

MATH 3307: Extra Credit for Homework 5

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.)

Two populations are normally distributed and both have the same mean. The probability of a randomly selected member of these populations being between the mean and 10 above the mean, for the variable being measured, are 0.4234 and 0.3413. The difference in these probabilities can be attributed to a difference in what characteristic of these two populations? Find this measure for both populations. Give the correct name for the characteristic in question and round numeric answers to four decimal places.