

$$\sigma = \sqrt{\frac{SS}{n}}$$

$$SD = \sqrt{\frac{SS}{n-1}} = \sqrt{\frac{SS}{df}} = \sqrt{\frac{\sum (x - \bar{x})^2}{df}}$$

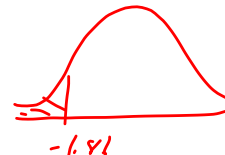
$$1) H_0: \mu < \mu(8)$$

$$H_1: \mu = \mu$$

2) t-distribution.

$$\mu = 8, SE = ?$$

$$3) t(8)_{c.o.} = -1.86$$



$$\alpha = .05, 1 - t_{c.o.}$$

$$df = 9 - 1 = 8$$

$$4) t = \frac{6.67 - 8}{.3} = -4.43$$

$$SD = \sqrt{\frac{6.5}{8}} = .90$$

$$SE = \frac{.90}{\sqrt{9}} = .3$$

$$5) -4.43 < -1.86 \therefore \text{Reject } H_0$$

$$t(8) = -4.43, p < .05, d = -1.48$$

$$t = \frac{M - \mu}{SE} \quad SE = \sqrt{\frac{SD^2}{n}}$$

$$SE = \sqrt{\frac{\frac{\sum (x - M)^2}{n-1}}{n}} = \frac{SD}{\sqrt{n}}$$

$$d = \frac{M - \mu}{SD}$$

$$SD = \sqrt{\frac{SS}{df}}$$

1

2

3

$M=2$