

### Homework Set 3

DUE: FEB 24, 2020 (AT THE BEGINNING OF CLASS)

**To be handed in:**

*Please write your solution to Problem 1 on a single sheet of paper!*

1. Suppose you have 3 bags containing only apples and oranges. Bag A has 2 apples and 4 oranges, bag B has 8 apples and 4 oranges, and bag C has 1 apple and 3 oranges. You pick 1 fruit (at random) from each bag.
  - a) What is the probability that you picked exactly 2 apples?
  - b) Suppose you picked 2 apples but forgot which bag they came from. What is the probability that you picked an apple from bag A?