

One Sample T-Tests Solutions

- 1) t-critical = 1.76
t-observed = 1.55
Fail to reject the null hypothesis and conclude that our sample does not have higher compliance scores. $t(14) = 1.55$, $p > .05$.
Effect size $d = .40$
95% CI = 13.51 to 17.03

- 2) t-critical = -1.76
t-observed = -3.08
Reject the null hypothesis and conclude that our sample of race car drivers do have significantly lower anxiety scores. $t(14) = -3.08$, $p < .05$.
Effect size $d = .79$
95% CI = 2.5 to 4.56

- 3) t-critical = (+/-) 2.31
t-observed = 1.47
Fail to reject the null hypothesis and conclude that the average age for drinking at School A has not changed. $t(8) = 1.47$, $p > .05$.
Effect size $d = .49$
95% CI = 14.68 to 16.44
 $\delta = 1.47 \rightarrow \text{Power} = .29$, $\beta = 1 - .29 = .71$