Answer on Question#37873 – Math – Statistic and Probability

Question.

The one sample t statistic from a sample of n=42 observations for two sided test of for testing:

h0:μ = 81

h1:μ ≠ 81

has the value Z = 1.12. what is the P value of this test statistic?

Solution.

The p-value = P(Z > |z|) = P(Z < -1.12) - P(Z > 1.12) = 2 * P(Z < -1.12) = 0.2627

Formula used: $P(Z \leq z) = \int_{-\infty}^{Z} \frac{1}{\sqrt{2\pi}} e^{-\frac{u^2}{2}} du.$