

EXAM 11 (duration: 25 minutes)

DatZ1143: Discrete mathematics for computing

Instructor: Abuzer Yakaryılmaz

Name and surname:

Student number:

Date:

Questions

(There are 5 questions, 10 points in total.)

1. What is the probability that a randomly selected integer chosen from the first 61 positive integers is even? [1 point]
2. Find the probability that a randomly generated bit string of length 8 contains the same numbers of 0s and 1s. [3 points]
3. What is the expected number of heads that come up when a fair coin is flipped once? [1 point]

4. What is the expected number of heads that come up when a fair coin is flipped three times? [2 point]

5. What is the expected value of the sum of the numbers that appear when four fair dices are rolled? [3 points]