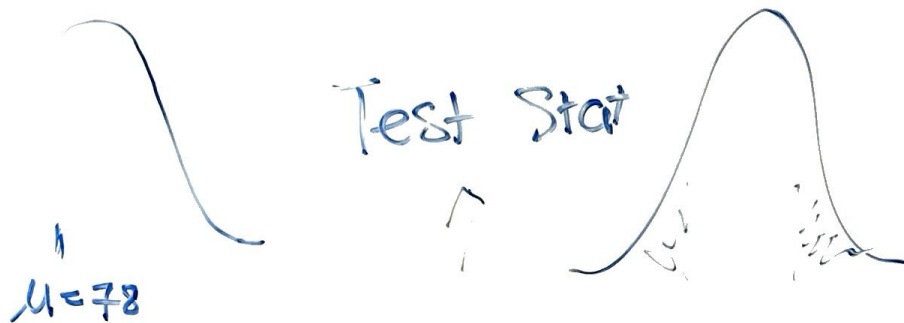


Frequentist

$$H_0: \mu = 78 \quad H_A: \mu \neq 78$$



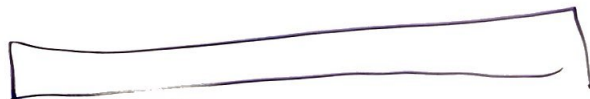
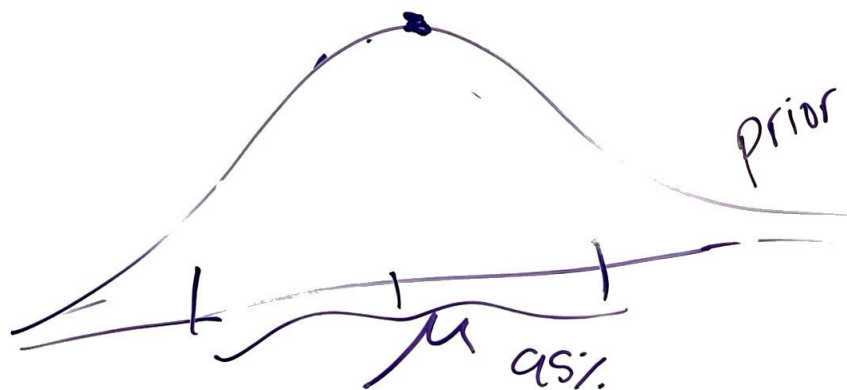
$P(x)$

~~$p(x)$~~

$P(\text{data} | \text{model})$

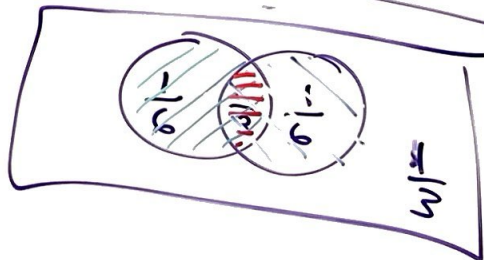
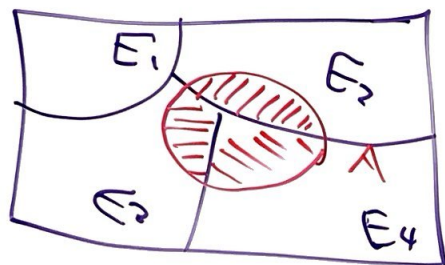
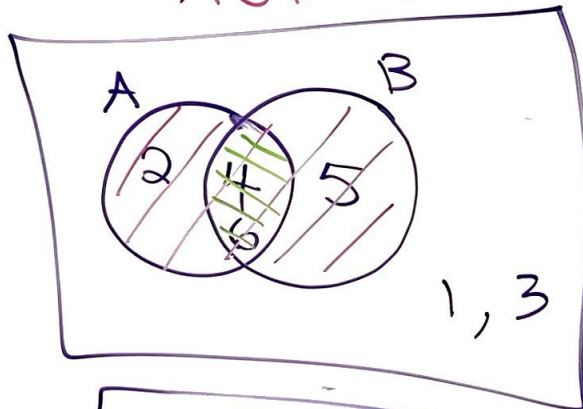
CI μ

$$\bar{x} \pm ME$$



$P(\text{model}|\text{data})$

$A \cup B$ $P(A \cap B)$



D = be the event that the person has the disease

$+$ = be the event that they tested positive

Person have disease?

		Test Positive?	
		Yes	No
Yes	True Positive 0.99	False Negatives	
No	False Positive 0.02	True Negative	

$$P(D) = 0.005$$

$$P(+|\bar{D}) = 0.02$$

$$P(+|D) = 0.99$$

$$P(D|+) = ?$$

Bayes Thrm

$$P(D|+) = \frac{P(+|D) \cdot P(D)}{P(+)}$$

