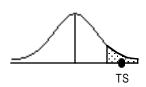
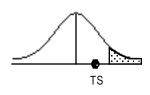
Conclusions for a Hypothesis Test

Traditional Method

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



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



P-Value Method

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

P - Value = 0.03 α

 $\alpha = 0.05$

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

P-Value = 0.06

 $\alpha = 0.05$

One Sentence Statement

see p. 377 Flow Chart

OR

If the claim is Ho (null hypothesis) then the key word is "...reject"

- If we Reject Ho then we say: "There is sufficient evidence to reject the claim that..."
- If we Fail to Reject Ho then we say: "There is not sufficient evidence to reject the claim that..."

If the claim is H₁ (alternative hypothesis) then the key word is "...support"

- If we Reject Ho then we prove H1 and say: "There is sufficient evidence to **support** the claim that ..."
- If we Fail to Reject Ho then we fail to prove H1 and say: "There is not sufficient to support the claim that ..."