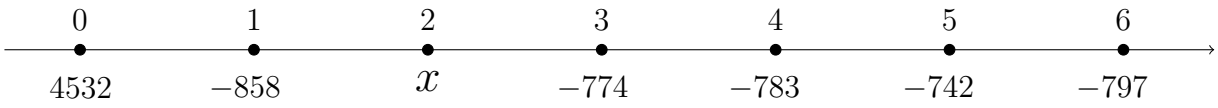
Exam of the course

Laboratory of Computer Science and Excel for Business

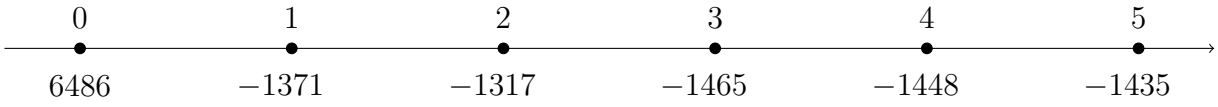
Prof. Stefano Patrì - September 2026, the 11th

Exercise 1. Given the following financial cash-flow with constant *interest rate* $i = 2.76\,\%$



find the amount of money x at the instant of time $t = 3$, specifying whether it must be paid or taken.

Exercise 2. Given the following financial cash-flow with constant *interest rate* i for each period



find the constant *interest rate* i of the unit period $0 - 1$ in form of percentage approximated to the second decimal digit (e.g. $7,52\,\%$).

Exercise 3. Given the initial *loan* $S = 44735$ €, fill the table of the *french amortization* and the table of the *italian amortization* with a constant interest rate $i = 2.93\,\%$ and $n = 40$ equal periods, specifying the values at every time of the amounts of money: *total payment* R_k , *principal paid* C_k , *Interest* I_k , and *outstanding balance* D_k . Verify that the sum of all the *principal payments* C_k in the *french amortization* is the initial *amount borrowed* S, and that the sum of all the *total payments* evaluated at $t = 0$ in the *italian amortization* is the initial *amount borrowed* S.