

One Sample Z-test Answers

1. Z-critical= (+/-) 1.96
Z-observed= 2.71
Reject the null hypothesis and conclude that the sample students who listen to music while taking a test do significantly better than the population of students who do not listen to music while taking a test, $z = 2.71$, $p < .05$.
Effect size $d = .39$
95% CI= 51.28-57.98
2. Z-critical=(+/-) 1.96
Z-observed= -1.43
Fail to reject the null hypothesis and conclude that the social skills have not changed significantly, $z = -1.43$, $p > .05$.
Effect size $d = .14$
99% CI= 64.4-78.84
3. Z-critical= -1.65
Z-observed= -2.47
Reject the null hypothesis and conclude that those with anxiety perform significantly lower on the anagram task, $z = -2.47$, $p < .05$.
Effect size $d = .66$
95% CI= 21.26-25.46