b)

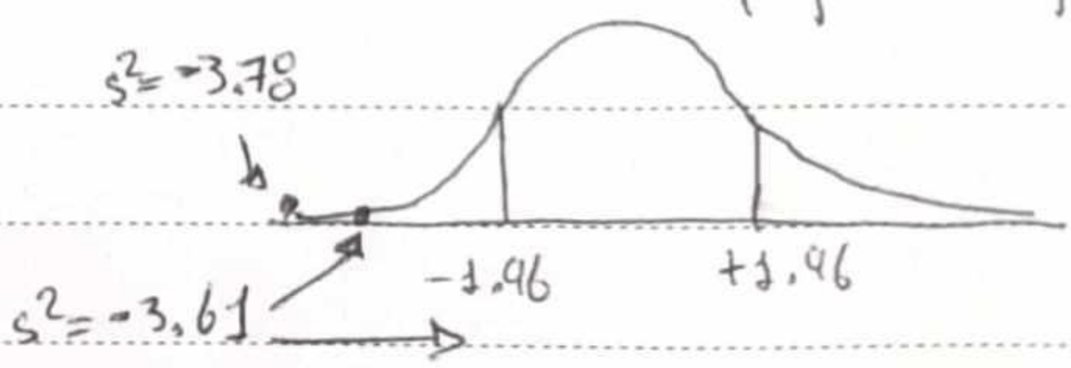
	Decision	
	Decisi Difference	No Difference
H_0	Type 1 error	No error
H_1	no error	Type 2 error

When we decrease the sample size of one side (scalpish) we can be in a way of commiting an Type II error

So as marqued here: $SE(\bar{x}_A - \bar{x}_B) = \sqrt{\frac{8.2}{40} + \frac{8.2}{110}}$

Power = 1 - p(Type 2 error)

$SE(\bar{x}_A - \bar{x}_B) = 0.5286$, if we decrease this number (sample size) we got another $SE(\bar{x}_A - \bar{x}_B)$ and this one tends to the ↓ to 80 right increasing the probability of ~~reject~~ not rejecting Ho



So. in order to reduce the chance of a Type 2 error without increasing the chance of Type 1 error I should increase N.