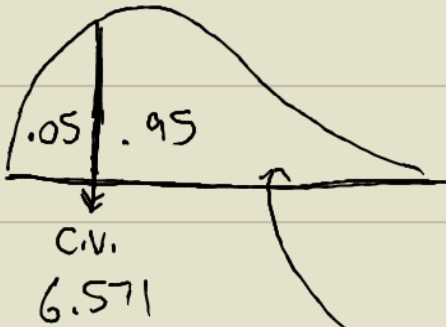


1. " $<$ "  
 CLAIM: LOWER THAN 2.1  
 $H_0: \sigma \geq 2.1$   
 $H_1: \sigma < 2.1$

$\mu = 20$   
 $\sigma = 2.1$   
 $n = 15$   
 $S = 1.8$   
 $\alpha = 0.05$

$H_0: \leq, \geq, =$   
 $H_1: <, >, \neq$



DF = n - 1  
 DF = 15 - 1  
 DF = 14

$$T.S. = \frac{(n-1)S^2}{\sigma^2}$$

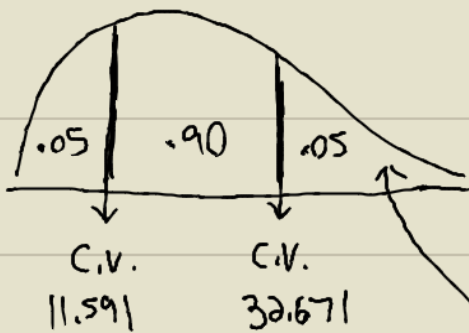
$$= \frac{(15-1)1.8^2}{2.1^2}$$

$$= 10.29$$

CONCLUSION  
 ACCEPT  $H_0$   
 REJECT  $H_1$   
 REJECT CLAIM

2. CLAIM: DIFF THAN 1.3  
 $H_0: \sigma = 1.3$   
 $H_1: \sigma \neq 1.3$

$\mu = 19$   
 $\sigma = 1.3$   
 $n = 22$   
 $S = 1.9$



$\alpha = .10$   
 DF = n - 1  
 DF = 21

$$T.S. = \frac{(n-1)S^2}{\sigma^2}$$

$$= \frac{(22-1)1.9^2}{1.3^2}$$

$$= 44.86$$

CONCLUSION: REJECT  $H_0$   
 ACCEPT  $H_1$   
 ACCEPT CLAIM