Ejercicio de prueba de hipótesis

Ejercicio Resuelto #1

$$z = \frac{\bar{x} - \mu}{\frac{a}{\sqrt{n}}} = 6.32$$

$z_y = 6.32$

$H_0 = \mu = 180$

$H_a = \mu 7 = 180$

$\mu = 180$

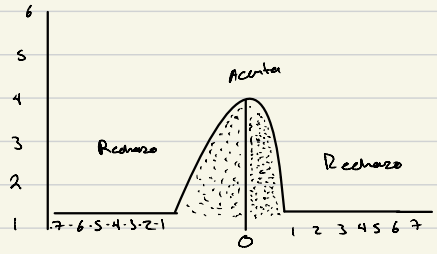
$\bar{x} = 173.47$

$a = 4$

$n = 15$

$\alpha = 5\%$

(0.05)



Se rechaza la hipotesis alternativa y se acepta la hipotesis nula.

Ejercicio resuelto #2

$$z = \frac{\bar{x} - \mu}{\frac{a}{\sqrt{n}}}$$

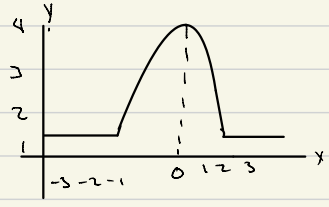
$\mu = 175$

$\bar{x} = 173.47$

$a = 4$

$n = 15$

$z = -1.5$



Se acepta la hipotesis alternativa y se rechaza la nula.

Ejercicio Resuelto # 3

$\mu = 162$

$\bar{x} = 161.06$

$a = 5.3$

$n = 16$

$z = -0.70$

$$z = \frac{161.06 - 162}{\frac{5.3}{\sqrt{16}}}$$

Se hacepta la hipotesis alternativa y se rechasa la nula

Ejercicio Resuelto #4

$\mu = 192$

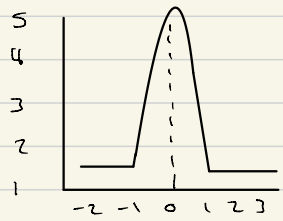
$\bar{X} = 41$

$a = 5.8$

$n = 21$

$z = -0.55$

$Zc = -194.30$



Se rechaza la nula y la negra te la cores

Ejercicio Resuelto #5

$\bar{X} = 0.333$

$P = 0.4$

$n = 200$

$$z = \frac{0.4 - 0.33}{\frac{\sqrt{0.33\,(1-0.33)}}{200}}$$

$0.4 - 0.33 = 0.07$

$1 - 0.33 = 0.67$

$0.33 \times 0.67 = 0.2211 \div 200 = \sqrt{0.0011055}$ (Raiz)

$\sqrt{0.0011055} = 0.03324$

$$\frac{0.07}{0.03324} = 2.1058$$