

Test No. 1. Example, results

Task 1.

a) $EX=2.64$

b) $P(1 < X \leq 3)=0.6$

Task 3.

$$a) F(x) = \begin{cases} 0 & \text{for } x \leq 10 \\ \frac{x^2}{300} - \frac{1}{300} & \text{for } 10 < x \leq 20 \\ 1 & \text{for } x > 20 \end{cases}$$

b) $5/12$

c) approx. 8.02

Task 4.

$1-P(Z \leq 4.17)=0.000015$ (or approx. 0)