East Los Angeles College
Department of Mathematics
Math 227
Test 2 Make Up

How much sleep did you get last night?

The following data was collected in hours.

2, 0, 4, 6, 6, 8, 7, 4, 6, 6,8 ,4, 0, 8, 3, 5, 0, 4

Determine the following.

1. Q_1
2. Q_2
3. Q_3
4. D_3
5. D_7
6. P_{88}

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**

7. Jack?
8. Spade?
9. **Non** Spade?
10. Red Card?
11. Black Jack?
12. Face card?
13. Jack of Spades?
14. Jack **or** Spade?
15. 2 **or** a 10?
16. 2 **given that** the card is a Spade?
17. 2 **given that** the card is Heart?
18. Red **given that** the card is an Club?

19. If you select two **different** cards, what is the probability they are both Jacks?
20. If you select three cards **with replacement**, what is the probability they are all Spades?

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	78	99	43	50	**270**
Not Drink	42	58	19	38	**157**
Total	**120**	**157**	**62**	**88**	**427**

21. Drinks?
22. Is aged 54 to 64?
23. Does **not** drink?
24. Is **not** aged 43 to 53?
25. Drinks **and** is aged 54 to 64?
26. Drinks **or** is aged 43 to 53?
27. Drinks **given that** the person is aged 54 to 64?
28. Drinks **given that** the person is aged 21 to 31?
29. If you select two **different** people at random, what is the probability they are both aged 21 to 31?
30. If you select three **different** people at random, what is the probability they all drink?

Answer Sheet

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