

# Assignment-4

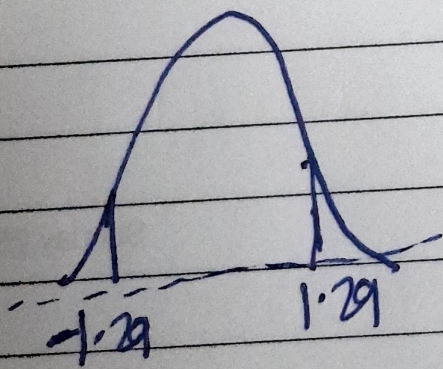
In a quant test of CAT exam, the population standard deviation is known to be 100. A sample of 25 test takers has a mean of 520. Construct a 80% CI about mean

1:  $\sigma = 100, n = 25, \bar{x} = 520$   
 $CI = 80\%$   
 $\alpha = 1 - 0.8 = 0.2$

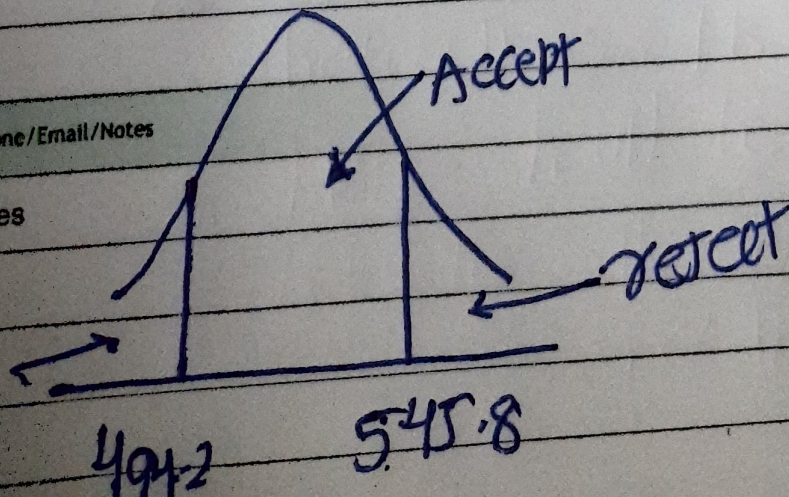
$$520 \pm Z_{0.1} \times \frac{100}{\sqrt{25}}$$

$$Z_{0.1} = 1.29$$

$$\begin{aligned} \text{upper fence} &= 520 + 1.29 \times 20 \\ &= 545.8 \end{aligned}$$



$$\begin{aligned} \text{lower fence} &= 520 - 1.29 \times 20 \\ &= 494.2 \end{aligned}$$



SEPTEMBER

M		3	10	17
T		4	11	18
W		5	12	19
T		6	13	20
F		7	14	21
S	1	8	15	22
S	2	9	16	23