Knowledge Check

Knowledge Check 1

What is the formula for finding the probability of X taking a given value in a binomial distribution?

A. $P(X = n) = p^n$

B. $P(X = 0) = q^n$

C. $P(X= r) = n_{C_r} * p^r * q^{n-r}$

D. $P(X \geq 4) = 1 - P(X \leq 3)$

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C. P(X= r) = $n_{C_r} * p^r * q^{n-r}$

D. P(X ≥ 4) = 1 – P(X ≤ 3)

The correct answer is **C**

The formula for finding the probability of X taking a given value in a binomial distribution is P(X= r) = $n_{C_r} * p^r * q^{n-r}$, where r can vary from 0 to n.

Knowledge Check 2

What is the Poisson distribution parameter representing the expected value of occurrences?

A. p

B. λ

C. q

D. σ

Knowledge Check 2

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A. p

B. λ

C. q

D. σ

The correct answer is **B**

Poisson distribution parameter λ represents the expected value of occurrences of an event.

Knowledge Check

3

What are the two criteria for a good estimator?

A. Unbiasedness and minimum variance

B. Variance and bias

C. Bias and consistency

D. Variance and efficiency

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The correct answer is **A**

A good estimator is unbiased and have minimum variance.

Thank You