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HW #2

What is the mean and standard deviation of a uniform random variable?

The mean is the average of all the numbers in a set. Standard deviation measures the dispersion of a dataset relative to the mean. A uniform random variable is used to model scenarios where the expected outcomes are equiprobable.

What is the marginal distribution of a joint distribution?

Marginal distribution of joint distribution is when either variable is the probability distribution of X when the values of Y are not taken into consideration

What is a moment generating function? Why is it helpful?

In probability theory and statistics, the moment-generating function of a real-valued random variable is an alternative specification of its probability distribution. It is helpful because it helps with analysis of sums of random variables.