1. "Gage Linearity and Bias" sheet. Evaluate Bias and Linearity for 3 analytical scales purchased for your lab. Use “Stat>Quality tools> Gage Linearity and Bias Study” to generate plots for each of the 3 scales. ***Comment on the study results for each scale and make your recommendations to the lab manager about those scales.***
2. "Continuous Gage R&R" sheet. Analyze the provided results of the Crossed Gage R&R Study for an analytical method for measuring the concentration of the active ingredient in a pharmaceutical solution produced by our company. Use “Stat>Quality tools> Gage R&R (crossed)”. The label claim for the concentration is 50 mg/mL, and the specification for Lower and Upper Limits is 90-110% of the label claim (use the “Options” button in the dialog box to enter the spec limits). The study was conducted with 3 analysts analyzing 10 different samples of the solution, 3 times for each sample, so there are a total of 90 measurement results. ***Comment on the study results and make your recommendations to the lab manager about the analytical method and about the 3 analysts.***
3. "Attribute Agreement Analysis" sheet: A tablet packaging line fills 100 tablets in each bottle, places and then torques the cap on.  Inside the cap, there is a polystyrene foam liner that is coated with a torque-activated adhesive to seal the bottle. To ensure bottles are fully sealed, inspectors visually inspect all bottles and reject any bottles with skewed caps. The reliability of that visual inspection is investigated. To do that, 4 inspectors inspected the same 100 bottles, 3 times each bottle, and made the Accept/Reject decisions. Those decisions were then checked against the “True Values” for each bottle that were determined by opening the cap and checking whether the inner seal under the cap is properly attached to the bottle mouth.Perform an Attribute Agreement Analysis on the Cap Inspection data using the “Stat > Quality Tools > Attribute Agreement Analysis” tool. **Based on Minitab output, answer the following questions:**
   * Which inspector had the best results?
   * Which inspector was worst in terms of rejecting bottles that should have been accepted?
   * Which inspector was worst in terms of accepting bottles that should have been rejected?
   * Which inspector was bad at both error types?
   * Which inspector represents the worst-case scenario for the company, and why?