

HOMEWORK 3
STA320.01, Probability
Fall Semester, 2013

Due: Tues Oct 1st 2013

- 1** How many different ways can the letters in the following words be arranged: (a) money, (b) banana, (c) Mississippi?
- 2** Two red cards and two black cards are lying face down on the table. You pick two cards and turn them over. What is the probability that the two cards are different colors?
- 3** (a) How many ways can we pick 4 students from a group of 30 to be on the math team? (b) Suppose there are 18 boys and 12 girls. What is the probability that the team will have 2 boys and 2 girls?
- 4** Suppose you draw 7 cards out of a deck of 52. What is the probability that you will have (a) exactly 5 cards of one suit? (b) At least 5 cards of one suit?
- 5** In a certain city 60% of the people subscribe to newspaper A, 50% to B, 40% to C, 30% to A and B, 20% to B and C, and 10% to A and C, but no one subscribe to all three. What percentage subscribe to (a) at least one newspaper, (b) exactly one newspaper, (c) only A, (d) only B?
- 6** You pick 13 cards out of a deck of 52 cards. What is the probability that you will not get a card from every suit?