1. A bag contains 3 red, 4green and 1 black balls. Two balls are drawn at random. What is the probability that none of the balls drawn is black?

Ans:3/4

**Explanation:**

Total number of balls = (3 + 4 + 1) = 8.

Let S be the sample space.

|  |  |
| --- | --- |
| Then, *n*(S) | = Number of ways of drawing 2 balls out of 7 |
|  | = 8C2 ` |
|  | |  |  | | --- | --- | | =28. |  | |  | |
|  |  |

Let E = Event of drawing 2 balls, none of which is black

|  |  |
| --- | --- |
| http://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif*n*(E) | = Number of ways of drawing 2 balls out of (3 + 4) balls. |
|  | = 7C2  =21 |
|  |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |

So ans is 21/28.=>3/4

1. A box numbered 1 to to 20 are mixed up and then one box is drawn at random .what is the probability that the box drawn has a number which is the multiple of 4 and 5?

Ans: 8/20

Explanation : Here, S = {1, 2, 3, 4, ...., 19, 20}.

Let E = event of getting a multiple of 4 or 5 = {4, 8 , 12, 16, 5, 10, 20}.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| http://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gifP(E) = | *n*(E) | = | 8 | . |
| *n*(S) | 20 |

1. What is the probability of getting a sum 9 from two throws of a dice?

Ans : 1/9

Explanation :

The maximum sum two dice can produce is 36

Sum of 9 with two dice is ={(3, 6), (4, 5), (5, 4), (6, 3)}.

So , 4/36 =1/9

1. What is the probability of getting a sum 6 from two throws of a dice?

Ans : 5/36

Explanation :

The maximum sum two dice can produce is 36

Sum of 6 with two dice is ={(1, 6), (3, 3), (4, 2), (5, 1),(6,1)}.

So , 5/36 =5/36.

1. Assuming that for an husband- wife couple the chances of their child being a boy or a girl are the same, the probablility of their two children being

A boy and a girl is :

Ans : ¼

Explanation : P(B)=1/2 ,P(G) =1/2;

Hence, the ans is P(BG)=P(B).P(G)=1/2\*1/2 =1/4.