(12) $\xi \sim N(\theta_1, \theta_2^2)$ $W = ?$

$H_0: D = \theta_2^2 = 0,1$

$H_1: D = \theta_2^2 > 0,1$

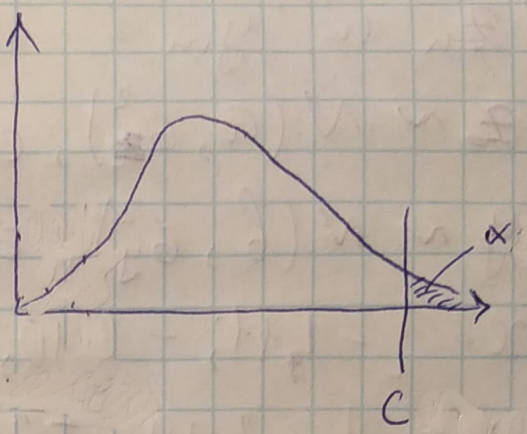
$D = 0,1$

$S^2 = 0,2$

Т. Фишера: $\frac{S^2(n-1)}{\theta_2^2} \sim \chi^2(n-1)$

$\tilde{\Delta} = \frac{S^2(n-1)}{B}$ $\quad$ Кр. : $\Delta \geq C$

$$\tilde{\Delta} = \frac{0,2 \cdot 24}{0,1} = 48$$



$$P(\vec{x}_n \in G_{кр.} \mid H_0) = \alpha$$

$$C : \int_{C_2}^{\infty} q_{\chi^2(24)} dt = 0,05 \qquad \alpha = 0,05$$

$$\underline{C = 37}$$

$$W = P(\Delta \geq C \mid H_1) = P\left(\frac{S^2(n-1)}{\sigma} \geq C \mid H_1\right) =$$

$$= P\left(\frac{S^2(n-1)}{\Theta_2^2} \geq \frac{C \cdot \sigma}{\Theta_2^2} \mid H_1\right)$$