

8. Exercise: Fresh start

Exercise: Fresh start

3/3 points (graded)

Consider a Bernoulli process, with a “1” considered a success and a “0” considered a failure. Determine whether the process starts fresh right after each of the following random times:

1. The time of the k th failure

Yes ▼

✓ Answer: Yes

2. The first time that a failure follows a success

Yes ▼

✓ Answer: Yes

3. The first time at which we have a failure that will be followed by a success

No ▼

✓ Answer: No

Solution:

In the first two cases, the time of interest is determined causally, by past events, and we have the fresh-start property. In the last case, the time of interest is determined by something that is to happen in the future. In particular, we know that right after the time of interest, the next trial will result in a success.

提交

你已经尝试了1次（总共可以尝试1次）

📘 Answers are displayed within the problem

讨论

显示讨论

主题: Unit 9 / Lec. 21 / 8. Exercise: Fresh start