

total 13:00

$n = 10$ (30)

$\bar{x} = 30$

$s = 5.21$

$1 - \alpha = 0.188$ (χ^2 d.f. $n = 10$ st. variability)

$$\frac{\alpha}{2} = 0.091$$

$$P(\chi^2 > \chi^2_{\alpha/2}) = \frac{\alpha}{2} = 0.091 \Rightarrow \chi^2_{\alpha/2} = 2.9124$$

$$P(\chi^2 > \chi^2_{1-\alpha/2}) = 1 - \frac{\alpha}{2} = 0.909 \Rightarrow \chi^2_{1-\alpha/2} = 21.558$$

$$s^2 \in \left[\frac{10 \cdot 2.9124}{29.124}, \frac{10 \cdot 21.558}{21.558} \right]$$

$$s^2 \in [10.333 / 99.893]$$

$$s \in [3.228 / 9.988]$$