Goal: Based on some sample decide on statement on population parameters.

① State H_0 and H_1
not-equal-condition → two-sided test
smaller | larger-condition → one-sided test

③ Derive $p(t)$ under H_0

④ Define significance level $\alpha = p(\bullet)$

$p(t)$

rejection regions

$\alpha / 2$ (two sided test illustrated)

t_{obs}

② define a stest statistic

t

⑤ Accept H_0 if t_{obs} not in rejection region(s), i. e. if $p(t > t_{obs}) > \alpha / 2$ and $p(t < t_{obs}) > \alpha / 2$