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

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

$$\begin{cases} S_m = 5 \\ \bar{x}_n = 64 \\ m = 20 \end{cases}$$

$$t_{5\%} = 2,1$$
$$t_{1\%} = 2,9$$

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

$$64 - \frac{21 \times 5}{\sqrt{2c-1}} = 66,4$$

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

$$IC_{1\%} = [60,7,\ 67,3]$$