

## MATH 3307: Extra Credit for Homework 12

### 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.)

A supermarket efficiency specialist prepared the following pie chart illustrating the primary reason for a customer's shopping trip. A store manager decided to verify these results by gathering a sample of 250 customers and polling their answers to similar questions. Using a significance level of 1%, the manager failed to reject the specialist's results. Determine the maximum possible range of respondents of each category of the survey.

[Answers should be presented as an interval, with rounding appropriate to the context of the questions, for each of the categories.]

