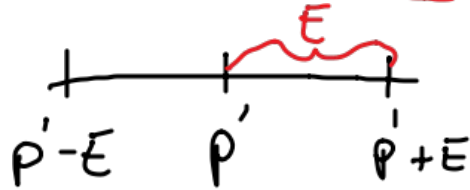


Confidence Intervals

proportion
Binomial
approx Normal
 $np > 5 + nq > 5$

$z \leftrightarrow CL$

$$E = z \cdot \sqrt{\frac{p' \cdot q'}{n}}$$



Mean

most common

σ unknown
t-distribution

$t \leftrightarrow CL$
 $df = n - 1$

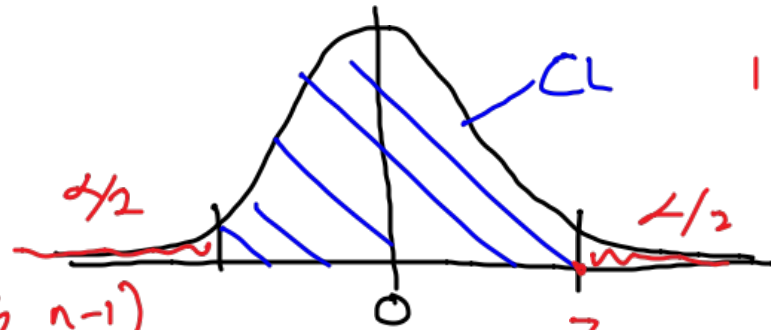
$$E = \frac{t \cdot s}{\sqrt{n}}$$



rare
 σ known

z

$$E = z \cdot \frac{\sigma}{\sqrt{n}}$$



$$1 - CL = \alpha$$

$$t = t.\text{inv}(\alpha/2, n-1)$$

$$z = \text{norm.inv}(\alpha/2, 0, 1)$$