MTH 210: Lab 4

P 1. Use the Acceptance–Rejection method to generate samples from Gamma$(4, 5)$ using an appropriate proposal distribution.

(1) Calculate the sample mean and variance and compare it with population mean and variance.

(2) Estimate the value of c and compare it with theoretical value.

P 2. Generate 10^4 uniform samples from a unite circle. Observe the scatter plot of the samples.