

Introduction to Agent-Based Modeling (Summer 2023)

4.6 Unit 4 Overview » Unit 4 Test

Question 1

What are the two core ideas of the ABM Design Principle?

- A. Focus on the question at hand and realism
 - B. Simplicity and Focus on the Question at hand
 - C. Simplicity and realism
 - D. Realism and any elements desired by the stakeholders
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Question 2

What are the two major forces in the Bas model?

- A. innovation and imitation
 - B. imitation and social networks
 - C. innovation and advertising
 - D. advertising and creativity
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Question 3

Which of these is not a design choice of agent-based modeling?

- A. Determining agent types
 - B. Determining agent properties
 - C. Determining inputs to a model
 - D. All of these are design choices for agent-based models
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Question 4

In the diffusion model, what are the behaviors of the agents?

- A. determine the optimal behavior of diffusion
 - B. move, eat, reproduce
 - C. decide whether or not to adopt the information / innovation
 - D. decide who to talk to
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Question 5

Nearly every SETUP procedure in NetLogo starts with what command?

- A. CLEAR-ALL
- B. RESET-TICKS
- C. TICK
- D. END

Question 6

What is the basic command used to plot the number of adopters over time?

- A. PLOT COUNT TURTLES WITH [ADOPTED?]
 - B. PLOT COUNT TURTLES
 - C. PLOT COUNT ADOPTED
 - D. PLOT TURTLES WITH [ADOPTED?]
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Question 7

In what kind of environment do agents operate in the DIFFUSION model?

- A. a social network
 - B. a GIS network
 - C. a lattice
 - D. a featurespace
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Question 8

What is the extension that we use in this model?

- A. nw
 - B. small-world
 - C. preferential-attachment
 - D. networkx
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Question 9

Why do we run each model multiple times in agent-based modeling?

- A. the models are often deterministic, and multiple runs help us determine their behavior
 - B. the models are often stochastic, and multiple runs help us understand the variance
 - C. you do not need multiple runs
 - D. BehaviorSpace requires multiple runs
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Question 10

What command in R is used to read the output of BehaviorSpace?

- A. read.netlogo
- B. read.data
- C. import.csv
- D. read.csv