

1. A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is a heart.
2. The king, queen and jack of clubs are removed from a deck of 52 playing cards and the well shuffled. One card is selected from the remaining cards. Find the probability of getting a heart.
3. A number x is selected from the numbers 1,2,3 and then a second number randomly selected from the numbers 1,4,9. What is the probability that the product xy of the two numbers will be less than 9?
4. Find the probability that a leap year selected at random will contain 53 Sundays.
5. A bag contains 5 red, 8 white and 7 black balls. A ball is drawn at random from the bag. Find the probability that the drawn ball is neither white nor black.
6. A bag contains 5 red, 8 white and 7 black balls. A ball is drawn at random from the bag. Find the probability that the drawn ball is:
 7. (a) Red or white (b) Not black
8. A lot consists of 144 ball pens of which 20 are defective and the others are good. Nuri will buy a pen if it is good, but will not buy if it defective. The shopkeeper draws one pen at random and gives it to her. What is the probability that :
 - (a) She will buy it?
 - (b) She will not buy it?
9. Three unbiased coins are tossed together. Find the probability of getting:
 - (a) All heads
 - (b) At least two heads
10. A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is:
 - (a) the ace of spades (c) jack
 - (b) a queen (d) the seven of clubs