

#### MITx: 14.310x Data Analysis for Social Scientists

Heli



- Module 1: The Basics of R and Introduction to the Course
- ▶ Entrance Survey
- Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions
- Module 3: Gathering and Collecting Data, Ethics, and Kernel Density Estimates
- Module 4: Joint,
   Marginal, and
   Conditional
   Distributions &
   Functions of Random
   Variable

Module 5: Moments of a Random Variable, Applications to Auctions, & Intro to Regression > Expectation, Variance, and an Introduction to Regression > Setting Up the St. Petersburg Paradox - Quiz

# 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

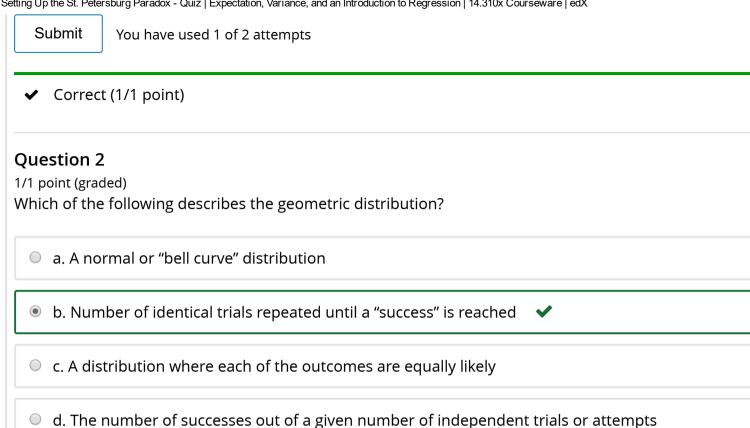
# **Expectation, Variance, and** an Introduction to Regression

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

#### Module 5: Homework

Homework due Oct 24, 2016 at 05:00 IST

Exit Survey

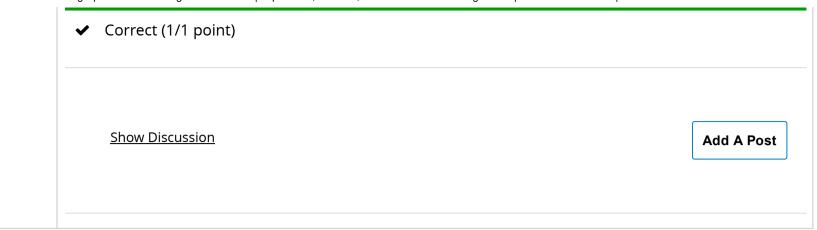


## **Explanation**

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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You have used 1 of 2 attempts



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