

The Central Limit Theorem #3

You have a sample of 100 values from a population with mean $\mu = 500$ and with standard deviation $\sigma = 80$. What is the probability that the sample mean will be in the interval (490, 510)?

Submission Modes and Output Format

You may either solve the problem on pen-and-paper and submit the final answer in the text box, or you may submit an R or Python program to accomplish the above task. Your output should be a floating point/decimal number, correct to 4 places of decimal.

1. In the text box below, enter a floating point/decimal number, correct to 4 places of decimal.
2. Alternatively, you may submit an **R** program, which uses the above parameters (hard-coded) and computes the answer.

Your answer should resemble something like:

0.1234

(This is **NOT** the answer, just a demonstration of what the answering format should resemble).