

STA 2014 STUDY GUIDE FOR THE FINAL

- 1.) Addition Rule for Probabilities based on Contingency Tables. (Reference: Example 4 on page 243.)
- 2.) Computing Conditional Probabilities based on Contingency Tables. (Reference: Example 2 on page 257.)
- 3.) Discrete probability distribution properties. (Reference: problem 20 on page 294.)
- 4.) Binomial Probability Distribution. (Reference: Problems 37 and 38 on page 311.)
- 5.) (i) Finding the area under the standard normal curve; (ii) Finding z -scores corresponding to the given area. (Reference: Problems 7, 9, 15, 19 on pages 341–342.)
- 6.) Applications of the Normal Distribution. (Reference: Problems 19 and 20 on page 350.)
- 7.) Distribution of the Sample Mean. (Reference: Problems 19 and 25 on page 390.)
- 8.) A question on confidence interval about a population mean. You need to be able to recognize the type of procedure appropriate for the given problem (Z -interval or T -Interval). Additionally, you need to be able to properly **interpret** your result in writing. (Reference: Problems 21, 23, 31 on pages 416–418; problems 13, 17, 21 on pages 431–432.)
- 9.) A question on confidence interval about a population proportion. You need to be able to properly **interpret** your result in writing. (Reference: Problems 11, 13, 15, 19 on pages 441–442.)
- 10.) Perform hypothesis testing for a population mean. You need to be able to carefully state the null hypothesis and the alternative hypothesis. You also need to be able to recognize the type of procedure appropriate for the given problem (Z -test or T -test). Additionally, you need to be able to properly **interpret** your result in writing. (Reference: Problems 17, 19, 21, 29 on pages 478–479; problems 13, 15, 19 on pages 488–489.)