

3) NEVSEČNOST A : $\lambda_A = \frac{1}{8000} \cdot 6000 = \frac{3}{4} = 0.75$

NEVSEČNOST B : $\lambda_B = \frac{2}{30000} \cdot 6000 = \frac{2}{5} = 0.40$

~~Y_A, Y_B~~ Y_A, Y_B - POISSONOVO PORAZDELJENI

$$P\{Y_A=0\} = \frac{e^{-\lambda_A} \cdot \lambda_A^0}{0!} = e^{-0.75} = 0.4724$$

$$P\{Y_B=0\} = \frac{e^{-\lambda_B} \cdot \lambda_B^0}{0!} = e^{-0.40} = 0.6703$$

$$P\{\text{NI OKVAR}\} = P\{Y_A=0 \cap Y_B=0\} \stackrel{\text{NEODVISNOST}}{=} P\{Y_A=0\} \cdot P\{Y_B=0\} = \underline{\underline{0.3166}}$$

$$P\{Y_A=1\} = e^{-\lambda_A} \cdot \lambda_A^1 / 1! = 0.3545$$

$$P\{Y_B=1\} = e^{-\lambda_B} \cdot \lambda_B^1 / 1! = 0.2681$$

NEZDRUŽL.
NEODVISNOST

$$P\{\text{NATANENO ENA OKVARA}\} = P\{(Y_A=1 \cap Y_B=0) \cup (Y_A=0 \cap Y_B=1)\} \stackrel{\downarrow}{=} \\ = P\{Y_A=1\} \cdot P\{Y_B=0\} + P\{Y_A=0\} \cdot P\{Y_B=1\} = \underline{\underline{0.3641}}$$

DRUGI NAČIN: VSOTA DVEH POISSONOVO PORAZDELJENIH
SLUČ. SPREMENLJIVK JE TUDI POISSONOVO
PORAZDELJENA

$$Y = Y_A + Y_B \quad \lambda = \lambda_A + \lambda_B = 1.15$$

$$P\{\text{NI OKVAR}\} = P\{Y=0\} = \frac{e^{-\lambda} \lambda^0}{0!} = e^{-1.15} = \underline{\underline{0.3166}}$$

$$P\{\text{NATANENO ENA OKVARA}\} = P\{Y=1\} = \frac{e^{-\lambda} \lambda^1}{1!} = \underline{\underline{0.3641}}$$