Probability Quiz

1. The probability of an impossible event is:

A. 0

B. 0.5

C. 1

D. Undefined

2. The sum of the probabilities of all the elementary events of an experiment is:

A. 0

B. Less than 1

C. 1

D. More than 1

3. If two coins are tossed simultaneously, the probability of getting at least one head is:

A. 1/4

B. 1/2

C. 3/4

D. 1

4. In a single throw of a die, the probability of getting a prime number is:

A. 1/2

B. 1/3

C. 1/6

D. 2/3

5. An event having only one outcome of a random experiment is called a(n):

A. Compound event

B. Impossible event

C. Simple event

D. Sure event

6. Two events A and B are mutually exclusive if:

A. P(A) + P(B) = 1

B. P(A) + P(B) > 1

C. P(A ∩ B) = 0

D. P(A ∩ B) > 0

7. The probability of an event that is certain to happen is:

A. 0

B. 0.5

C. 1

D. Undefined

8. The odds in favor of an event A are 3:2. What is the probability of A?

A. 3/5

B. 2/3

C. 2/5

D. 5/3

9. If P(E) represents the probability of an event E, then 0 ≤ P(E) ≤ 1. This is known as:

A. Probability axiom

B. Probability theorem

C. Probability range

D. Probability law

10. The probability of getting a number greater than 4 in a single roll of a six-sided die is:

A. 1/3

B. 1/2

C. 1/6

D. 2/3

11. If the probability of winning a game is 0.09, what is the probability of losing the game?

A. 0.91

B. 0.09

C. 0.81

D. 1.00

12. A bag contains 5 red balls and 7 green balls. What is the probability of drawing a green ball?

A. 5/12

B. 7/12

C. 7/5

D. 12/7

13. When two dice are rolled, what is the probability of getting a sum of 9?

A. 1/9

B. 1/6

C. 4/36

D. 1/12

14. A card is drawn at random from a standard deck of 52 cards. What is the probability that the card is a queen?

A. 1/13

B. 1/12

C. 4/52

D. 1/4

15. An event E is independent of itself if and only if P(E) is:

A. 0 or 1

B. Exactly 1/2

C. Less than 1/2

D. More than 1/2

16. A jar contains 3 red, 2 blue, and 5 green marbles. If a marble is drawn at random, what is the probability that it is not green?

A. 2/5

B. 1/2

C. 5/10

D. 3/5

17. If events A and B are independent, the probability of both events occurring is given by:

A. P(A) + P(B)

B. P(A) - P(B)

C. P(A) × P(B)

D. P(A) / P(B)

18. In a batch of 8 batteries, 3 are defective. If one battery is chosen at random, what is the probability it is not defective?

A. 5/8

B. 3/8

C. 3/5

D. 8/5

19. The probability

of selecting a red card or a king from a standard deck of cards is:

A. 26/52

B. 28/52

C. 2/52

D. 4/52

20. A bag contains 4 white, 5 red, and 6 black balls. A ball is drawn at random. What is the probability that it is either red or black?

A. 5/15

B. 9/15

C. 11/15

D. 6/15

Probability Quiz Answer Key

1. A

2. C

3. C

4. A

5. C

6. C

7. C

8. A

9. A

10. A

11. A

12. B

13. C

14. A

15. A

16. D

17. C

18. A

19. B

20. C

And that completes the quiz set for the "Probability" chapter. If you need further assistance or more quizzes, feel free to ask!