East Los Angeles College
Department of Mathematics
Math 227
Test 2 Study Guide

How much sleep did you get last night?

The following data was collected in hours.

8, 0, 4, 6, 6, 8, 7, 4, 6, 7,8 ,4, 5, 5, 5, 8, 3, 5, 7, 8

Determine the following.

1. Q_1
2. Q_2
3. Q_3
4. D_1
5. D_9
6. P_{65}

A couple plans on having three children. What's the probability of having:
Approximate your answers to the nearest thousandths.

7. More than one girl?
8 At least one girl?
9. No More than one girl?
10. Less than two girls?

Standard Deck
Assume the Ace is low. If you select a card at random, what's the probability of selecting the following: **Approximate your answer to the nearest thousandths**

11. Jack?
12. Club?
13. **Non** Jack?
14. Red Card?
15. Red jack?
16. Red face card?
17. Jack of Clubs?
18. Jack **or** Queen?
19. Jack **or** a 7?
20. Jack **given that** the card is a club?
21. Jack **given that** the card is red?
22. Red **given that** the card is red?

23. If you select two cards **with replacement**, what is the probability both are Queens?
24. If you select three cards **with replacement**, what is the probability both are Clubs?

Drinking based on Age Groups

The following table illustrates the drinking habits based on age groups. If you select a person at random, what's the probability of selecting a person: **Approximate your answer to the nearest thousandths**

	Age 21 to 31	Age 32 to 42	Age 43 to 53	Age 54 to 64	**Total**
Drink	58	69	53	41	**221**
Not Drink	32	38	29	18	**117**
Total	**90**	**107**	**82**	**59**	**338**

25. Drinks?
26. Is aged 21 to 31?
27. Does **not** drink?
28. Is **not** aged 43 to 53?
29. Drinks **and** is aged 21 to 31?
30. Does not drink **and** is aged 43 to 53?
31. Drinks **or** is aged 21 to 31?
32. Drinks **given that** the person is aged 21 to 31?
33. Drinks **given that** the person is aged 43 to 53?
34. If you select two **different** people at random, what is the probability they all drink?
35. If you select three **different** people at random, what is the probability none drink?

Answer Sheet

1		19	
2		20	
3		21	
4		22	
5		23	
6		24	
7		25	
8		26	
9		27	
10		28	
11		29	
12		30	
13		31	
14		32	
15		33	
16		34	
17		35	
18			