

Pre-class preparation

Please read the following textbook sections from Blitzstein and Hwang's *Introduction to Probability* (second edition) OR watched the indicated video from Blitzstein's Math 110 YouTube channel:

- Textbook: skim sections 7.4 and 7.7 (just the part on the Multinomial)
- Keep studying for the Midterm!

Objectives

By the end of the day's class, students should be able to do the following:

- Define the multinomial distribution via a story model and calculate the corresponding joint PMF.
- Compute the marginal and conditional distributions for the multinomial distribution, as well as the covariance of coordinates of the multinomial vector.
- Sample from a multinomial distribution in R.

Reflection Questions

Please submit your answers to the following questions to the corresponding Canvas assignment by 7:45AM:

1. None! Study for the midterm!
2. (Optional) Is there anything from the pre-class preparation that you have questions about? What topics would you like would you like some more clarification on?