## AGEC622 - Agribusiness Analysis and Forecasting 06\_Exercises

- Complete the exercises in the provided notebook "06\_exercises.xlsx". a
- If there is more than one question, note that each will have its own tab in the workbook.
- Work vertically down the sheet within your notebook. Separate the individual parts of the question(s) (a, b, c, ....) using dividing rows like the blue example dividers in the file.
- Submit your completed .xlsx file via Canvas.

Question 1. The overall objective of this exercise is to simulate corn price and yield with different types of distributions and make the comparisons.

- a) Simulate corn price and corn yield. Simulate the variables assuming normal distribution.
- b) **Test for normality**. Test both variables for normality using Simetar's "Hypothesis Tests" wizard.
- c) Estimate parameters for different distributions. Use Simetar's "Parameter Estimation" wizard to estimate the parameters of different types of distributions for corn price and yield data.
- d) Simulate corn price and yield data with different distributions. Simulate corn price assuming *log normal* distribution and simulate corn yields assuming *beta* distribution.
- e) Compare the distributions. Create PDFs and compare the distributions.