a) $H_0: \mu \leq 8$

$H_1: \mu > 8$

Caso II

$H_0 = \mu = 8$

$H_1 = \mu > 8$

$\bar{X} = 8.08$

$\mu_0 = 8$

$S = 2.15$

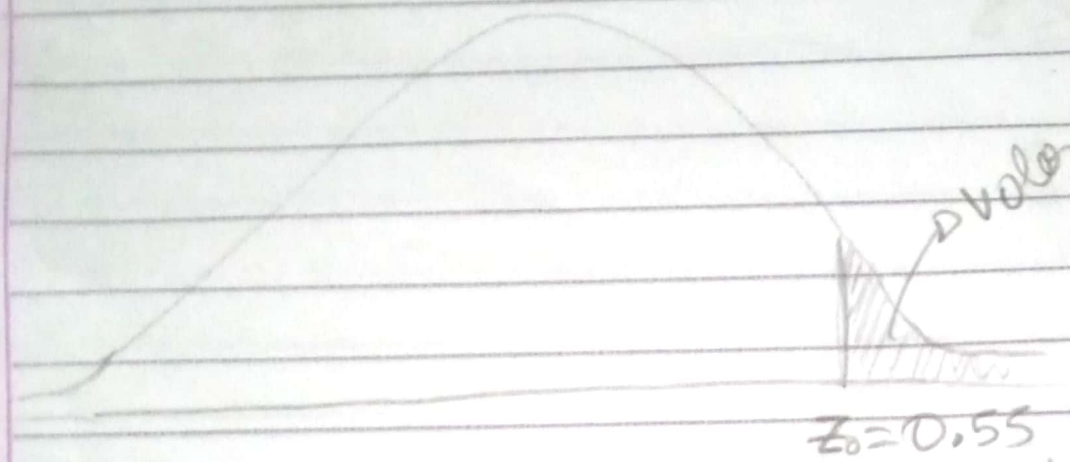
$n = 225$

$\alpha = 0,05$

$$z_0 = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}}$$

$$z_0 = \frac{8.08 - 8}{\frac{2.15}{\sqrt{225}}}$$

$$z_0 = 0.55$$



$P(Z > 0.55) = 0,2912 = Valor\ p$

$C.R. \alpha > Valor\ p$

$0,05 > 0,2912$ (NO)

NO se rechaza Ho, con un N.C del 95% afirmamos q ue no es posible rechazar que

$\mu \leq 8$

b)

C.R

Valor $p < \alpha$

$P(Z > Z_0) < 0.05$

$\Rightarrow Z_0 < 1.645$

$$\frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n-1}}} < 1.645$$

$$\frac{\bar{X} - 8}{\frac{2.015}{\sqrt{225}}} < 1.645$$

$$\bar{X} < 8.23$$

c) $\alpha = P($ Probabilidad de Rechazar Ho Siendo verdadera $)$

$\alpha = 0.05$

$Z_{0.025} = 1.96$

$Z_0 = 0.55 = \frac{\bar{X}_0 - 8}{}$