Math 353 Homework #1- Due Wednesday 9/7/16

1. 2.2.1B

2. 2.2.4B Hint: This is is a difficult problem. First observe that you can always permute the rows and columns so the red counters on are on the diagonal. So your final answer is 8! times the number of ways to arrange the green counters after the red ones have been placed, i.e. to arrange the green counters with none on the diagonal.

3. 2.3.1B

4. 2.3.2B Give a combinatorial proof.

5. 2.3.3B

6. 2.3.4B

7. 2.4.2 A

8. 2.4.2B