Dik:

n1 = 10 n2 = 10 → rumus t

α = 0,05

$S_1 = 6442{,}15$ $S_2 = 11086{,}29$

$\bar{X}_1 = 16329{,}9$ $\bar{X}_2 = 30432{,}5$

Rumusan Hipotesis:

Ho : μ1 ≤ μ2

Ha : μ1 > μ2

Satu arah kanan

Tingkat signifikan:

$t_{tab} = \alpha; (n1 + n2 - 2) = 0{,}05; (18) \rightarrow 1{,}734$

$$S_p^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} = \frac{(9)6442{,}15^2 + (9)11086{,}29^2}{18}$$

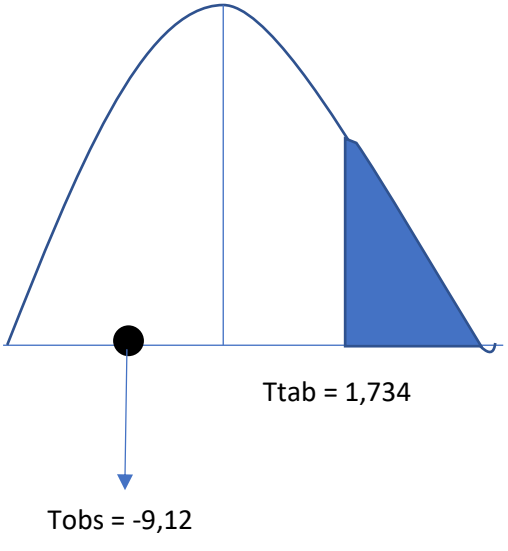
$$= \frac{373.511.669{,}58 + 1.106.152.433{,}64}{18} = \frac{1.479.664.103{,}22}{18}$$

$$= 82.203.561{,}29$$

$$t_{obs} = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{S_p^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$= \frac{(-14102{,}6) - (0)}{\sqrt{82.203.561{,}29\left(\frac{1}{10} + \frac{1}{10}\right)}}$$

$$= \frac{-14102{,}6}{16.440.712{,}25} = -8{,}57$$



Kesimpulan, Ho diterima dan Ha ditolak. Maka dari itu tidak ada perbedaan rata-rata biaya Pendidikan pada keluarga yang berpendapatan $80.000 dan $120.000