MATH 10B with Prof. Stankova Section #209; time: 3:30-5pm

GSI: Ninh DO

Quiz 3

Student: SID:

Tue 2/12/19

True/False - No explanation needed. (1pt for correct, 0pt - no answer, -1pt - incorrect)

- 1. The number of solutions to the problem of distributing indistinguishable objects to indistinguishable boxes is larger than that of distributing indistinguishable objects to distinguishable boxes, given the same input. True/False
- 2. The solutions to the problem of distributing distinguishable objects to indistinguishable boxes involve Stirling numbers. True/False

Problems - Need justification. No justification means zero!

1. (5pts) How many non-negative integer solutions to the inequality $x_1 + x_2 + x_3 + x_4 \le 24$, where $x_1 \ge 4$?

2. (5pts) How many ways are there to to deal 10 cards from a deck of 52 cards to 2 players if the players are indistinguishable?