Lecture 8

Small Exercise - 1

- In a region, the occurrence of typhoon landfall may follow a Poisson process, the average of which is 3 in a year.

  What is the probability that 3 typhoons make landfalls in that region in a year?

🟥	1.00
🟩	0.50
🟧	0.22

Lecture 8

Small Exercise - 2

A worker has to sort out all produced pieces that do not reach the length of 1 meter.

From former experiences with the producing process, he knows that the probability of producing pieces not reaching 1 meter is P=0.2. He wants to test 100 pieces. What is the expected value of pieces not reaching the length of 1 meter?

█ $100 \cdot 0.2$

█ $\binom{100}{1} 0.2^1 (1-0.2)^{100-1}$

█ $0.2^1 (1-0.2)^{100-1}$