MATH 10B
Section 211
GSI: Theo McKenzie

Quiz 3

Student:
SID:
Tue 2/12/19

True/False - No explanation needed. (For each: 1 point if correct, 0 points if not answered, -1 points if incorrect)

1. The number of potential sets of heterosexual marriages between 500 men and 500 women is $999 \cdot 997 \cdots 3 \cdot 1 = \frac{1000!}{2^{500}500!}$. True/False

2. $(x+y+z)^{1000}$ has 3^{1000} terms before combining similar terms, and $\binom{1002}{2}$ terms after combining similar terms. True/False

Problems - Needs justification.

1. Use the recursion of Sterling numbers, the table of Sterling numbers or another method (besides brute force) to compute $S(4,2)$. (10 points)