Unit 9 Study Guide

In a bowl of marbles, there are 10 red ones, 6 green ones, and 8 blue ones.

3/4 1. If a marble is chosen at random from the bowl, find P(red one or a blue one)?

5/36 2. If two marbles are chosen at random with replacement, find P(red and a blue)?

15/92 3. If two marbles are chosen at random without replacement, find P(they are both red)?

A person rolls two dice, one after the other.

11/18 4. P(even sum) **or** P(sum of 9)

11/18 5. P(odd sum) **or** P(sum less than 5)

5/11 6. What is the probability that the sum of two rolls is an even number **given** at least one of the rolls is a 4?

+	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

A card is chosen from a standard deck of cards. The drawer is looking for clubs and face cards.

	Club	Not a Club
Face card	3	9
Not a face card	10	30

1/4 7. Find P(Club)

1/4 8. Find P(Club | Not a Face Card)

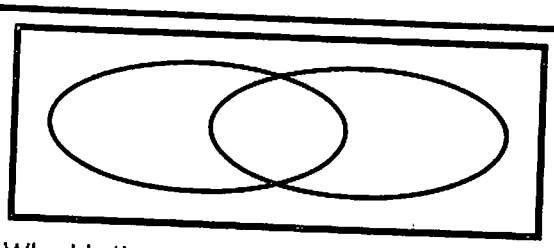
3/52 9. Find P(Club ∩ Face Card)

49/52 10. Find P(Not a Club ∪ Not a Face Card)

Yes 11. Are the events Club and Not a Face Card Independent of each other?

21/32 12. In a Coordinate Algebra class, 22 students were male and 10 students were female. Out of those students, 11 of the guys and 4 of the girls passed the EOCT. If a person is chosen at random from the class, what is the probability of choosing a girl or a person that did NOT pass the EOCT?

	Pass	Not Pass	
Male			
Female			



Of 500 athletes surveyed, 300 were male and 20 were left-handed. Only 8 of the left-handed athletes were female.

77/125 13. What is the probability that an athlete was male or was left-handed?

In a survey of 450 people, 200 of whom are female, it was found that 225 prefer chocolate ice cream including 99 males. Use this information to complete the table below.

	Males	Females	
Vanilla			
Chocolate			
			450

1/2 14. The person likes chocolate.

151/250 15. The person like vanilla, given they are male.

351/450 16. The person likes vanilla or is a female.

NO 17. Are being a male and liking chocolate independent events?

.5 18. The probability of a randomly chosen boy playing basketball is 0.30. The chance that a boy plays both basketball and football is 0.05. The chance that a boy plays football is 0.25. What is the probability that a randomly chosen boy plays basketball or football?

.25 19. Assume that the following events are dependent:

- The probability that a high school student eats breakfast is 0.8.
- The probability that a high school senior will eat breakfast and get over 6 hours of sleep is 0.2.

What is the probability that a high school senior will get over 6 hours of sleep, given that the person ate breakfast?

3/51 20. What is the P(getting a pair of Ace's from a deck of cards I one Ace)?

1/8 21. What is the probability of flipping a coin three times and getting heads all three times?

1/60 22. What is the probability of getting a sum of 4 on a pair of dices and selecting the letter G from GABEL?