

Review for Test 3

Section 6-5, Chapter 7 and Chapter 8

YOU NEED TO KNOW

- 1. The difference between a parameter and a statistic**
- 2. The Central Limit Theorem**
- 3. Confidence Interval for the mean when σ is known (know the conditions, the formula, and how to interpret them)**
- 4. Confidence Interval for the mean when σ is unknown (know the conditions, the formula, and how to interpret them)**
- 5. how to find the margin of error**
- 6. how to find the sample mean and the margin of error if the CI is given**
- 7. how the CIs behaves as we increase the confidence, or we change the sample size, or the standard deviation/standard error**
- 8. how to find the minimum sample size when the margin of error is given**
- 9. how to carry out a hypothesis test for the mean (check conditions, state claims, find the test statistic, find the p-value, give the conclusion)**
- 10. which test to use for the mean: the z-test, or the t-test**
- 11. Type I error, and Type II error**
- 12. the properties of the t-distribution**
- 13. how to find the sample proportion**
- 14. confidence intervals for a proportion (know the conditions, the formula, and how to interpret them)**
- 15. how to find the minimum sample size when the margin of error is given (for proportions)**
- 16. how to carry out a hypothesis test for the proportion (check conditions, state claims, find the test statistic, find the p-value, give the conclusion)**