Test 1 - No.3 - Retest

DEDP 2017-2018

Exercises

1. Compute the probability that a random variable X with normal distribution $\mathcal{N}(\mu = 5, \sigma^2 = 4)$, has the value smaller than 0.

2. Compute the temporal variance σ_t^2 and the temporal autocorrelation function $R_{xx}[\tau]$ (only for $-2 \leq \tau \leq 2$) for the following sequence:

$$x = [0, 1, 0, 1, 0, 1, 0, 1, 0, 1]$$

Known:

- $F(x) = \frac{1}{2}\left(1 + \mathrm{erf}\left(\frac{x-\mu}{\sigma\sqrt{2}}\right)\right)$