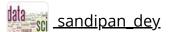


<u> Help</u>





<u>Course</u> > <u>Week 8: Statistical Testing</u> > <u>Week 8 Graded Assignment</u> > Graded Assignment 1

Graded Assignment 1

Part 1.

1.5/1.5 points (graded)

MoonDoe Café is a large chain with more than 2600 coffee shops worldwide. They have recently started their operations in India with 100 coffee shops. MoonDoe Café was launched as a Premium coffee shop in India, in contrast to their branding in USA where they are considered a regular coffee shop. The management wants to figure out how this change in branding in India affects their revenue.

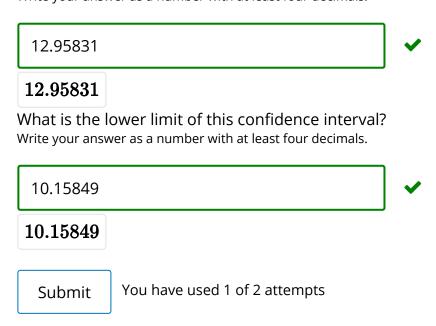
In order to perform this analysis, weekly sales data from 25 different coffee shops in India was collected during a period of three months. See the average weekly sales per customer per coffee shop in the table below.

Coffee shop #	Average sales per customer
	\$12.0
1	\$8.45
2	\$6.8
3	\$11.0
4	\$6.98
5	
6	\$20.45
7	\$16.28
8	\$14.1
	\$8.9
9	\$14.54
10	\$15.78
11	\$19.45
12	

Graded Assignment 1 Week o Graded Assignm	ient CTL.SCox Courseware eux
13	\$10.38
14	\$7.4
15	\$5.03
16	\$13.45
17	\$9.09
18	\$8.07
19	\$11.2
20	\$13.58
21	\$11.3
22	\$7.48
23	\$9.4
24	\$10.45
25	\$17.4

You have been hired to review this data. Your first task it to create a 90% confidence interval for the mean of the dataset using the sample collected from India.

What is the upper limit of this confidence interval? Write your answer as a number with at least four decimals.



✓ Correct (1.5/1.5 points)
Part 2.
1.5/1.5 points (graded) Based on the sample data that you are given, calculate the prediction interval at a 90% confidence level.
What is the upper limit of this prediction interval? Write your answer as a number with at least four decimals.
18.55797
18.55797
What is the lower limit of this prediction interval? Write your answer as a number with at least four decimals.
4.558829
$\boldsymbol{4.558829}$
Submit You have used 1 of 2 attempts
✓ Correct (1.5/1.5 points)

Part 3.

2/2 points (graded)

The management is curious to know whether the premium branding in India worked or not. They want you to test if the weekly sales per customer at the Indian coffee shops is greater than their global weekly sales per customer with a confidence level of 99%.

You know the global average weekly sales per customer for MoonDoe coffee shops is \$9.25 (this would be the population mean). Therefore, you are going to conduct the following hypothesis test:

 $H_0:$ Average weekly sales in India are not greater than the population mean at a confidence level of 99%

 $H_1:$ Average weekly sales in India are greater than the population mean at a confidence level of 99%

Would you reject your H_0 ? Choose the correct answer.

	MoonDoe coffee shops in India have sales greater than population mean. t greater than the population mean at the 99% confidence level.	
Accept H0: Sales from MoonDoe cafe in India are not	t greater than the population mean at the 99% confidence level.	
	Accept H0: Sales from MoonDoe cafe in India are not greater than the population mean at the 99% confidence level.	
t is the p-value for this hypothesis test?	er is loss than 2001 than enter 0	
e your answer as a number with at least four decimals. If your answe	er is less than .000 i then enter 0.	
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