

# Probability - part 1

date: ..... , class: ..... , student: .....

## 1 Exercises

- **Exercise 1:** You have a *fair die* with 12 faces: what is the probability of scoring a 4 if you *roll* it just once?
- **Exercise 2:** What is the probability of getting exactly 2 “heads” when flipping 3 fair coins?.
- **Exercise 3:** What is the probability of getting exactly 2 “heads” and 1 “tails” when flipping 4 fair coins?.
- **Exercise 4:** What is the probability of *drawing* a “K” out of a *deck* of 52 cards?
- **Exercise 5:** What is the probability of not getting a 2 when throwing two fair dices?
- **Exercise 6:** What is the probability of not getting 4 ”tails” when flipping four fair coins?
- **Exercise 7:** What is the probability of getting at least 1 ”heads” flipping 4 fair coins?
- **Exercise 8:** What is the probability of not getting 3 “heads” when flipping 3 fair coins?.

## 2 Useful links

- TED-Ed: solution of “the birthday problem”.  
<https://goo.gl/2jBE74>
- online activity ”Simple probability – practice” (from Khan Academy)  
<https://goo.gl/AnfDmS>
- Khan academy: solution of a not–so–simple problem about probability.  
<https://goo.gl/JVZBAb>

## Glossary

- fair = (in questo contesto) non truccato
- die = dado (il plurale è “dice”)
- to roll/throw a die = tirare un dado
- heads/tails = testa/croce
- flipping a coin = lanciare una moneta
- draw = estrarre
- deck = mazzo