Instructions A

You are an analyst at "Performance Lawn Equipment (PLE)", a privately owned designer and producer of traditional lawn mowers. Your manager, Elizabeth Burke, has received several questions from other managers regarding operational performance and employee retention of the firm. Using statistical tools and analysis, she would like you to answer the questions below from the firm's Database.

Read the database description in pages 31-32 of your book and use appropriate statistical techniques (covered in this course) to answer the following questions:

1. From the worksheet defects *After* delivery,
   1. Is there a difference in the number of defects after delivery over the years (from 2014 to 2018) ?
   2. What are your recommendations on the measures that PLE should take to reduce the number of defects after delivery ?
2. From the worksheet Employee Retention,
   1. Is there a relationship between the Years spent at PLE (YearsPLE} and Education, GPA and Age?
   2. Are there di1Terences in employee retention due to gender?
   3. How can PLE improve employee retention in the company?

**More instructions**

Conduct appropriate statistical analyses and hypothesis tests to answer these questions and summarize your results in a formal report to your (fictional) manager, Ms. Burke.

* To answer the questions, you must use the statistical techniques discussed in this course.
* There is no unique solution to this case study. The statistical techniques used should appropriately answer the questions.
* This is not a group work. The submitted work should be unique and your own. The percentage of plagiarism will be checked with Safeassign; it shouldn't exceed 35%. You have access to that percentage after submitting your work.
* Your report should be a word documen t. You must also submit the Excel file showing your own work.
* Don't focus on describing the techniques you used; the core of the report should be on what your numbers mean (interpretations) for the firm PLE. Keep in mind that your manager may not be a technical person and may only be interested in the insights provided in order to make a strategic decision about the company and its activities. Your detailed technical work will be shown in the Excel file in case your manager has some technical background. However, you should show the most useful results and interpret them in your report (the word document).