

## Zadaci poglavlje 2 - rješenja

- 1.
- 2.
- 3.
- 4.
- 5.
6.  $w = 88, \bar{F}_T = \frac{88-t}{88} \mathbf{1}_{(0,88)}(t), \mu(t) = \frac{1}{88-t} \mathbf{1}_{(0,88)}(t), \text{var}T_{16} = 432.$
7.  $\frac{1}{1+c}$
8.  $\text{Var}T_x = \frac{(100-x)^2}{18}$
9.  $P(K = k) = \frac{1}{n(n-1)}, EK = +\infty.$
10.  $f_T = pf_A + (1-p)f_B$
11.  $f(t|33) = \frac{1}{2\sqrt{67(67-t)}} \mathbf{1}_{(0,67)}(t), ET_{33} = 44.67, P(T_{33} > 30) = 0.74312.$
12.  $\frac{\lambda(1-p)e^{-\lambda t} + \lambda'pe^{-\lambda't}}{(1-p)e^{-\lambda t} + pe^{-\lambda't}}$
13.  $8/35$
14.  $0.1$
15.  $\frac{3}{4}(1+x)^2$
16.  $0.909$
- 17.
18.  $0.234652$
19. a)  $0.9334662,$  b)  $0.9333418,$  c)  $0.9334662$
20.  $0.999544, 0.9987346, 0.001210433$
21. a)  $0.99122,$  b)  $0.00878,$  c)  $0.51765$
22. a)  $0.09517,$  b)  $0.705,$  c)  $0.0859.$