

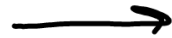
8-5

9. $t = .430$

$n = 25$

$df = 24$

$df \downarrow$
24



.10

↑
1.318

pvalue > .10

11. $n = 9$
 $df = 8$

≠ 2 tailed

$t = -1.905$

$df \downarrow$
8

.05 .10

↑
2.306

↑
1.860

pvalue

$.05 < p\text{-value} < .10$

8-6 Hypothesis Testing

Standard Deviation

Variance

χ^2

n sample size

s sample standard deviation

s^2 sample variance

σ population standard deviation

σ^2 population variance

$$\chi^2 = \frac{(n-1)s^2}{\sigma^2}$$

df $n-1$

9. p. 118

$$\sigma = .0230$$

$$n = 31$$

$$s = .03910$$

$$\alpha = .05$$

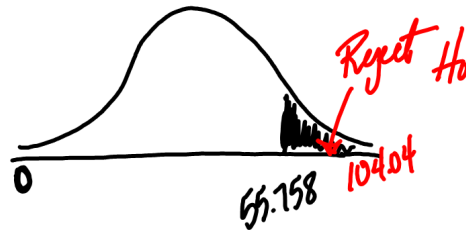
$$H_0: \sigma = .0230$$

$$H_1: \sigma > .0230$$

$$\chi^2 = \frac{(n-1)s^2}{\sigma^2}$$

$$\chi^2 = \frac{(31-1)(.03910)^2}{(.0230)^2}$$

$$\chi^2 = 104.04$$



p-value
 $.0000 \leq .05$
 Reject H_0