

Probability

2nd Sec.

Final revision

Given that A and B are two events in a sample space , $A \subset B$

, then $P(A \cup B) = \dots\dots\dots$

- (a) $P(A)$ (b) $P(B)$ (c) $P(A) + P(B)$ (d) $P(A \cap B)$

Given that A and B are two events in the sample space of a random experiment , then the probability of occurrence of only one of them is

(a) $P(A \cup B)$

(b) $P(A \cup B^c)$

(c) $P(A \cup B) - P(A \cap B)$

(d) $P(A \cap B)$

A box contains 30 identical cards , numbered from 1 to 30 , a card is drawn at random from the box , then the porbability that the card has an odd number which is a perfect cube is

(a) zero

(b) $\frac{1}{10}$

(c) $\frac{1}{30}$

(d) $\frac{1}{15}$

If A and B are two events in the sample space of a random experiment
, $P(A) = 0.3$, $P(B) = 0.8$, $P(A \cap B) = 0.2$, then $P(B - A) = \dots\dots\dots$

(a) 0.5

(b) 0.6

(c) 0.1

(d) 0.8

If the probability that a student succeeds in Mathematics is 0.8 , the probability that he succeeds in French is 0.7 and the probability that he succeeds in both subjects is 0.56 , then the probability of success in Mathematics but not in French is

(a) 0.24

(b) 0.94

(c) 0.44

(d) 0.2

If A and B are two events in the sample space (S) of a random experiment where $P(B) = \frac{5}{7}$, then $P(\bar{A} \cap B) + P(A \cap B) = \dots\dots\dots$

(a) $\frac{2}{7}$

(b) 1

(c) $\frac{5}{7}$

(d) $\frac{9}{7}$

If A and B are two events of the sample space of a random experiment and $P(A) = 3P(\bar{A})$, $P(A \cap B) = 0.2$, then the probability of occurrence event A only equal

(a) 0.55

(b) 0.05

(c) 0.3

(d) 0.75

In the experiment of throwing a fair die twice in succession , then the probability of getting the same number in the two throws equals

(a) $\frac{5}{36}$

(b) $\frac{1}{6}$

(c) $\frac{1}{4}$

(d) $\frac{1}{3}$

If A and B are two mutually exclusive events from the sample space S of a random experiment , $P(\bar{B}) = \frac{1}{4}$ and $P(A \cup B) = 0.05$, then $P(A) = \dots\dots\dots$

(a) 0.75

(b) 0.7

(c) 0.95

(d) 0.2

If A and B are two events in the sample space of a random experiment where $P(A) = 0.3$, $P(B) = 0.8$, $P(A \cap B) = 0.2$, then $P(\bar{A}) + P(A \cup B) = \dots\dots\dots$

(a) 0.7

(b) 0.9

(c) 1.6

(d) 1

If A and B are two mutually exclusive events , then $P(A \cap B) = \dots\dots\dots$

(a) \emptyset

(b) $\frac{1}{2}$

(c) zero

(d) 1

If $P(A) = 0.4$, $P(B) = 0.3$, A and B are two mutually exclusive events from a sample space , then $P(\bar{A} \cap \bar{B}) = \dots\dots\dots$

(a) 0.5

(b) 0.3

(c) 0.8

(d) 0.2

If A and B are two events from the sample space of a random experiment and $P(A) = P(\bar{A})$, $P(B) = \frac{5}{8} P(A)$, $P(A \cap B) = \frac{1}{16}$, then $P(A \cup B) = \dots\dots\dots$

(a) $\frac{3}{4}$

(b) $\frac{1}{4}$

(c) $\frac{7}{8}$

(d) 1

In the experiment of tossing a regular coin once , then the probability of appearance of a head or a tail equals

(a) $\frac{1}{3}$

(b) $\frac{1}{2}$

(c) 1

(d) zero

A box contains 3 white balls , 5 red balls and 7 green balls , one ball is chosen randomly , then the probability that the chosen ball is white or green is

(a) $\frac{1}{5}$

(b) $\frac{2}{3}$

(c) $\frac{7}{15}$

(d) $\frac{1}{2}$

If A and B are two events from a sample space of a random experiment and $B \subset A$ and $P(A) = 0.9$, $P(B) = 0.6$, then $P(A - B) = \dots\dots\dots$

(a) 0.6

(b) 0.3

(c) 0.4

(d) 0.2

If $S = \{A, B, C\}$ is a sample space of a random experiment and $P(A) = \frac{1}{3}$, $P(B) = \frac{2}{5}$, then $P(C) = \dots\dots\dots$

(a) $\frac{4}{15}$

(b) $\frac{2}{15}$

(c) $\frac{1}{15}$

(d) $\frac{11}{15}$

If A and B are two mutually exclusive events from a sample space S of a random experiment and $P(A) = P(\bar{A})$, $P(B) = \frac{1}{2} P(A)$, then $P(B) = \dots\dots\dots$

(a) $\frac{1}{2}$

(b) $\frac{1}{4}$

(c) $\frac{3}{4}$

(d) $\frac{1}{3}$

A box contains 9 identical cards numbered from 1 to 9 one card is chosen randomly , then the probability that the chosen card carries an odd number or divisible by 9 is

(a) $\frac{1}{3}$

(b) $\frac{7}{9}$

(c) $\frac{1}{2}$

(d) $\frac{5}{9}$

If $S = \{A, B, C, D\}$ is the sample space of a random experiment and $P(A) = 3P(B)$, $P(C) = P(D) = \frac{7}{18}$, then $P(A) + P(C) = \dots\dots\dots$

(a) $\frac{1}{6}$

(b) $\frac{1}{18}$

(c) $\frac{5}{9}$

(d) $\frac{5}{18}$

A class contains 24 boys and 16 girls there are 9 boys and 4 girls from them are wearing glasses. If a pupil is chosen randomly from this class , then the probability that pupil is a girl or wearing glasses

(a) $\frac{13}{40}$

(b) $\frac{1}{8}$

(c) $\frac{3}{8}$

(d) $\frac{5}{8}$

In the experiment of throwing a regular dice 3 consecutive times and observing the number on the upper face , the number of elements of the sample space =

(a) 216

(b) 8

(c) 64

(d) 18

In the experiment of tossing a coin two consecutive times , the sample space of this experiment is

(a) $\{H, T\}$

(b) $\{(H, H), (T, T)\}$

(c) $\{(H, H), (T, T), (H, T), (T, H)\}$

(d) $\{(H, T), (T, H)\}$

In the opposite figure :

(S) is the sample space of a random experiment
, A and B are two events in (S) , then the event
which represents the shaded part is



(a) $A - B$

(b) \hat{A}

(c) $(B - A)^{\sim}$

(d) $(A - B)^{\sim}$

If A and B are two events from the sample space S of a random experiment ,
then $P(\bar{A}) = \frac{3}{5}$, $P(A \cup B) = 0.45$, $P(A - B) = 0.2$, then $P(B) = \dots\dots\dots$

(a) 0.75

(b) 0.6

(c) 0.65

(d) 0.55