MATHEMATICS 3201 · NEWFOUNDLAND AND LABRADOR

Mathematics 3201

Practice Test

Unit C: Probability and Combinatorics

25 Questions

Original practice test based on the Newfoundland and Labrador curriculum. Work through each question, then check your answers at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

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Question 1

$P(8,\ 3)$ is

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Question 2

$P(10,\ 2)$ is

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Question 3

$P(7,\ 4)$ is

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Question 4

$C(9,\ 3)$ is

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Question 5

$C(11,\ 2)$ is

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Question 6

$C(12,\ 5)$ is

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Question 7

A bag holds 3 red marbles out of 10 marbles in total. The probability of drawing a red marble is

A) $\frac{3}{10}$

B) $\frac{1}{2}$

C) $\frac{1}{10}$

D) $\frac{7}{10}$

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Question 8

A bag holds 7 red marbles out of 20 marbles in total. The probability of drawing a red marble is

A) $\frac{1}{2}$

B) $\frac{7}{20}$

C) $\frac{1}{20}$

D) $\frac{13}{20}$

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Question 9

A bag holds 2 red marbles out of 5 marbles in total. The probability of drawing a red marble is

A) $\frac{1}{2}$

B) $\frac{1}{5}$

C) $\frac{2}{5}$

D) $\frac{3}{5}$

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Question 10

If the probability of an event is 0.25 , then the probability it does not happen is

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Question 11

If the probability of an event is 0.4 , then the probability it does not happen is

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Question 12

If the probability of an event is 0.1 , then the probability it does not happen is

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Question 13

A game pays 100 dollars with probability 0.1 . Its expected value is, in dollars

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Question 14

A game pays 50 dollars with probability 0.2 . Its expected value is, in dollars

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Question 15

A game pays 200 dollars with probability 0.05 . Its expected value is, in dollars

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Question 16

Odds of 3 to 2 in favour of an event mean the probability of the event is

A) $\frac{3}{5}$ B) $\frac{2}{5}$

C) $\frac{3}{2}$ D) $\frac{1}{2}$

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Question 17

Odds of 1 to 4 in favour of an event mean the probability of the event is

A) $\frac{4}{5}$ B) $\frac{1}{5}$

C) $\frac{1}{4}$ D) $\frac{1}{2}$

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Question 18

Odds of 5 to 3 in favour of an event mean the probability of the event is

A) $\frac{3}{8}$

B) $\frac{5}{3}$

C) $\frac{5}{8}$

D) $\frac{1}{2}$

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Question 19

A fair coin is tossed 6 times. The number of possible sequences of heads and tails is

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Question 20

A fair coin is tossed 8 times. The number of possible sequences of heads and tails is

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Question 21

Two independent events have probabilities 0.2 and 0.3 . The probability both happen is

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Question 22

Two independent events have probabilities 0.4 and 0.5 . The probability both happen is

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Question 23

Two events that cannot happen at the same time are called

A) mutually exclusive

B) independent

C) complementary

D) dependent

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Question 24

The probability of rolling an even number on a fair die is

A) $\frac{1}{3}$

B) $\frac{1}{2}$

C) $\frac{1}{6}$

D) $\frac{2}{3}$

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Question 25

If two events are independent, then the outcome of one

A) always matches the other

B) prevents the other

C) does not affect the other

D) doubles the other

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ANSWER KEY

1. 336
2. 90
3. 840
4. 84
5. 55
6. 792
7. A
8. B
9. C
10. 0.75
11. 0.6
12. 0.9
13. 10
14. 10
15. 10
16. A
17. B
18. C
19. 64
20. 256
21. 0.06
22. 0.2
23. A
24. B
25. C

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