**Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 7 Quiz

Answer the following questions. **Show your work**.

1. From a random sample of 65 students, 40% said they prefer to wake up to do their homework rather than stay up late. Calculate and interpret the 98% confidence interval.
2. If I decrease the confidence level for the interval in Question 1, will the resulting interval be wider or narrower? Explain your choice (no need to calculate anything, but feel free to if desired).
3. Table

   Description automatically generatedTo the right is a random sample of 10 Homework grades (%).

Suppose Homework grades are normally distributed with unknown population standard deviation. Calculate and interpret the 88% confidence interval!

1. Find the Margin of Error from the interval you found in Question 3.