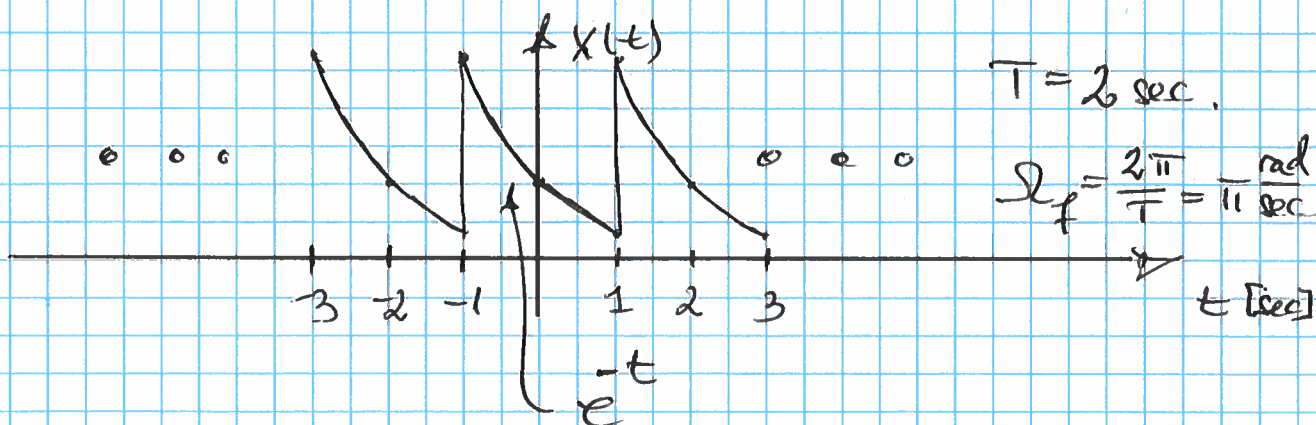


# EXERCISES, DFT

①

## FOURIER SERIES

1) GIVEN THE PERIODIC SIGNAL  $x(t)$



• Find the Fourier Series  $X[k]$

Hint: Do the integration over one period from  $-1$  to  $1$ .

• Find and plot  $|X[k]|$  for  $k \in [-30; 30]$

2) Problem 4 p. 713

## DISCRETE FOURIER TRANSFORMATION

3) Problem 5 p. 713 question a+b

4) Problem 7 p. 714