



Knowledge Check

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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. $P(X = r) = nC_r * p^r * q^{n-r}$
- 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. $P(X \geq 4) = 1 - P(X \leq 3)$

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 .



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2

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

- A. p
- B. λ
- C. q
- D. σ



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2

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

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- 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

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The correct answer is **A**

A good estimator is unbiased and has minimum variance.



Thank You