

## MATH 3307: Extra Credit for Homework 10

### Reminders:

- Extra Credit questions are difficult and involve more work than a standard homework question.
- You will receive up to 10% additional points (not to exceed full credit) on the related Homework Assignment only. Keep in mind for an assignment graded out of 10 to 20 points, this is only 1 or 2 additional points.
- Unlike assigned homework questions, extra credit questions should not be brought to your instructor or to tutoring services for assistance.
- Correct Answers with valid explanation of your process will receive credit only.
- These are due the Sunday following their related Homework assignment by 11:59 pm.
- Submit Answers to <https://forms.gle/yw89xJe8PBrqvF5J7> (Late Answers will not be accepted.)

To determine the performance of a chain of car dealerships, you are asked to analyze mean weekly sales by salesman. A representative sample of data was collected from one dealership in each region of the country and the results are presented in the table below showing weekly sales and frequency from this sample. You are asked to create a confidence interval, with a width of 0.5, representing the mean number of weekly sales per salesman for all dealerships in the country, along with its level of confidence. [For example, the mean sales per salesman in for all dealerships is between \_\_\_\_\_ and \_\_\_\_\_ with a confidence level of \_\_\_\_\_%. All answers rounded to four decimal places.]

Sales:	4	5	6	7	8	9	10	11	12	13	14	15
Frq:	3	7	15	22	28	35	41	20	18	15	12	9