

# Lab 2 - Concept Review Sheet

CSSS / POLS 510 — Maximum Likelihood Estimation

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## Computing / programming

- Commenting
- Set the seed
- Pseudo-code
- Monte Carlo / simulation
- Don't repeat yourself
- The benefits of breaking things

## Statistics

- Marginal / joint / conditional probability
- PDF / CDF
- Moments (1st, 2nd)
- Bernoulli distribution
- binomial distribution
- Poisson distribution
- uniform distribution
- normal / Gaussian distribution
- Stochastic
- Systematic
- Expected values vs. predicted values

## R Skills

- Packages (`MASS`, `simcf`, `tile`, `tidyverse`)
- R Markdown (or... what?)
- Churn + baby math (simulation)
- Serious math (analytic solution)
- Data visualization

## Logistics

- Must type homework. Please not in MSWord or similar word processing program. Remember to separate paper progress from the rest of the homework assignment.