$$P\left(\frac{-t S_m}{\sqrt{n-1}} < \bar{X}_n - m < \frac{t S_n}{\sqrt{n-1}}\right) = 1-\alpha$$

$$P\left(\bar{X}_n - \frac{t S_n}{\sqrt{n-1}} < m < \bar{X}_n + \frac{t S_n}{\sqrt{n-1}}\right) = 1-\alpha$$

$$\begin{cases} S_n = 5 \\ \bar{x}_n = 64 \\ n = 20 \end{cases}$$

$t_{5\%} = 2,1$

$t_{1\%} = 2,9$

$$64 - \frac{2,1 \times 5}{\sqrt{20-1}} = 61,59$$

$$64 - \frac{2,1 \times 5}{\sqrt{20-1}} = 66,4$$

$IC_{5\%} = [61,59 ; 66,4]$

$IC_{1\%} = [60,67 ; 67,32]$