ONTARIO MATHEMATICS OF DATA MANAGEMENT, GRADE 12, UNIVERSITY PREPARATION (MDM4U) · UNIT B · 10 QUESTIONS

Probability Distributions — 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 **A normal distribution has mean 90 and standard deviation 15 The z score for a value of 120 is**

- **A** 3
- **B** 2
- **C** 1
- **D** 0

Understand It with Pulse | Flag a mistake

2 **For a binomial distribution with n = 40 and probability 0.25 the expected number of successes is**

- A 10
- B 12
- C 8
- D 40

Understand It with Pulse | Flag a mistake

3 **A die is rolled 24 times. The expected number of sixes is**

- A 4.5
- B 3.5
- C 4
- D 15

Understand It with Pulse | Flag a mistake

4 **In a normal distribution, about 68 percent of data lie within 1 standard deviation of the mean. This statement is**

- A false
- B true
- C unknown
- D sometimes

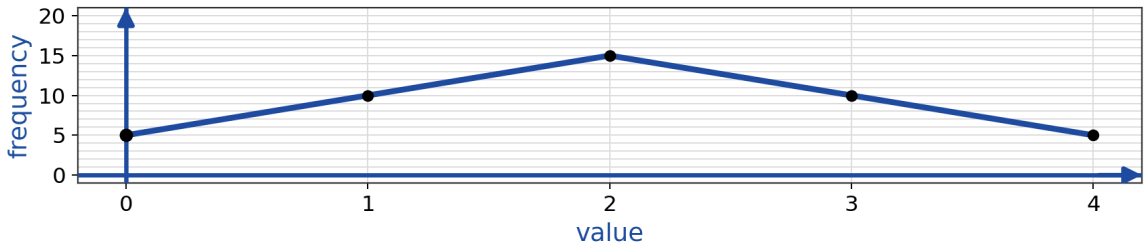
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5 **In a normal distribution, about 95 percent of data lie within 2 standard deviations of the mean. This statement is**

- A true
- B false
- C unknown
- D sometimes

Understand It with Pulse | Flag a mistake

6 **The graph shows frequencies for values 0 to 4. The frequency for value 2 is Figure 1**



- **A** 15
- **B** 10
- **C** 5
- **D** 20

Understand It with Pulse | Flag a mistake

7 **A normal distribution has mean 120 and standard deviation 30 The z score for a value of 150 is**

- **A** 2
- **B** 0
- **C** 12
- **D** 1

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8 **For a binomial distribution with n = 30 and probability 0.1 the expected number of successes is**

A 5

B 3

C 1

D 30

Understand It with Pulse | Flag a mistake

9 **A normal distribution has mean 40 and standard deviation 8 The z score for a value of 56 is**

A 3

B 1

C 2

D 0

Understand It with Pulse | Flag a mistake

10 **For a binomial distribution with n = 50 and probability 0.2 the expected number of successes is**

A 10

B 12

C 8

D 50

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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