Knowledge Check

Knowledge Check 1

What's the equation to find the probability of a specific outcome 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. $P(X \geq 4) = 1 - P(X \leq 3)$

Knowledge Check 1

What's the equation to find the probability of a specific outcome 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. $P(X \geq 4) = 1 - P(X \leq 3)$

The correct answer is **C**

The formula for finding the probability of a specific outcome 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

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

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

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

The correct answer is **A**

A good estimator is unbiased and has minimum variance.

Thank You