

# Lab 8 – MATH 240 – Computational Statistics

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## Abstract

This document provides a basic template for the 2-page labs we will complete each week. Here, briefly summarize what you did and why it might be helpful. Provide all the top-line conclusions, but avoid providing *all* the details. Results should be limited to “we show X, Y, and Z.”

**Keywords:** What topics does the lab cover concerning class? List 3-4 key terms here, separated by semicolons.

## 1 Introduction

Provide an overarching summary of what you’re talking about. In this section, you introduce the idea to the reader, and your goal is to pull them in. What’s the mystery you aim to solve?

You want to provide enough background to understand the context of the work. Specifically, what is the question you are addressing? If it applies, describe what information currently exists about this problem, including citations, and explain how the question you’re answering complements this work.

Provide a roadmap of the structure of the paper.

## 2 Density Functions and Parameters

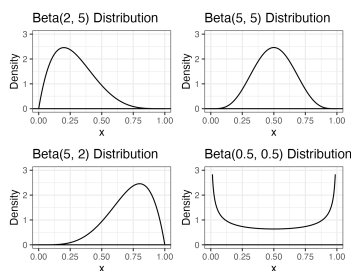
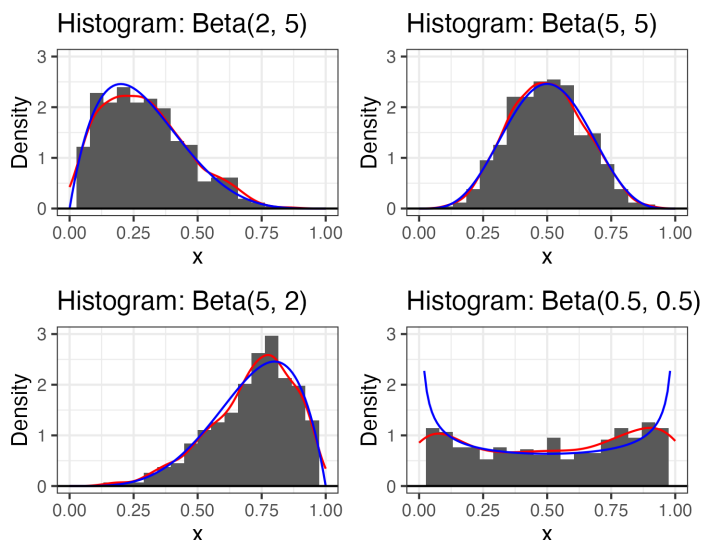
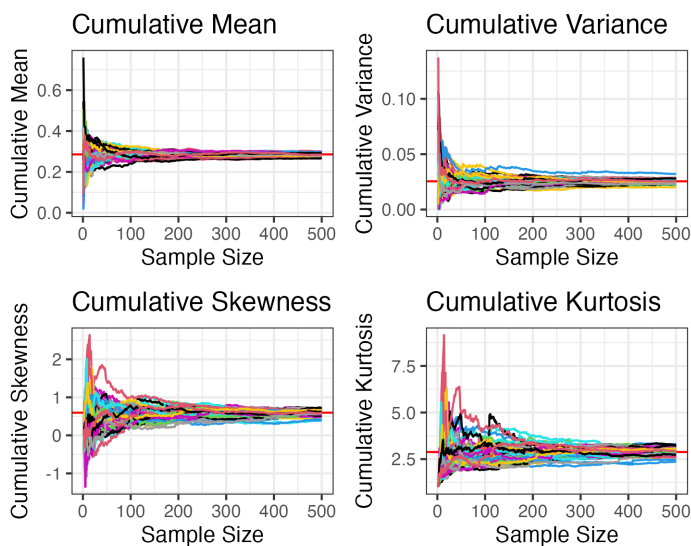


Figure 1: Hello.

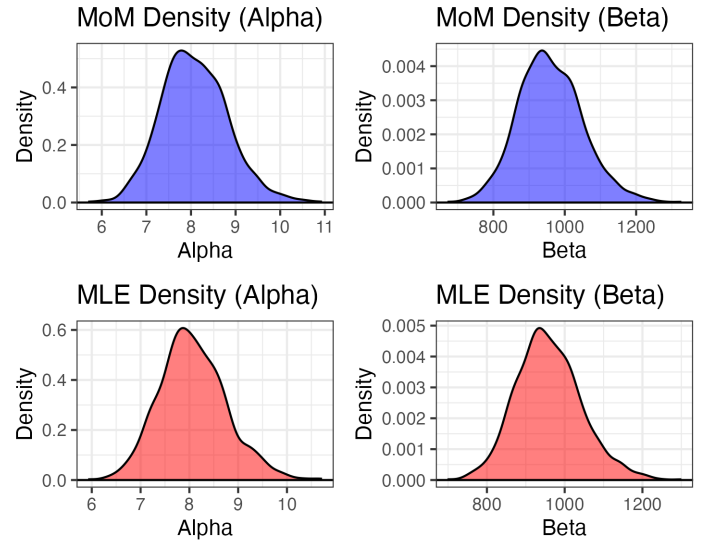
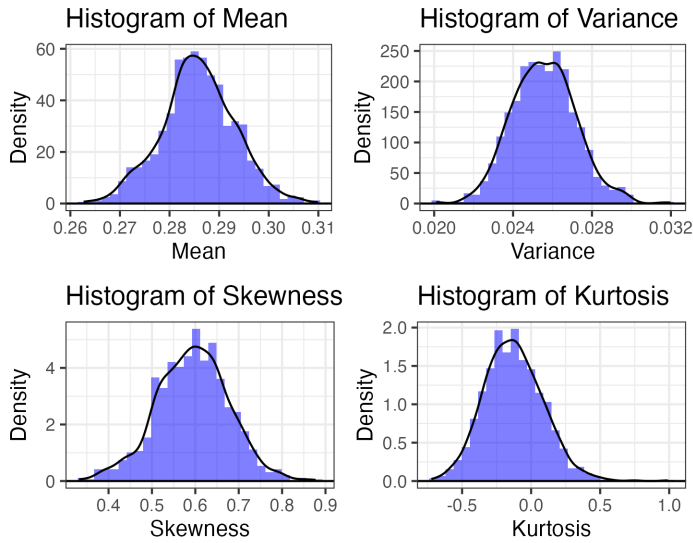
Alpha	Beta	Mean	Variance	Skewness	Excess Kurtosis
2.00	5.00	0.29	0.03	0.60	-0.46
5.00	5.00	0.50	0.02	0.00	-0.46
5.00	2.00	0.71	0.03	-0.60	-0.12
0.50	0.50	0.50	0.12	0.00	-1.50



## 3 Properties



## 5 Estimators



Parameter	Method	Bias	Precision	MSE
Alpha	MOM	0.08	1.83	0.55
Alpha	MLE	0.07	2.13	0.48
Beta	MOM	10.29	0.00	8288.46
Beta	MLE	9.11	0.00	7132.70

## 4 Example



## 6 Discussion

You should objectively evaluate the evidence you found in the data. Do not embellish or wish-terpet (my made-up phrase for making an interpretation you, or the researcher, wants to be true without the data *actually* supporting it). Connect your findings to the existing information you provided in the Introduction.

Finally, provide some concluding remarks that tie together the entire paper. Think of the last part of the results as abstract-like. Tell the reader what they just consumed – what's the takeaway message?

**Bibliography:** Note that when you add citations to your bib.bib file *and* you cite them in your document, the bibliography section will automatically populate here.

## 7 Appendix

If you have anything extra, you can add it here in the appendix. This can include images or tables that don't work well in the two-page setup, code snippets you might want to share, etc.