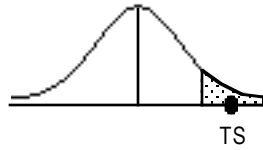


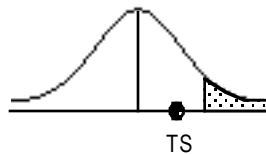
Conclusions for a Hypothesis Test

Traditional Method

Reject H_0 if the test statistic falls in the critical region.



Fail to Reject H_0 if the test statistic does NOT fall in the critical region.



P-Value Method

Reject H_0 if the P-Value is $\leq \alpha$ (alpha, the significance level).

$$P - Value = 0.03 \quad \alpha = 0.05$$

Fail to Reject H_0 if the P-Value is $> \alpha$ (alpha, the significance level).

$$P - Value = 0.06 \quad \alpha = 0.05$$

One Sentence Statement

see p. 377 Flow Chart

OR

If the claim is H_0 (null hypothesis) then the key word is “...**reject**”

- If we Reject H_0 then we say: “There is sufficient evidence to **reject** the claim that...”
- If we Fail to Reject H_0 then we say: “There is not sufficient evidence to **reject** the claim that...”

If the claim is H_1 (alternative hypothesis) then the key word is “...**support**”

- If we Reject H_0 then we prove H_1 and say: “There is sufficient evidence to **support** the claim that ...”
- If we Fail to Reject H_0 then we fail to prove H_1 and say: “There is not sufficient to **support** the claim that ...”