

## PINE TREES, INC. – QUESTIONS – Spring, 2021

Before Ms. Marcus replies to Mr. Washington, write an objective report to her (refer to the report guidelines on the Gateway web site), addressing the following questions. (Assume that the applicable precedent is from the fictional jurisdiction of the state of Gould).

- Q. 1. Is the disclaimer of any consequential damages contained in the Purchase Order Acknowledgment part of the agreement between Burger and Pine?
- Q. 2. Using MS Excel and the data given in the case:
- Calculate Profit from Revenues and Expenses. Create a time series plot (basically, a scatterplot with time on the x-axis). Plot both Revenues and Profit as separate lines on the time-series plot. (Use the Excel file provided.) Inspect the plot and explain any possible trend (or lack of trend).
  - Create a histogram of the weekly operating profits (i.e., weekly revenues minus weekly expenses) from the prior year of operation using approximately 6 equal sized bins. Does the histogram appear to be approximately normally distributed? Why is that important?
  - What was the average weekly profit for the prior 12-month period? Determine and define the variance and standard deviation of weekly profit.
  - How confident are you of this estimate? Calculate a 99% confidence interval for weekly profits, assuming that sigma is unknown. What does this tell you about weekly profits?
  - Based on the above, what is the expected exposure on the lost profits claim?
- Q. 3. Assuming that the consequential damages clause is deemed not part of the contract and further assuming that the delivery crew was negligent in decorating the tree, could Pine be held liable for the lost profits? In answering this question, make sure to address the legal standard for awarding lost profits and the results from Q. 2. (Assume that expenses and revenues are similar from year to year)
- Q. 4. Assume that, based on Q. 2. e. above, Pine made an initial settlement offer to Burger. However, on behalf of Burger, Mr. Washington declined the offer because he felt the offer underestimated the lost profits. He stated that profits from the last six months (26 weeks) before the fire are more indicative of future expected profits. He feels that only data from the last six months should be used to calculate future expected profits.
- To formally test Mr. Washington's claim, test to see if there was a significant difference in mean weekly profits between the first 6 months of the year and the last 6 months. Use a 0.05 significance level and assume unequal variances. Does this support Mr. Washington's claim?
  - Having thought about Mr. Washington's suggestion, you consider several options as an estimate of lost profits. These include 1) the full year, 2) the last six months only, 3) a weighted average that gives twice the weight to the last six months as to the first six months, or 4) some other weighted average. Which method do you think gives the most accurate estimate of lost profits?