

MATH 3307: Extra Credit for Homework 8

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.)

How random is the random digit table?

Using Line 135 of the Random Digit Table from your textbook, determine the randomness (or unpredictability) based on three factors: (1) is the number of occurrences of each specific number predictable (are they all equal as likely to be chosen at random) or not? (2) is the occurrence of a specific number dependent on the number immediately preceding it (or are there no patterns such as this evident)? (3) does this line of random digits favor high valued numbers (valued at 5 and up) more or less than low valued digits (less than five) or is there no pattern the value of these numbers?

Explain how all calculations performed address these three measures.