

1. What is the probability of selecting a number from a list of integers 1 through 20 and getting a prime or an even number?

2. A survey found that 8 out of 10 parents approved of the new chorus director's performance. If 4 parents' names chosen, what is the probability that they all approve of the chorus director's performance?

3. A marble is selected at random from a bag of 4 yellow, 3 green, and 9 blue marbles and not replaced. What is the probability both marbles selected will be green?

4. Vina wants to buy a drink from a vending machine. In her pocket are 2 nickels, 3 quarters, and 5 dimes. What is the probability she first pulls out a quarter and then another quarter?

5. Mark wants to visit the 10 colleges he is considering attending. He can only spend the night at 3 of them. What is the probability that he spends a night at Rutgers university, a night at the University of Miami, and a night at Clemson?

6. What is  $P(\text{online}|\text{male})$ ?

	Online	By Mail
Male	12	8
Female	24	6

7. A school system compiled the following information from a survey it sent to people who were juniors in high school 10 years earlier. 85% of the students graduated from high school. Of the students who graduated from high school, 75% are happy with their present jobs. Of the students who did not graduate from high school, 60% are happy with their present jobs.

A. What is the probability that a student did not graduate and is happy with his or her job?

B. What is the probability that a student graduated and is unhappy with his or her job?

8.

A. What is  $P(\text{has experience}|\text{has diploma})$ ?

B. What is  $P(\text{has no diploma}|\text{has experience})$ ?

		Has Experience	
		Yes	No
Has high school diploma	Yes	54	27
	No	5	4

9.

A. What is  $P(4 \text{ wheel drive}|\text{car})$ ?

B. What is  $P(\text{truck}|\text{4 wheel drive})$ ?

	Car	Truck
2 wheel Drive	24	12
4 wheel drive	6	38