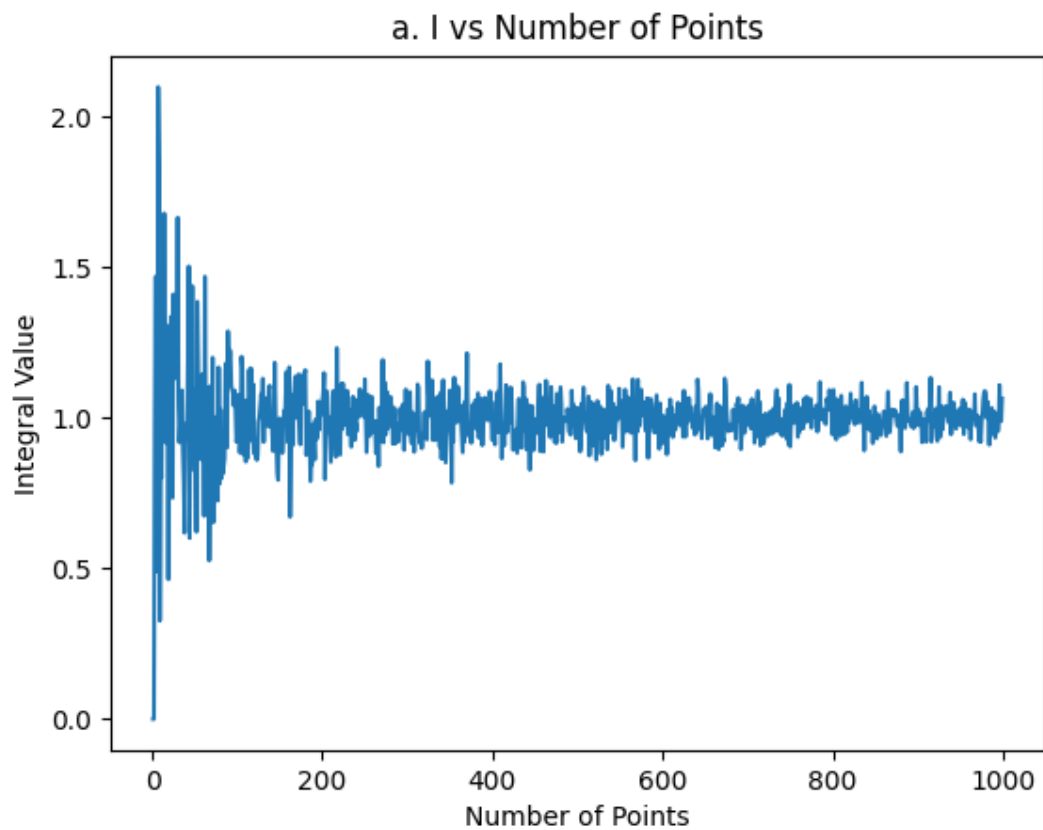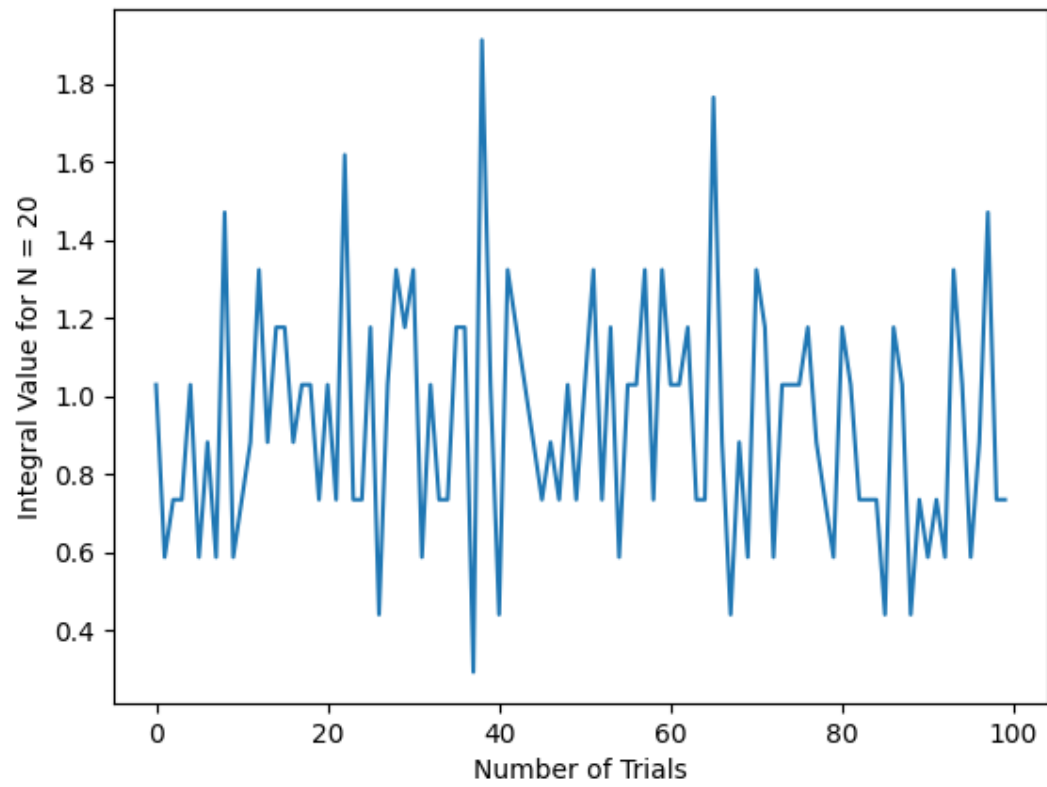# Question 6 - Report

Integrals solved using Monte Carlo method

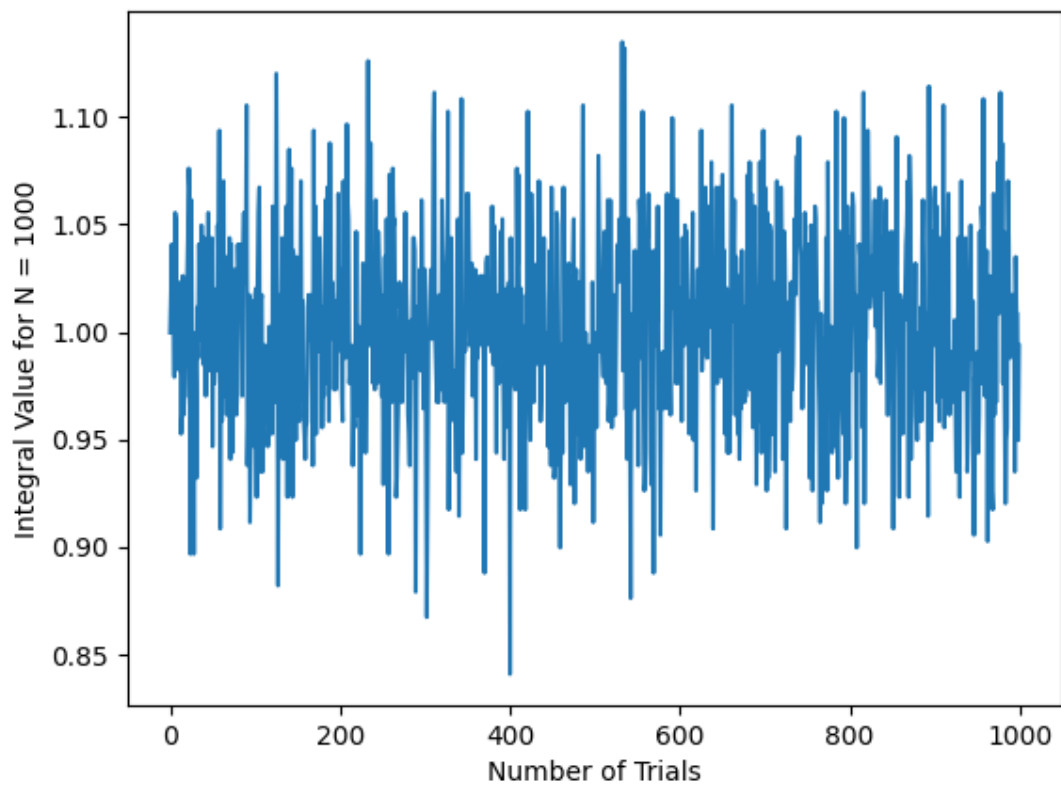## Part 1:

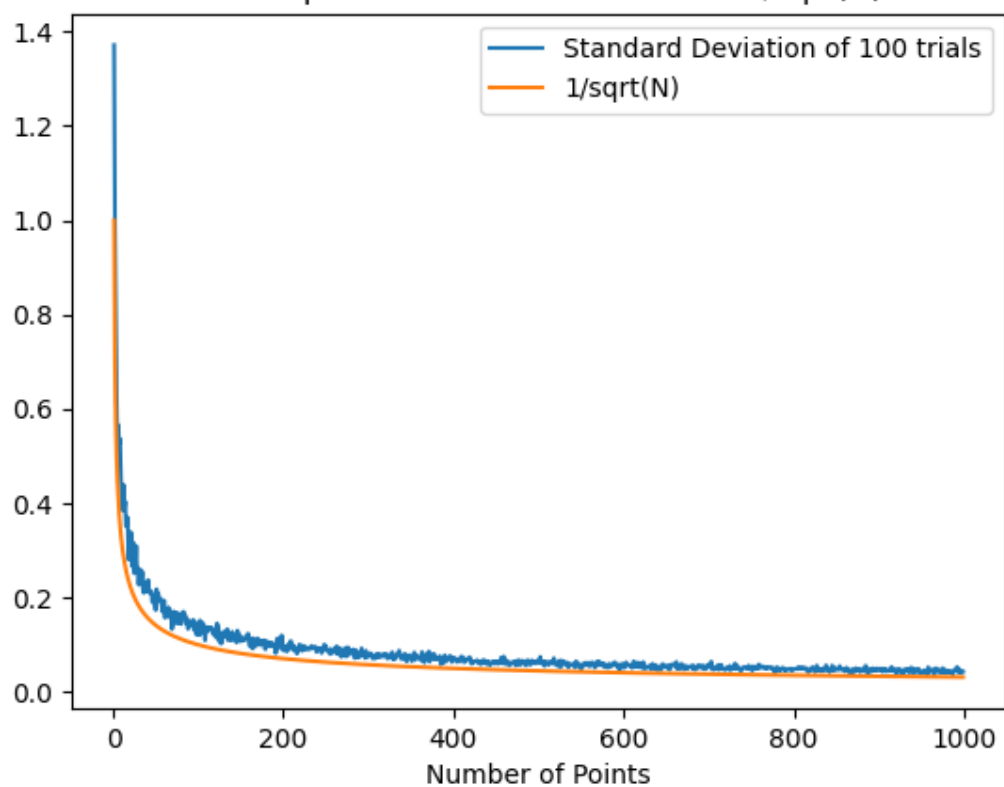corresponds to equation $\int_0^1 3x^2dx$

a. I vs Number of Points
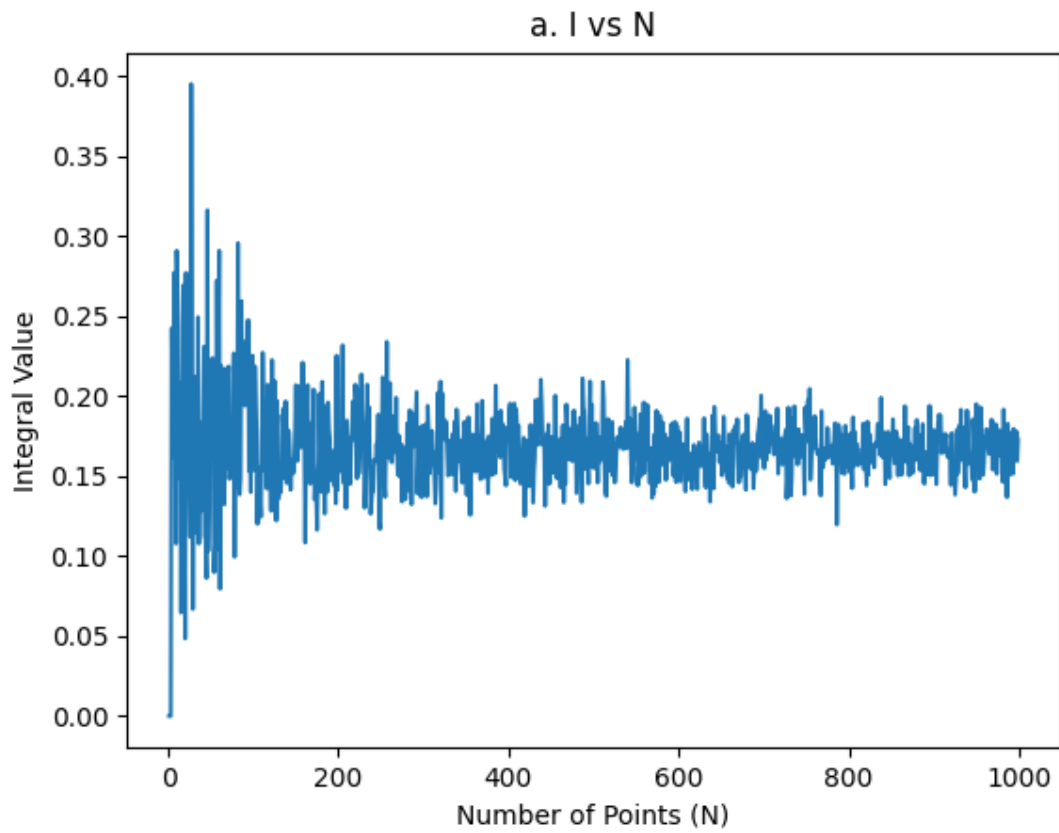
b. I vs trials(N=20)

c. I vs trials (N=1000)

d. Comparison of Monte Carlo with 1/sqrt(N)

Part 2

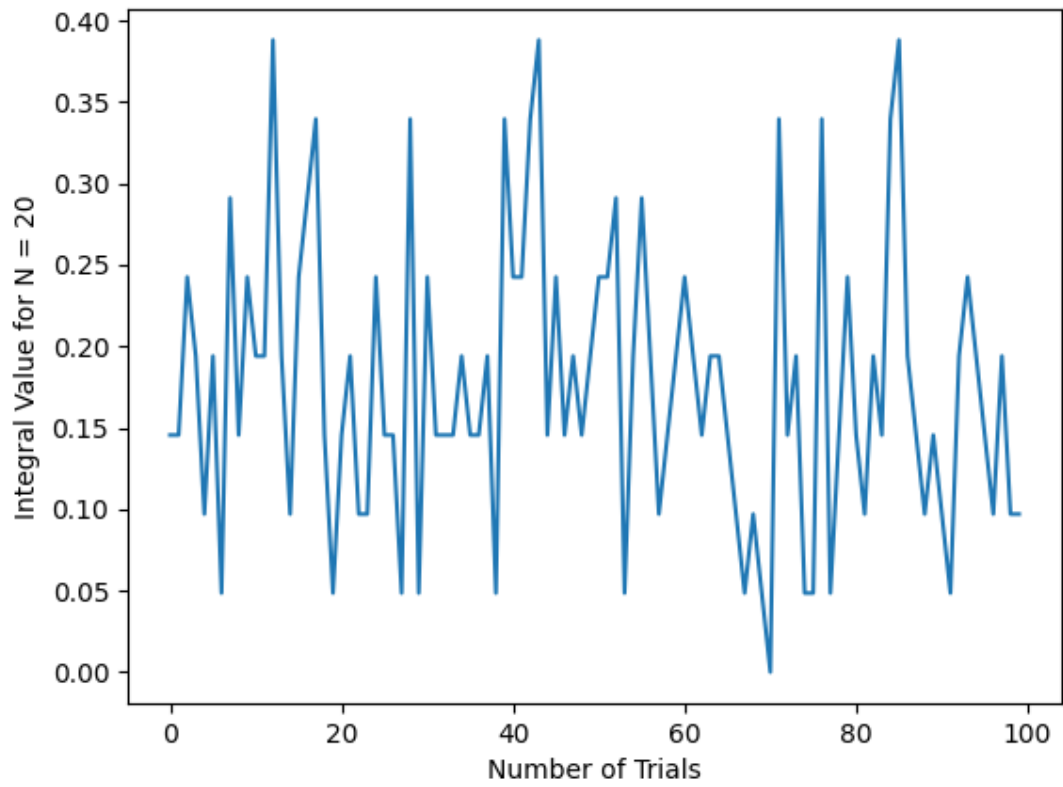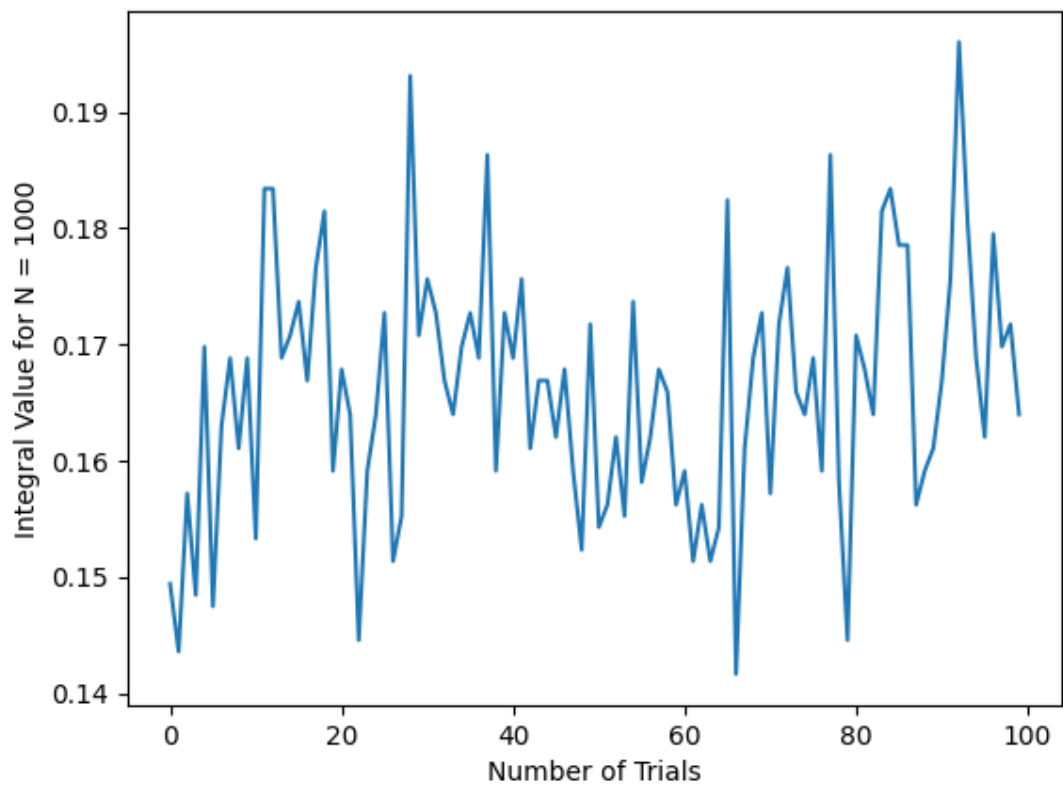corresponds to equation $\int_0^1 \int_0^1 x^2 \, y \, dx \, dy$

a. I vs N

b. I vs trials (N=20)

c. I vs trials (N=1000)

d. Comparison of Monte Carlo with 1/sqrt(N)