MT 143, Quiz #11, Spring 2020 Name _____

Instructions: Show all work. Answers without work can only be graded all or nothing. Partial credit is available only when work is shown. Answer all parts of each problem. Provide explanations as indicated. You may use Minitab or any other statistical software (such as a calculator or Excel) to complete any required statistical calculations or graphs.

1. Using the data in the file **143quiz11data.xlsx**, conduct a χ^2 -test (using the data on Sheet 1) to determine if Age (Category 1 = Young, Category 2 = Middle-aged, Category 3 = Old) and Region are dependent. State the null and alternative hypotheses, test statistic, p-value and conclusion.

Using the data in the file 143quiz11data.xlsx, conduct an ANOVA test (using the data on Sheet
to determine if customer size impacts the number of days to complete their order. State the null and alternative hypotheses, test statistic, p-value and conclusion