Practice with Probability
Due Friday 5/8/15

1.) If it rains tomorrow, the probability is 0.8 that John will practice his piano lessons. If it does not rain tomorrow, there is only a 0.4 chance that John will practice. Suppose that the chance of rain tomorrow is 60%. What is the probability that John will practice his piano lesson?

2.) There are two precalculus classes: 1st period has 12 girls and 8 boys, while 2nd period has 10 girls and 15 boys. If a precalculus student chosen at random is a girl, what is the probability she is in period 1?

3.) In the game of Yahtzee, on the first roll five dice are tossed simultaneously. What is the probability of rolling five of a kind (which is yahtzee) on the first roll?

4.) Two cans of mixed nuts of different brands are open on a table. Brand A consists of 30% cashews, while brand B consists of 40% cashews. A can is chosen at random, and a nut is chosen at random from the can. Find the probability that the nut is

      a.) from the brand A can

      b.) a brand A cashew

      c.) a cashew

      d.) from the brand A can, given that it is a cashew