

X	$X - \bar{X}$	$(X - \bar{X})^2$
16	$16 - 17 = -1$	$(-1)^2 = 1$
16.1	$16.1 - 17 = -.9$	$(-.9)^2 = .81$
17	$17 - 17 = 0$	$0^2 = 0$
17.5	$17.5 - 17 = 0.5$	$(0.5)^2 = 0.25$
17.2	$17.2 - 17 = 0.2$	$(0.2)^2 = 0.04$
17	$17 - 17 = 0$	$0^2 = 0$
17.5	$17.5 - 17 = 0.5$	$0.5^2 = 0.25$
16.3	$16.3 - 17 = -0.7$	$(-0.7)^2 = 0.49$
16.7	$16.7 - 17 = -0.3$	$(-0.3)^2 = 0.09$
<u>18.7</u>	$18.7 - 17 = 1.7$	$1.7^2 = 2.89$
<u>170</u>		<u>5.82</u>

$$\bar{X} = \frac{\sum X}{n} = \frac{170}{10} = 17$$

$$S = \sqrt{\frac{\sum (X - \bar{X})^2}{n-1}} = \sqrt{\frac{5.82}{10-1}} = 0.8041558721$$

$\mu = 16.9$
 $n = 10$
 $\bar{X} = 17$
 $S = 0.8041558721$
 $\alpha = 0.10$
 $DF = 9$

CLAIM: MEAN $>$ 16.9
 $H_0: \mu \leq 16.9$
 $H_1: \mu > 16.9$

$$t_0 = \frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n}}}$$

$$t_0 = \frac{(17 - 16.9)}{\left(\frac{0.8041558721}{\sqrt{10}}\right)}$$

$t_0 = 0.39$
 Look up 0.39 with DF = 9
 $P > 0.25$
 CONC: ACCEPT H_0
 REJECT H_1
 REJECT CLAIM