NOVA SCOTIA MATHEMATICS 12 · UNIT C · 10 QUESTIONS

Counting Methods and Probability — Practice Test

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.

1 **Find the number of combinations when choosing 4 items from 9 different items, order not mattering.**

ANSWER _____

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2 **Find the number of combinations when choosing 5 items from 6 different items, order not mattering.**

ANSWER _____

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3 **Find the number of combinations when choosing 4 items from 10 different items, order not mattering.**

ANSWER _____

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4 **The number of combinations of n items taken r at a time is written**

- **A** n choose r
- **B** n permute r
- **C** n! ÷ r
- **D** n^r

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5 **If a coin is tossed twice, the number of possible outcomes is**

- **A** 2
- **B** 4
- **C** 3
- **D** 6

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6 **The expected value of a game is found by multiplying each outcome by**

- **A** its probability and subtracting
- **B** the number of outcomes
- **C** its probability and adding
- **D** the largest outcome

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7 **A fair die has probability $\frac{1}{6}$ of showing**

- **A** any even face
- **B** a face greater than 6
- **C** two faces at once
- **D** any one chosen face

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8 **Sampling with replacement means an item is**

A returned before the next draw

B removed forever

C counted twice

D never counted

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9 **The probability that a flipped coin shows heads is**

A 1

B 1 ÷ 2, written as a decimal 0.5

C 0

D 2

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10 **Odds in favour differ from probability because odds compare**

A total outcomes to favourable outcomes

B favourable outcomes to total outcomes

C favourable to unfavourable outcomes

D two probabilities

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ANSWER KEY

1. 126
2. 6
3. 210
4. A
5. B
6. C
7. D
8. A
9. B
10. C

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