Predmet: Pravděpodobnost a statistika 1

Ukol: 5. Verze: 1.

Autor: David Napravnik

Harddisk

vypocet lambdy:

$$4 = \frac{1}{\lambda}$$
$$\lambda = \frac{1}{4}$$

a)

$$F_x(x) = 1 - e^{-\lambda x}$$

 $F_x(3) = 1 - e^{-\frac{3}{4}}$

$$F_x(3) = 1 - e^{-x}$$

 $F_x(3) = 0.5276$

b)

$$F_x(x) = 1 - e^{-\lambda x}$$

$$F_x(10) = 1 - e^{-\frac{10}{4}}$$

$$1 - F_x(10) = e^{-\frac{10}{4}}$$

$$1 - F_x(10) = 0.082085$$

 $\mathbf{c})$

$$\begin{split} F_x(x) &= 1 - e^{-\lambda x} \\ F_x(10) &= 1 - e^{-\frac{10}{4}} \\ 1 - e^{-\frac{1}{4}*x} &= .1 \\ \text{po } 0.421 \text{ roku} \end{split}$$