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Homework

Please answer the following questions. Be sure that you have downloaded the associated Excel file before beginning the homework. This lesson uses the **JulyTwoPopMeansHW.xlsx** file.

*Remember that homework counts for 20% of your final grade. You are allowed **unlimited** attempts per question for homework problems. The main goal of homework is for you to practice and learn how to apply what you've learned in the content without worrying about getting the problem right the first time. Some homework problems may also provide hints or advice. Have fun!*

M5L7HW1

1/1 point (graded)

Use the given data on annual Tbills and 10 year bond returns (provided in Problem 1 of JulyTwoPopMeansHW.xlsx) to determine if Tbills and Bonds10 returns have equal means. Use $\alpha = 0.05$. The returns in each row are NOT from the same year.

☒ Means are equal ✓

☐ Means are not equal

Submit

✓ Correct (1/1 point)

M5L7HW2

1/1 point (graded)

You are given the amount of money spent at a supermarket by a sample of shoppers during the morning and afternoon hours (provided in Problem 2 of JulyTwoPopMeansHW.xlsx). For $\alpha = 0.05$, does this data indicate that morning shoppers spend less than afternoon shoppers?

- ☒ The p-value is 0.01, so you conclude that the average spent by morning customers is less than the average spent by afternoon customers ✓
- ☐ The p-value is 0.10, so you conclude that the average spent by morning customers is greater than the average spent by afternoon customers

Submit

✓ Correct (1/1 point)

M5L7HW3

1/1 point (graded)

You are given the miles per gallon obtained for 20 cars using gasoline and ethanol (provided in Problem 3 of JulyTwoPopMeansHW.xlsx). For $\alpha = 0.01$, does this data indicate that there is a significant difference in the MPG cars obtain when fueled by ethanol or gasoline?

- ☐ The p-value is 0.0082, so we reject that average mileage does not depend on whether gas or ethanol is used.
- ☒ The p-value is 0.8200, so fail to reject that the average mileage does not depend on whether gas or ethanol is used. ✓

Submit

✓ Correct (1/1 point)

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