

Probability (1)

Dice

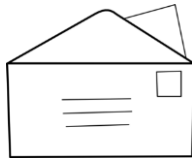


1. A fair dice is rolled.
What is the probability of rolling:
(a) 6 (b) 3
(c) 2 or 3 (d) even number
(e) number greater than 2
2. A fair dice is rolled.
What is the probability of rolling:
(a) 1 (b) 2,3 or 4
(c) 3 or 5 (d) number less than 2
3. A fair dice is rolled.
What is the probability of rolling:
(a) 1 or 3 (b) 2,3,4 or 5
(c) 7 (d) number less than 10

Colours

1. A bag contains four red balls, two green balls and one white ball (RRRR GG W).
What is the probability of picking:
(a) red ball (b) white ball (c) green ball
(d) ball which is *not* white
2. A bag contains three red balls, two green balls and four white balls.
What is the probability of picking:
(a) red ball (b) white or green ball
(c) ball which is not white
3. A bag contains four red balls, two green balls and four white balls.
What is the probability of picking:
(a) red ball (b) white, yellow or red ball
(c) ball which is *not* white

Letters



1. A random letter is chosen from INTEGER
What is the probability of choosing:
(a) T (b) G (c) E
(d) vowel (e) consonant
2. A random letter is chosen from RHOMBUS
What is the probability of choosing:
(a) R (b) U (c) T
(d) vowel (e) consonant
3. A random letter is chosen from PARALLEL
What is the probability of choosing:
(a) P (b) A (c) P or A
(d) vowel (e) not a vowel
(f) vowel or consonant

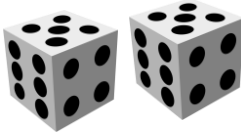
Colours extension



1. A bag contains three red balls, two green balls and four white balls. Two balls are picked out.
What is the probability of picking:
(a) A red ball on the first turn
(b) A red ball on the second turn, if the first ball is red and is *not* replaced
(c) A white ball on the first turn
(d) A white ball on the second turn, if the first ball is white and is *not* replaced
(e) A green ball on the first turn
(f) A green ball on the second turn, if the first ball is red and is *not* replaced

Probability (2)

Dice



4. Two fair dice are rolled.
What is the probability of rolling:
 - (a) double 6
 - (b) double 3
 - (c) one dice 5, the other dice 6
 - (d) a total of 10
 - (e) a total of 3 or less
5. Two fair dice are rolled.
What is the probability:
 - (a) *Exactly* one dice is 6
 - (b) *Either* dice is 6
 - (c) *Neither* dice is 6
6. Two fair dice are rolled.
What is the probability:
 - (a) *Both* dice are odd
 - (b) *At least one* dice is odd
 - (c) The *total* is odd



Letters

1. A random letter is chosen from ISOSCELES
What is the probability of choosing:
 - (a) C
 - (b) S or E
 - (c) H or I
2. A random letter is chosen from SCALENE
Then a second random letter is chosen from the remaining six letters. What is the probability:
 - (a) The *first letter* chosen is an S?
 - (b) The *second letter* chosen is an S?
 - (c) *Both* the first and second letter is an E?
 - (d) *Neither* the first nor second letter is an E?
 - (e) *Either* the first or second letter is an E?

Colours



A bag contains four red balls, two green balls and one white ball (RRRR GG W)

1. One ball is picked and put back in, then a second ball is picked. What is the probability:
 - (a) *First ball* is red (b) *Second ball* is red
 - (c) *Both* the first and second ball are red
 - (d) *Neither* the first nor the second ball is red
 - (e) *Either* the first or the second ball is red
2. One ball is picked and removed, then a second ball is picked. What is the probability:
 - (a) *First ball* is red (b) *Second ball* is red
 - (c) *Both* the first and second ball are red
 - (d) *Neither* the first nor the second ball is red
 - (e) *Either* the first or the second ball is red
3. Compare your answers to Question 1(c) and Question 2(c).
What effect does removing the first ball have on the probability of both balls being red?

Birthdays



1. For this question, assume that everyone is equally likely to be born on any day of the week. Find the probability:
 - (a) That someone is born on a Wednesday
 - (b) That someone is born on the weekend
 - (c) That two people are both born on Friday
 - (d) That two people are both born on the weekend
 - (e) That two people are born on the same day