

1.06 Simulation Methods

Question 1

Given that continuously compounded returns are normally or approximately normally distributed, asset prices are:

- A. normally distributed.
- B. chi-square distributed.
- C. lognormally distributed.

Question 2

A feature of Monte Carlo simulation is its ability to:

- A. provide exact results.
- B. incorporate "what-if" analysis.
- C. explain cause-and-effect relationships.

Question 3

An analyst is determining the appropriate price for a complex call option on a bond. Monte Carlo simulation is *most appropriate* to use if the analyst:

- A. requires an accurate result.
- B. can only use estimates for the inputs.
- C. is unsure of the probability distributions for the inputs.

Question 4

Which of the following distributions is *most appropriate* for modeling a stock's price?

- A. Normal
- B. Lognormal
- C. Multivariate

Question 5

Prices for a volatile asset *most likely* follow a(n):

- A. F-distribution.
- B. binomial distribution.
- C. lognormal distribution.

Question 6

If a random variable X is lognormally distributed, its natural log *most likely* follows a:

- A. normal distribution.
- B. lognormal distribution.
- C. chi-squared distribution.