Math 1116, Quiz #16, Spring 2013

Instructions: Show all work. Give exact answers for each probability below, and then convert that to a percent with at least one decimal place. For very small percentages (<0.1%) give the first non-zero digit.

1. What is the probability of choosing a 4 from a standard deck of cards?

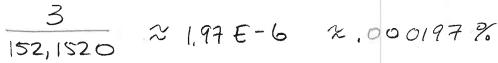
Name

4/57 2. 7.69%

2. What is the probability of rolling snake eyes (two 1's) on two dice?

/36 2 2.78%

3. What is the probability of winning a vacation package if there are 210 contestants, and three winners?



4. What is the probability of choosing either a heart or a queen from a standard deck of cards?

$$\frac{4+13-1}{52} = \frac{4}{13} \times 30.8\%$$

5. What is the probability of not getting exactly three heads if a coin is flipped 10 times?

6. If the odds against winning a game are 7 to 1, what is the probability of winning?

7. If you have to pay \$1 to play a game, but there is a 13% chance you will win \$6, should you play the game? [Hint: find the expected value.]

13% *6 -1 = -. 22 NO in The long run you will lose