CS 13: Mathematical Foundations of Computing — Fall 2023

Lecturcises 06 (due Saturday, November 11th @ 11:30pm)

Directions: *These problems were presented within the last week as "exercises" in lecture. During lecture, you were able to collaborate with students, TAs, and Prof. Blank. Your task now is to write up solutions to these problems* ***without discussing them with anyone****. You should submit the lecturcise below on Gradescope. Note that your submissions will be graded on* correctness, *not effort.*

High Five!

To raise the morale of the n students worried about 38, the 8 38 TAs, $T_1, T_2, \ldots, T_8$ decide to give students high fives. For each student, the TAs roll two 8 sided dice and the numbers that show up will be the TAs to give the student a high five. If the numbers are the same, then that TA will give the student two high fives. What is the expected number of students that will get two high fives from the same TA?