

2) LOGARITEMSKO NORMALNA PORAZDELITEV  $Y$

$$m_y = 40$$

$$\tilde{m}_y = 38$$

IZRAČUNAJMO NAJPREJ  $\sigma_{\ln Y}$ :

$$m_y = \tilde{m}_y e^{\frac{1}{2}\sigma_{\ln Y}^2} \Rightarrow m_y / \tilde{m}_y = e^{\frac{1}{2}\sigma_{\ln Y}^2} \Rightarrow$$

$$\sigma_{\ln Y}^2 = 2 \ln(m_y / \tilde{m}_y) = 0.1026$$

$$\sigma_{\ln Y} = \underline{\underline{0.3203}}$$

$$\begin{aligned} P[Y > 2 \tilde{m}_y] &= 1 - P[Y \leq 76] = 1 - F_Y(76) = 1 - F_U\left(\frac{\ln 76 - \ln 38}{\sigma_{\ln Y}}\right) \\ &= 1 - F_U(2.1641) = 1 - 0.9848 = \underline{\underline{0.0152}} \end{aligned}$$