

PROBABILITY

1. There are 20 counters numbered from 1 to 20. If one counter is chosen at random, what is the probability of getting a multiple of 3.
 A $\frac{3}{20}$ B $\frac{3}{10}$ C $\frac{1}{4}$ D $\frac{7}{20}$
2. Invoices produced within a firm are known to contain errors. 3% contain a very serious error, 6% a serious error, and 12% a minor error. The probability that a randomly chosen invoice will have a serious error or a minor error is
 A 0.21 B 0.18 C = 0.09 D 0.06
3. From past records it is known that 10% of items from a production line are defective. What is the probability that if two items are selected randomly, that only one will be defective.
 A 0.01 B 0.1 C 0.18 D 0.09
4. A fair coin and a standard dice are thrown together. What is the probability of getting a tail and an odd number.
 A $\frac{1}{12}$ B $\frac{1}{6}$ C $\frac{2}{3}$ D $\frac{1}{4}$
5. A and B are two events such that, $P(A) = 0.4$, $P(B) = 0.5$ and $P(A \cup B) = 0.8$. Find $P(A \cap B)$
 A 0.1 B 0.2 C 0.25 D 0.7.
6. A and B are two independent events. $P(A) = 0.4$ and $P(B) = 0.3$. Find $P(A \cup B)$
 A 0.7 B 0.12 C 0.58 D 0.3

7. A and B are two events such that $P(A) = 0.5$, $P(B) = 0.4$ and $P(A \cap B) = 0.1$. Find $P(B|A)$.
- A 0.2 B 0.25 C 0.8 D 0.9.
8. If A and B are mutually exclusive events, $P(A \cap B)$ is,
- A 1 B $\frac{1}{2}$ C 0 D -1.
9. A coin is biased so that the probability of getting head is twice as tail. If this coin is tossed twice, what is the probability of getting a head and a tail.
- A $\frac{4}{9}$ B $\frac{2}{9}$ C $\frac{1}{9}$ D $\frac{8}{9}$
10. A and B are two events such that $P(A) = 0.4$, $P(B) = 0.3$ and $P(A \cap B) = 0.1$. Find $P(A \cap B')$.
- A 0.2 B 0.6 C 0.4 D 0.3
11. The probability that I am late for work on any day is 0.2, what is the probability that, on two consecutive mornings, I am late for work once.
- A 0.16 B 0.04 C 0.64 D 0.32
12. The probability that it will be sunny tomorrow is $\frac{1}{3}$. If it is sunny, the probability that Nimal plays tennis is $\frac{4}{5}$. If it is not sunny, the probability that Nimal plays tennis is $\frac{2}{5}$. What is the probability that Nimal plays tennis tomorrow
- A $\frac{8}{25}$ B $\frac{4}{20}$ C $\frac{4}{15}$ D $\frac{8}{15}$

Answers: (1) B (2) B (3) C (4) D (5) A (6) C
 (7) A (8) C (9) A (10) D (11) D (12) D