

EE325 Section 1: Online Quiz#1

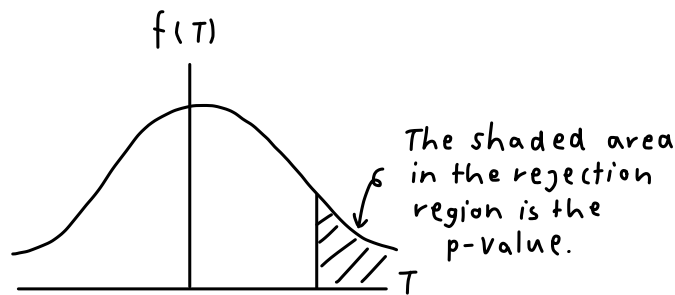
**** Required only for those who did not do the in-class quiz on Mar 12th, 2020.**

** Due 12noon on Friday 13rd March, 2020. Please submit via Moodle.

1) Why do we have to calculate the t-statistics when doing hypothesis test?

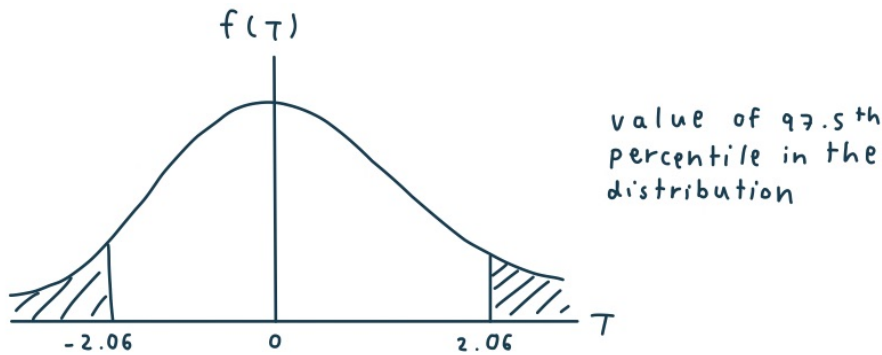
We calculate t-statistic to know the critical value, so that we can know whether this value falls into the rejection region or not. If yes, we reject H_0 and can conclude that _____. (depends on the question. $T = \frac{\hat{\beta}_2 - \beta_2}{s.e.(\hat{\beta}_2)}$)

2) What is the p-value? Draw a graph to accompany your explanation.



3) What is a 95% confidence interval? How do we calculate it?

$$\alpha = 95\% = 0.95$$



$$\text{The } 95\% \text{ CI for } \hat{\beta}_2 = [\hat{\beta}_2 - 2.06 \cdot s.e.(\hat{\beta}_2), \hat{\beta}_2 + 2.06 \cdot s.e.(\hat{\beta}_2)]$$

===== END OF THE QUIZ =====