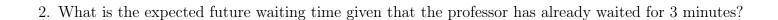
## Stochastic processes: Quiz

March	10.	2025

Question. Name a discrete memoryless distribution.

<b>Problem.</b> Students arrive to a classroom according to a Poisson process with rate $\lambda > 0$ . The professor decides to wait for 2 minutes (no matter what). Once the 2 minutes are elapsed, the professor proceeds as follows. If at least one student has entered the classroom, the lecture begins. If not, the professor waits until the first student arrives then starts.
1. What is the probability that the lecture doesn't start at $t=2$ minutes?



3. What is the probability that the lecture begins within 5 minutes but past 2 minutes?

