01204211 Discrete Mathematics
Lecture 15: Fibonacci sequence

Jittat Fakcharoenphol

September 22, 2015

The Fibonacci sequence[1]

In 1202, Leonardo Bonacci (known as Fibonacci) asked the following question.

> "[A]ssuming that: a newly born pair of rabbits, one male, one female, are put in a field; rabbits are able to mate at the age of one month so that at the end of its second month a female can produce another pair of rabbits; rabbits never die and a mating pair always produces one new pair (one male, one female) every month from the second month on."
>
> "The puzzle that Fibonacci posed was: how many pairs will there be in one year?"

From https://en.wikipedia.org/wiki/Fibonacci_number

---

[1]This lecture mostly follows Chapter 4 of [LPV].