

What is Random Behavior?

The Gambler's Fallacy.

Dec 8-2:02 PM

Dec 1-7:11 AM

You will turn this in.

Write your name on a piece of paper.

Portland Blazer player Damian Lillard has a career Free Throw success of 86.2%.

Say you are at a game and watched Lillard miss four FTs in a row. A spectator next to you says that he is "due" to make the fifth!

What do you think?

Quickly note down on your paper your reaction to this statement.

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A family you know has three girls. Your friend says "The next is bound to be a boy."

What do you think?

Quickly note down on your paper your reaction to this statement.

Three days this week you haven't managed to find a parking spot near to the school. The friend who travels with you says "Bad things come in threes, tomorrow you'll get a spot."

What do you think?

Quickly note down on your paper your reaction to this statement.

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Do long-run facts help us predict outcomes of random events over the short run?

Write down your answer.

We are going to try to predict the next outcome in a random sequence of events based on your knowledge of prior sequences.

Your predictions may not be correct all the time, it is random! but your prediction method may be better than the others.

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I am going to run a sampler that generates a sequence of five reds and yellows in some order.

Your job is to devise a method to correctly predict what the next color will be: red or yellow.

Watch the sequences as I generate them. As soon as you can, write down your "rule". When everyone has a rule I will start showing you the sixth in the sequence.

Record how many times your rule worked. Calculate the probability that your rule is successful.

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What can we do to make this process more successful?

What was the best rule in the class?

Do the data from past selections help in making a prediction for the next selection?

Do the patterns of the sequences help in making a prediction?

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Dec 8-3:01 PM

What do you think now about the three statements presented at the beginning?

Write down on your paper whether or not your thoughts changed and if they did, how. If they did not change, write down why you thought the way you did.

What is the best success probability you can hope to achieve with any rule?

Discuss what you learned about predicting future outcomes in a random sequence.

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Dec 8-3:08 PM