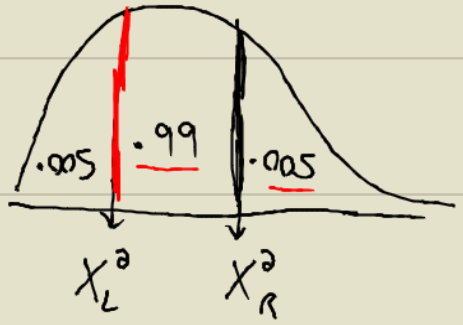
4. $n = 25$

$DF = n - 1$

$= 25 - 1$

$DF = 24$

$S = 10.1$



99% C.I. For VAR. 9.886 45.559

$$LB = \frac{(n-1)S^2}{X_R^2} = \frac{(25-1)\,10.1^2}{45.559} = 53.74$$

$$UB = \frac{(n-1)S^2}{X_L^2} = \frac{(25-1)\,10.1^2}{9.886} = 247.65$$

(53.74, 247.65)