East Los Angeles College
Department of Mathematics
Math 227
Practice Test 3

A batch of 80 ipads contains 12 that are defective and 68 that are non-defective. If you select two different ipads, what's the probability:

1. Both are defective? **Thousandths**
2. Both are non-defective? **Thousandths**
3. At least one is defective? **Thousandths**

4. What is the probability that 4 randomly selected people all have the same birthday? **Thousandths**

An unprepared student takes an 8 question multiple choice quiz. If each question has 5 possible answers (a) (b) (c) (d) (e), what's the probability of guessing correct on:

5. All questions? **Thousandths**
6. None of the questions? **Thousandths**
7. At least one question? **Thousandths**

An unprepared student takes an 8 question true-false quiz. If each question has 2 possible answers (true) (false), what's the probability of guessing correct on:

8. All questions? **Thousandths**
9. None of the questions? **Thousandths**
10. At least one question? **Thousandths**

11. In a blood sampling procedure. Blood samples from 5 people are combined into one mixture. The mixture will only test negative, if all the individual samples are negative. If the probability that an individual sample tests positive is 0.08, what is the probability that the mixture will test positive? **Ten Thousandths**

How many likes in an hour on Social Media Accounts?

The following distribution represents data collected from Social media users who report the number of likes they receive on a post in an hour.

x	p(x)
0	0.053
1	0.080
2	0.187
3	0.240
4	0.147
5	0.093
6	0.200

If you select a Social Media user at random, what's the probability the user receives:

12. No likes? **Thousandths**
13. One like? **Thousandths**
14. Two likes? **Thousandths**
15. At least one like? **Thousandths**
16. At least two likes? **Thousandths**
17. More than four likes? **Thousandths**
18. No more than two likes? **Thousandths**
19. Less than three likes? **Thousandths**
20. Between One and three likes, inclusive? **Thousandths**
21. What is the expected number of likes for this distribution? **Thousandths**

Husky Gamble Game

It costs $ 3.00 for a chance to win $ 500.00 In the Husky Gamble Game. All you have to do is select 4 different queens from a standard deck. What's the:

22. Probability of winning this game? **Ten Thousandths**
23. Probability of losing this game? **Ten Thousandths**
24. Expected Value for this game? **Hundredths**
25. What is your name?

Answer Sheet

1		14	
2		15	
3		16	
4		17	
5		18	
6		19	
7		20	
8		21	
9		22	
10		23	
11		24	
12		25	
13			