

# Math 160/263 Minitab Assignment # 5 - Unix Version

Chapters 2 and 4 - Probability

Worksheet Name - data5.MTW

Upper Wabash Tech has two professional schools, business and law. A three-way table of applicants to these professional schools, categorized by gender, school, and admission decision is given below.

	Business		Law	
	Admit	Deny	Admit	Deny
Male	480	120	10	90
Female	180	20	100	200

1. Use the **TALLY** command with the **ALL** subcommand to produce tables for gender, decision, and school.
  - (a) What is the probability that a randomly selected applicant to Upper Wabash Tech is male? female?
  - (b) What is the probability that a randomly selected applicant to Upper Wabash Tech is admitted? denied?
  - (c) What is the probability that a randomly selected applicant to Upper Wabash Tech applied to the Business School? the Law School?
2. Use the **TABLES** command with the **ROWPercents** subcommand to produce a two-way table of gender by decision.
  - (a) What is the probability that a randomly selected male applicant is admitted?
  - (b) What is the probability that a randomly selected female applicant is admitted?
3. Use the **TABLES** command with the **ROWPercents** subcommand to produce separate two-way tables of gender by decision for each of the professional schools.
  - (a) What is the probability that a randomly selected male applicant to the Business School is admitted? What is the probability that a randomly selected female applicant to the Business School is admitted?
  - (b) What is the probability that a randomly selected male applicant to the Law School is admitted? What is the probability that a randomly selected female applicant to the Law school is admitted?