edX

Homework

Please answer the following questions. Be sure that you have downloaded the associated Excel file before beginning the homework. This lesson uses the **JulyZ-TestHW.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!*

M5L3HW1

1/1 point (graded)
The average test score in the state of Texas is 75. A sample of 400 Dylan High School students yielded x-bar = 73 and s = 30. For α = 0.05, would you conclude that Dylan students score significantly different than the state of Texas? What p-value would you report?

What do you conclude?

- ⊙ We fail to reject Ho; the p-value is 0.18 ✔

○ We fail to reject Ho; the p-value is 0.04

○ We reject Ho; the p-value is 0.18

○ We reject Ho; the p-value is 0.04

Submit

M5L3HW2

1/1 point (graded)

Suppose a can of soda is supposed to contain 12 ounces of soda. A random sample of 100 cans taken by the state of Washington yields x-bar = 11.9 and s = 0.2 ounces. For α=0.01, should the state conclude that soda cans are underfilled? What p-value would you report?

What do you conclude?

○ We fail to reject Ho; the p-value is 0.00

○ We fail to reject Ho; the p-value is 0.19

◉ We reject Ho; the p-value is 0.00 ✔

○   We reject Ho; the p-value is 0.19

Submit

M5L3HW3

1/1 point (graded)

The current version of the XOXO tire average lasts 40,000 miles before wearing out. The tire has been redesigned, and 100 tires were tested. The number of miles the tires lasted had x-bar = 41,000 and s = 10,000. For α=0.10, would you conclude that the redesign has improved tire life? What p-value would you report?

What do you conclude?

◉   We fail to reject Ho; the p-value is 0.1587 ✔

○   We fail to reject Ho; the p-value is 0.0966

○   We reject Ho; the p-value is 0.1587

○   We reject Ho; the p-value is 0.0966

Submit