AP Stats review sheet for unit 5 test.

Multiple choice section.

- 1. What is the correct interpretation of a confidence interval?
- 2. Calculate a p-value based off of given data, by using the correct hypothesis test.
- 3. Calculate a confidence interval with given data.
- 4. What is the number of degrees of freedom in the given problem?
- 5. Calculate a p-value based off of given data, by using the correct hypothesis test.
- 6. Calculate the mean of a normal distribution with the given data and the equation

$$z = \frac{x - \mu}{\sigma}.$$

- 7. What happens to the mean and standard deviation when all terms in a list are increased, decreased, multiplied, or divided by a certain number?
- 8. Know what it is to have a type I and type II error in context with a specific situation.
- 9. What is meant by having a certain margin of error?
- 10. Calculate an expected value.
- 11. What effect is there with changing the confidence level?
- 12. What are the null and alternative hypotheses for a specific scenario?
- 13. A least squares line is given. What do the slope and y-int mean?
- 14. What is the minimum sample size is needed to make sure all conditions are met for constructing a confidence?
- 15. Know what a type II error is in context with a specific situation.
- 16. Know things about what the level of significance means.
- 17. What does a confidence interval tell you about your decision on a hypotheses test?
- 18. Is enough information given to conduct a hypotheses test, if so what is the answer, if not what is the missing info?
- 19. Create a confident interval for a specific case.
- 20. How does changing the sample size change a confidence interval?