

Statistics
1st Semester Exam Review: Tables & Distributions Review

A hair loss pattern related to body mass index? One study (*Journal of the American Medical Association*, February 24, 1993, page 1000) of 769 men showed the following numbers:

		Hair loss pattern		
		None	Frontal	Vertex
Body Mass Index	< 25	137	22	40
	25 – 28	218	34	67
	> 28	153	30	68

- a. What percent of men had no hair loss?
- b. What is the marginal distribution for men with a Body Mass Index greater than 28?
- c. What is the conditional distribution for men with a Body Mass Index between 25 and 28 among the men that have lost hair in the Vertex region?
- d. What is the marginal distribution for men with frontal hair loss?
- e. Create a segment bar chart that displays the Body Mass Index of men with Frontal hair loss.

A study was made to compare year in high school with preference for vanilla or chocolate ice cream with the following results:

	Vanilla	Chocolate
Freshman	20	10
Sophomore	24	12
Junior	18	9
Senior	22	11

- Determine the percentage of high school students that prefer chocolate ice cream.
- What is the marginal distribution for sophomores?
- What is the conditional distribution of freshman, given the student prefers Vanilla ice cream?
- What is the marginal distribution of students that prefer chocolate ice cream?
- What is the conditional distribution of students that prefer vanilla ice cream, given that the students are seniors?