

$$3) \begin{array}{lll} m_1 = 15 & \bar{X}_1 = 100 & S_{x_1}^* = 10 \\ m_2 = 20 & \bar{X}_2 = 95 & S_{x_2}^* = 9 \end{array}$$

$$m_{x_1} - m_{x_2} \in \left[\bar{X}_1 - \bar{X}_2 - t_{1-\alpha/2} S^* \sqrt{\frac{1}{m_1} + \frac{1}{m_2}}, \bar{X}_1 - \bar{X}_2 + t_{1-\alpha/2} S^* \sqrt{\frac{1}{m_1} + \frac{1}{m_2}} \right]$$

$$S^{*2} = \frac{(m_1 - 1) S_{x_1}^{*2} + (m_2 - 1) S_{x_2}^{*2}}{m_1 + m_2 - 2} = 89.06$$

$$S^* = \sqrt{S^{*2}} = 9.437$$

IZ PREGLEDNICE ZA PORAZDELITEV t ($\nu = 33$), $1 - \alpha/2 = 0.95$

$$t_{1-\alpha/2} = 1.692$$

$$m_{x_1} - m_{x_2} \in [-0.454, 10.454]$$