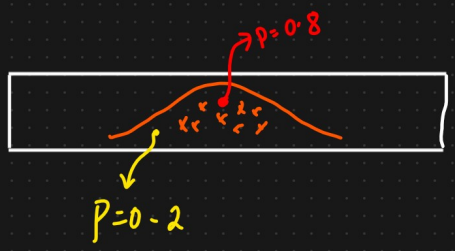
Pvalue

The p value is a number, calculated from a statistical test, that describes how likely you are to have found a particular set of observations if the null hypothesis were true. P values are used in hypothesis testing to help decide whether to reject the null hypothesis.



Out of 100 touches in this Keg the probability of touching in this region 20

Hypothesis Testing

Exp = Coin is fair or Not {100 Tosses}

{H, T}

① Null Hypothesis H_0 : Coin is fair

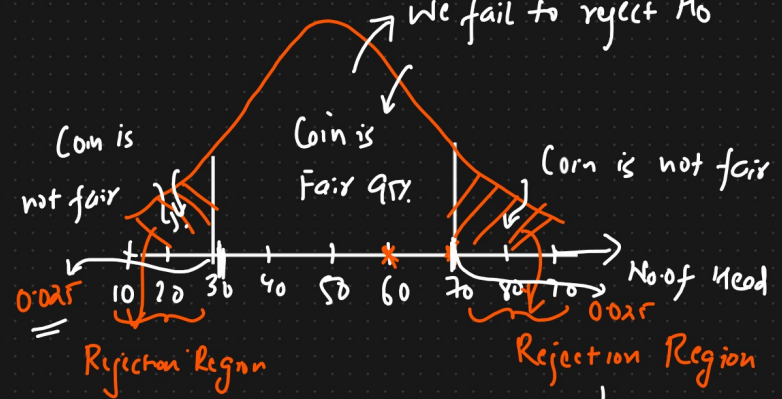
② Alternate Hypothesis H_1 – Coin is not fair

$P(H) = 0.5$ $P(T) = 0.5$

$P(H) = 0.6$ $P(T) = 0.4$

$\rightarrow P(H) = 0.7$ $P(T) = 0.3$

③ Experiment



We Reject the Null Hypothesis

We reject the Null Hypothesis

Significance value : $\alpha = 0.05$ C.I = 1 − 0.05 = 0.95

Conclusion

P : 0.01 < Significance

We reject the Null Hypothesis

C) c

We fail to reject Null Hypothesis