

Grading policy for Quiz 1

General Guidelines:

1. For every question, if the final answer is incorrect, 3 marks will be deducted.
2. No marks will be given if you have only written the final answer with no explanation/poor explanation.
3. Heavy penalties will be imposed(1-5 marks) for insufficient/meaningless explanations of your answer.
4. For every place where you have used linearity of expectation without explicitly mentioning it, 1 mark will be deducted.
5. For every place where you have used a random variable without properly explaining it, 1-3 marks will be deducted.
6. Both Q3 and Q4 has two alternatives, a and b, having 10 and 7 marks respectively. If you have answered both parts, you will receive maximum(a,b).

Question Specific Guidelines:

Q1. 1 mark for correct deduction and explanation of the last step of the ant and intermediate expressions.

Q2. 4 marks each for 2a and 2b. For 2b, 1 mark will be given for correct deduction and explanation of why the n -th animal should be marked and intermediate expressions.

Q3a. 1st part has 4 marks and 2nd part has 6 marks. For the 2nd part, subject to the clarity of your explanation, upto 3 marks may be given if you have correctly deduced the probability of Bob scoring a 6 after Alice.

Q4a. Marks will be deducted if you have assumed $n < m$ or $m < n$.

Q4b. The question asks you to find the expected number of blocks of joined magnets. If you have also considered single isolated magnets as blocks but failed to explicitly mention it, 2 marks will be deducted.

Q5. No marks will be given for meaningless explanation. No marks will be given for arriving at a recursive solution. Heavy penalties will be imposed(upto 6 marks) for providing the correct answer without sufficient explanation.