

# **NPFL 054**

**Entry test in probability and statistics**

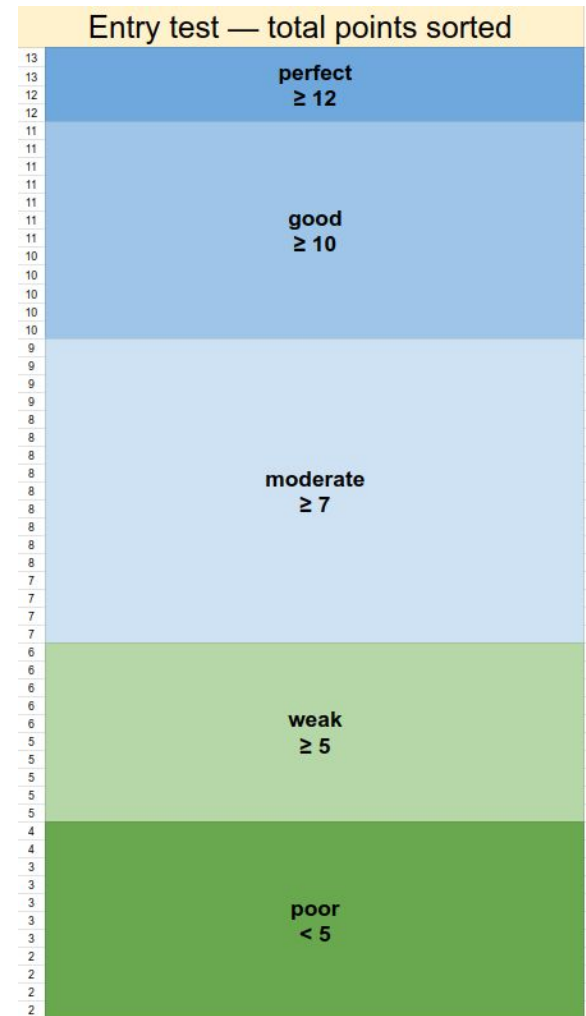
October 2019

# Students and questions

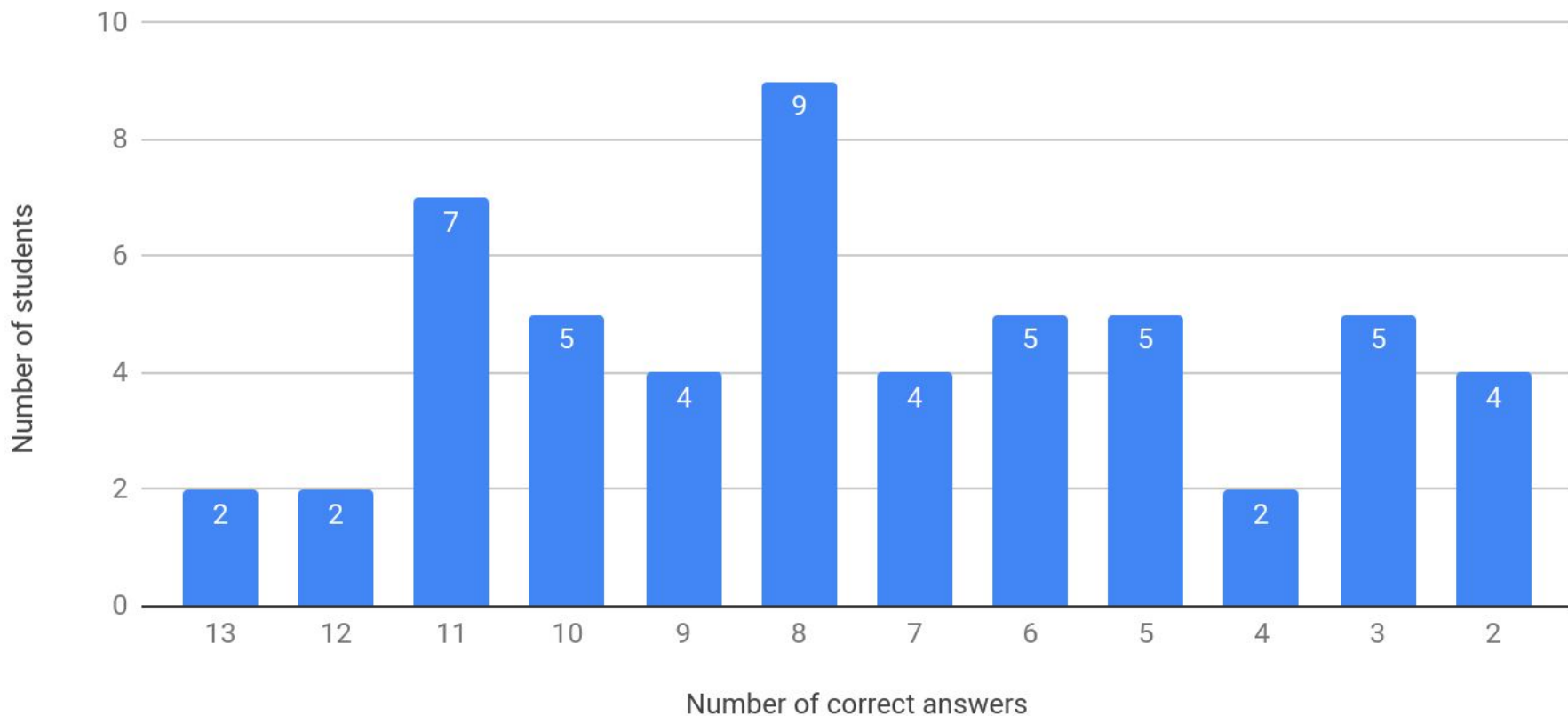
- 54 students took the test (written form, 2 pages, 20 minutes)
  - 33% stated they have not passed any university course on probability/statistics
  - 50 students of Faculty of Mathematics and Physics (MFF)  
3 students of Faculty of Science (PřF), 1 student of Faculty of Arts (FF UK)
- 13 test questions on
  - simple probability calculating (1)
  - conditional probability (4)
  - joint probability (4)
  - statistical independence (1)
  - binomial distribution (1)
  - sample mean (1)
  - sample median (1)

# Evaluation

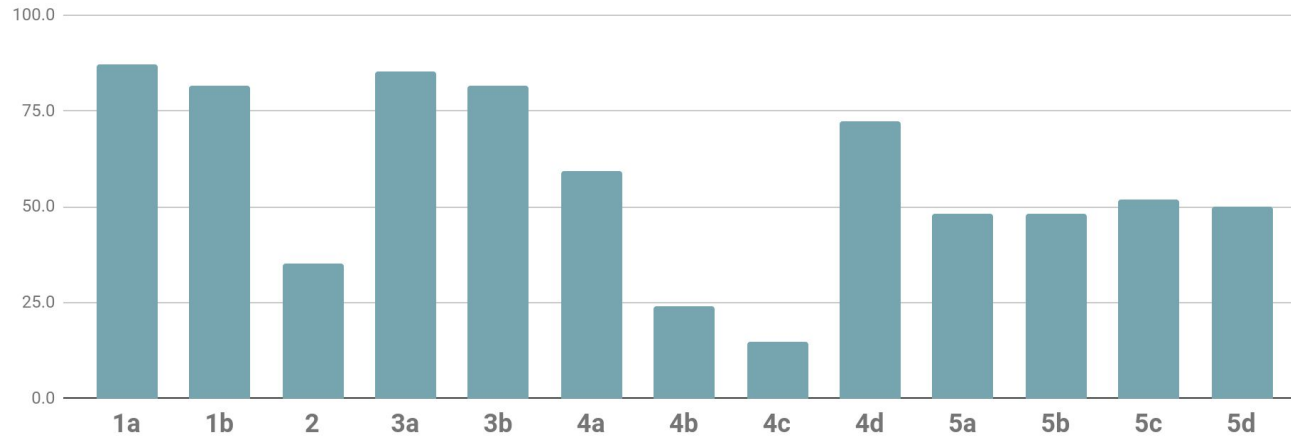
- **Maximum score = 13 points**
  - 13 questions equally scored, each by 1 point
- **Painful missing knowledge**
  - binomial distribution – only 35% of answers correct
  - conditional probability – only 50% of answers correct
- **Your knowledge of probability and statistics should be practical**
  - you should be able to apply your theoretical knowledge to practical exercises



## Entry test in probability and statistics – distribution of correct answers



## Percentage of correct answers



### Questions

1. Calculating probability
2. Binomial distribution
3. Sample mean and median
4. Joint probability
5. Conditional probability and statistical independence

# Percentage of correct answers

Depending on the previous course in probability/statistics

