MCQ On Probability Class 10 Question 1. The probability of getting exactly one head in tossing a pair of coins is
(a) 0
(b) 1
(c) 1/3
(d)1/2

**Answer/ Explanation**
Answer: d
Explanation: Reason: S = [HH, HT, TH, TT] = 4
∴ P(exactly 1 head) $=24=12$

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MCQ Questions For Class 10 Maths Probability Question 2. The probability of getting a spade card from a well shuffled deck of 52 cards is
$(a)\ \frac{1}{13}$ $(b)\ \frac{1}{4}$ $(c)\ \frac{12}{13}$ $(d)\ \frac{3}{4}$

**Answer/ Explanation**
Answer: b
Explanation: Reason: Total cards = 52,
Spade cards = 13
∴ P(a spade card) $=1352=14$

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Probability MCQ Class 10 Question 3. The probability of getting less than 3 in a single throw of a die is
$(a)\ \frac{1}{3}$ $(b)\ \frac{1}{2}$ $(c)\ \frac{1}{4}$ $(d)\ \frac{2}{3}$

**Answer/ Explanation**
Answer: a
Explanation: Reason: Here S = [1, 2, 3, 4, 5, 6]
∴ n(S) = 6
E = (Less than 3) = [1, 2
∴ P(Less than 3) $=26=13$

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Probability Class 10 MCQ Question 4. The total number of events of throwing 10 coins simultaneously is
(a) 1024
(b) 512
(c) 100
(d) 10

**Answer/ Explanation**
Answer: a
Explanation: Reason: Total events $2^{10} = 1024$

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MCQ Of Probability For Class 10 Question 5. Which of the following can be the probability of an event?
(a) – 0.4
(b) 1.004
(c) 1823
(d) 107

**Answer/ Explanation**
Answer: c
Explanation: Reason: The probability of an event can neither be a negative value, nor it can exceed unity.

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Probability MCQs With Answers Pdf Question 6. Three coins are tossed simultaneously. The probability of getting all heads is

(a) 1 (b) $\frac{1}{2}$ (c) $\frac{1}{4}$ (d) $\frac{1}{8}$

**Answer/ Explanation**
Answer: d
Explanation: Reason: Here S = [HHH, HHT, HTH, THH, HTT, THT, TTH, TTT] = 8
∴ P(all heads) = 18

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Probability MCQ Question 7. One card is drawn from a well shuffled deck of 52 cards. The probability of getting a king of red colour is

(a) $\frac{1}{26}$ (b) $\frac{1}{13}$ (c) $\frac{1}{4}$ (d) $\frac{1}{2}$

**Answer/ Explanation**

Answer: a

Explanation: Reason: Total cards = 52

Total events «(S) = 52

a king of red colour = 2

P(a king of red colour) $=252=126$

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MCQ Questions For Class 10 Maths With Answers Question 8. One card is drawn from a well shuffled deck of 52 playing cards. The probability of getting a non-face card is

(a) $\frac{3}{13}$ (b) $\frac{10}{13}$ (c) $\frac{7}{13}$ (d) $\frac{4}{13}$

**Answer/ Explanation**

Answer: b

Explanation: Reason; Total cards = 52,

Total face cards = 12

∴ Non-face cards = 52 – 12 = 40

∴ P(a non-face card) $=4052=1013$

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9. The chance of throwing 5 with an ordinary die is

(a) $\frac{1}{6}$ (b) $\frac{5}{6}$ (c) $\frac{1}{3}$ (d) $\frac{1}{2}$

**Answer/ Explanation**

Answer: a

Explanation: Reason: Here S = [1, 2, 3,4, 5, 6]

∴ n(S) = 6

∴ P(throwings) = $16$

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MCQ Questions For Class 10 Maths Question 10. The letters of the word SOCIETY are placed at random in a row. The probability of getting a vowel is

(a) $\frac{1}{7}$ (b) $\frac{2}{7}$ (c) $\frac{3}{7}$ (d) $\frac{4}{7}$

**Answer/ Explanation**

Answer: c

Explanation: Reason: Totle letters = 7

No. of vowel = 3 [∵ Vowel are O, I, E]

∴ P(a vowel) = 37

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Probability Questions And Answers Pdf Question 11. Cards bearing numbers 3 to 20 are placed in a bag and mixed thoroughly. A card is taken out from the bag at random. The probability that the number on the card taken out is an even number, is

$(a)\ \frac{1}{20}$ $(b)\ \frac{1}{4}$ $(c)\ \frac{1}{3}$ $(d)\ \frac{1}{2}$

**Answer/ Explanation**

Answer: d

Explanation: Reason: Total cards = 18

Cards with even numbers are 4, 6, 8, 10, 12, 14, 16, 18, 20 = 9

∴ P(even number) =918=12

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Maths MCQ For Class 10 Question 12. The total events to throw three dice simultaneously is

(a) 6

(b) 18

(c) 81

(d) 216

**Answer/ Explanation**

Answer: d

Explanation: Reason: Total cards = $(6)^3$= 216

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10 Class Maths MCQ With Answers Question 13. The probability of getting a consonant from the word MAHIR is

$(a)\ \frac{2}{5}$ $(b)\ \frac{3}{5}$

$(c)\ \frac{4}{5}$ $(d)\ 1$

**Answer/ Explanation**
Answer: b
Explanation: Reason: Total characters in MAHIR = 5,
Consonants are M, H, R i.e., 3
∴ P(getting a consonant) = $35$

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Probability Multiple Choice Questions Question 14. A girl calculates that the probability of her winning the first prize in a lottery is $8100$. If 6,000 tickets are sold, how many tickets has she bought?
(a) 400
(b) 750
(c) 480
(d) 240
**Answer/ Explanation**
Answer: c
Explanation: Reason: No. of tickets sold = $8100$ × 6000 = 8 ×60 = 480

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Multiple Choice Questions On Probability Question 15. A card is drawn from a well shuffled deck of 52 cards. The probability of a seven of spade is

$(a)\ \frac{1}{26}$ $(b)\ \frac{1}{52}$ $(c)\ \frac{3}{52}$ $(d)\ \frac{1}{13}$

**Answer/ Explanation**
Answer: b
Explanation: Reason: Total cards = 52, A seven of spade = 1
∴ P(a seven of spade) = $152$

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Probability Multiple Choice Questions And Answers Question 16. A bag contains 3 red balls and 5 black balls. A ball is drawn at random from the bag. The probability that a red ball drawn is

$(a)\ \frac{3}{8}$ $(b)\ \frac{1}{2}$ $(c)\ \frac{5}{8}$ $(d)\ \frac{3}{4}$

**Answer/ Explanation**
Answer: a
Explanation: Reason: Total balls = 3 + 5 = 8

∴ Total events = 8
P(a red ball) = $\frac{3}{8}$

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Probability MCQ Pdf Question 17. A child has a die whose six faces show the letters as given below:

| A | B | C | D | E | F |
|---|---|---|---|---|---|
| | | | | | |

The die is thrown once. The probability of getting a 'D' is

(a) $\frac{1}{2}$ (b) $\frac{1}{3}$ (c) $\frac{1}{4}$ (d) $\frac{1}{6}$

**Answer/ Explanation**

Answer: d
Explaination: Reason: Sample space S = [A, B, C, D, E, F] = 6
∴ n(S) = 6
∴ P(getting D) = $\frac{1}{6}$

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Probability Multiple Choice Questions And Answers Pdf Question 18. One card is drawn from a well-shuffled deck of 52 cards. The probability that the card will not be an ace is

(a) $\frac{1}{13}$ (b) $\frac{4}{13}$

(c) $\frac{12}{13}$ (d) $\frac{3}{13}$

**Answer/ Explanation**

Answer: c
Explaination: Reason: Total cards = 52
∴ Total events = 52
No. of ace cards = 4
Non-ace cards = 52 – 4 = 48
∴ P(not an ace) =$\frac{48}{52}$=$\frac{12}{13}$

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Probability Multiple Choice Questions Pdf Question 19. A lot consists of 144 ball pens of which 20 ae defective and the others are good. Tanu will buy a pen if it is good but will not buy if it is defective. The shopkeeper draws one pen at random and gives it to her. The probability that she will buy that pen is

$(a)\ \frac{5}{36}$ $(b)\ \frac{20}{36}$ $(c)\ \frac{31}{36}$ $(d)\ \frac{31}{144}$

**Answer/ Explanation**

Answer: c

Explanation: Reason: Total ball pens = 144

Defective ball pens = 20

Good ball pens = 144 – 20 = 124

∴ P(she will buy a pen) = P(good ball pen) $=124144=3136$

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Multiple Choice Probability Questions Question 20. A ticket is drawn at random from a bag containing tickets numbered from 1 to 40. The probability that the selected ticket has a number which is a multiple of 5 is

$(a)\ \frac{3}{5}$ $(b)\ \frac{1}{5}$ $(c)\ \frac{1}{3}$ $(d)\ \frac{4}{5}$

**Answer/ Explanation**

Answer: b

Explanation: Reason: Total number = 40

∴ n(S) = 40

Number of favourable events are 5,10,15, 20, 25, 30, 35, 40 = 8

∴ Probability (multiple of 5) $=840=15$

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Probability Questions Multiple Choice Question 21. Which of the following cannot be the probability of an event? [Delhi 2011]

(a) 1.5

(b) 35

(c) 25%

(d) 0.3

**Answer/ Explanation**

Answer: a

Explanation:

(a) ∵ Probability of any event cannot be more than 1.

∴ 1.5 can not be the probability of any event.
∴ (a) is the answer.

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Basic Probability Multiple Choice Questions Pdf Question 22. A coin is tossed twice. The probability of getting both heads is [Foreign 2013]

$(a)\ \frac{1}{2}$ $(b)\ \frac{1}{3}$

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

**Answer/ Explanation**

Answer: c
Explanation:
(c) Sample space = {HH, HT, TH, TT}
Number of total possible outcomes =4
Number of favourable outcome (both heads) = 1
∴ Probability of getting both heads = 14

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Probability MCQs With Answers Question 23. A fair dice is rolled. Probability of getting a number x such that $1 \le x \le 6$, is
(a) 0
(b) > 1
(c) between 0 and 1
(d) 1

**Answer/ Explanation**

Answer: d
Explanation: (d) 1, ∵ It is a sure event.

---

24. The sum of the probabilities of all elementary events of an experiment is p, then
(a) $0 < p < 1$
(b) $0 \le p < 1$
(c) $p = 1$
(d) $p = 0$

**Answer/ Explanation**
Answer: c
Explanation: (c) p = 1

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25. If an event cannot occur, then its probability is [NCERT Exemplar Problems]
(a) 1
(b) $34$
(c) $12$
(d) 0
**Answer/ Explanation**
Answer: d
Explanation: (d) 0. ∵ event cannot occur.

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26. An event is very unlikely to happen. Its probability is closest to [NCERT Exemplar Problems]
(a) 0.0001
(b) 0.001
(c) 0.01
(d) 0.1

**Answer/ Explanation**
Answer: a
Explanation: (a) 0.0001

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27. Match the columns:

| | |
|---|---|
| (1) Probability of sure event | (A) $\frac{1}{2}$ |
| (2) Probability of impossible event | (B) 0 |
| (3) A and B are complementary events | (C) 1 |
| | (D) P(B) = 1 – P(A) |
| | (E) P(A) = P(B) |

(a) (1) → (A), (2) → (B), (3) → (C)
(b) (1) → (B), (2) → (A), (3) → (C)
(c) (1) → (C), (2) → (B), (3) → (E)
(d) (1) → (C), (2) → (B), (3) → (D)

**Answer/ Explanation**
Answer: d
Explanation: (d) Probability facts

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28. A card is drawn from a well-shuffled deck of 52 playing cards. The probability that the card will not be an ace is

$(a)\ \frac{1}{13}$ $(b)\ \frac{1}{4}$
$(c)\ \frac{12}{13}$ $(d)\ \frac{3}{4}$

**Answer/ Explanation**
Answer: c
Explanation:
(c) Total number of cards = 52
Number of ace = 4
P(not be an ace) = $4852=1213$

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29. An experiment whose outcomes has to be among a set of events that are completely known but whose exact outcomes is unknown is a

(a) sample space
(b) elementary event
(c) random experiment
(d) none of these

**Answer/ Explanation**
Answer: c
Explanation: (c) Random experiment

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30. The experiments which when repeated under identical conditions produce the same results or outcomes are known as
(a) random experiments
(b) probabilistic experiment
(c) elementary experiment
(d) deterministic experiment

**Answer/ Explanation**
Answer: d
Explanation: (d) Deterministic experiment

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31. For an event E, P(E) + P$(\mathrm{E}\rightarrow)$ = q, then
(a) $0 \leq q < 1$
(b) $0 < q \leq 1$
(c) $0 < q < 1$
(d) none of these

**Answer/ Explanation**
Answer: d
Explanation:
(d) $\because$ P(E) + P$(\mathrm{E}\rightarrow)$ = 1
$\therefore$ q = 1

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32. A man is known to speak truth 3 out of 4 times. He throws a die and a number other than six comes up. Find the probability that he reports it is a six.

(a) $\frac{3}{4}$ (b) $\frac{1}{4}$

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

**Answer/ Explanation**

Answer: b

Explanation:

(b) When a number other than six appears

and man reports it is a six, it means man is telling a lie.

∴ Probability = 1 – $14$=$14$

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33. One ticket is selected at random from 100 tickets numbered 0.0, 01, 02, ……, 99. Suppose x is the sum of digits and y is the product of digits, then probability that x = 9 and y = 0 is

(a) $\frac{2}{17}$ (b) $\frac{3}{27}$

(c) $\frac{1}{50}$ (d) $\frac{1}{25}$

**Answer/ Explanation**

Answer: c

Explanation:

(c) Sum of digits = 9 and product = 0

∴ Number is either 09 or 90.

∴ Required probability = $2100$=$150$

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34. A bag contains 5 black balls, 4 white balls and 3 red balls. If a ball is selected randomwise, the probability that it is a black or red ball is ____ .

**Answer/ Explanation**

Answer:

Explanation:

Number of black or red balls = 5 + 3

= 8

∴ Required probability = $812 = 23$

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35. The probability of a non-leap year having 53 Mondays is _____. [Foreign 2012]

**Answer/ Explanation**

Answer:

Explaination:

No. of days in a non-leap year = 365

No. of complete weeks = 52(52 × 7 = 364)

No. of days left = 1

∴ Probability of this day being a Monday = Probability of 53 Mondays = $17$