SEI / OVRS 8.9.2006

3) INTERVAL ZAUPANJA ZA VARIANCO σ_x^2

$$\bar{X} = \frac{705 + 450 + \dots + 498}{10} = 528.8$$

$$\frac{\sum X_i^2}{m} = \frac{705^2 + 450^2 + \dots}{10} = 285270.2$$

$$S_x^{*2} = \left(\frac{\sum X_i^2}{m} - \bar{X}^2 \right) \cdot \frac{10}{9} = 6267.5$$

INTERVAL ZAUPANJA, $\alpha = 10\%$ $\nu = m - 1 = 9$

$$\chi^2_{1-\alpha/2} = 16.919 \qquad \chi^2_{\alpha/2} = 3.325$$

$$\sigma_x^2 \in \left[\frac{S_x^{*2}(m-1)}{\chi^2_{1-\alpha/2}}, \frac{S_x^{*2}(m-1)}{\chi^2_{\alpha/2}} \right]$$

$$\underline{\sigma_x^2 \in [3334, \ 16964]}$$