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Setting Up the St. Petersburg Paradox - Quiz

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Question 1

1/1 point (graded)

The Bernoulli distribution is a special case of the _____ distribution where _____.

☐ a. Uniform ; the support ranges from 0 to 1

☐ b. Binomial ; probability is 0.5

☒ c. Binomial ; $n=1$ ✓


☐ d. Binomial ; the support ranges from 0 to 1

Explanation


The Bernoulli distribution is a special case of the binomial distribution where $n=1$. In other words, whereas the binomial distribution might describe the outcomes of a series of coin flips, for example, the Bernoulli distribution would describe the outcome of a single coin flip.

▼ **Module 5: Moments of a Random Variable, Applications to Auctions, & Intro to Regression**


Moments of a Distribution and Auctions

Finger Exercises due Oct 31, 2016 at 05:00 IST 

Expectation, Variance, and an Introduction to Regression

Finger Exercises due Oct 31, 2016 at 05:00 IST 

Module 5: Homework

Homework due Oct 24, 2016 at 05:00 IST 

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Question 2

1/1 point (graded)

Which of the following describes the geometric distribution?

- ☐ a. A normal or “bell curve” distribution
- ☒ b. Number of identical trials repeated until a “success” is reached ✓
- ☐ c. A distribution where each of the outcomes are equally likely
- ☐ d. The number of successes out of a given number of independent trials or attempts

Explanation

The geometric distribution describes the distribution of the number of trials or attempts until a “success” is reached. For example, if you flip a coin until the coin lands heads, the number of flips that tails that would land before the first heads in repeated trials could be characterized by a geometric distribution. We will learn more about the geometric and other special distributions in the next lecture.

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