. Exercise 5.10 in Newman.

3. Exercise 5.13 in Newman. Then: (d) Perform the calculation using Gauss-Hermite quadrature (`scipy` can give you the right roots and weights to use). Can you make an exact evaluation (meaning zero approximation error) of the integral?