How to Find the T Critical Value on a TI-84 Calculator: A Step-by-Step Guide

Authored by

stats writer

March 12, 2026

To find the T critical value on a TI-84 calculator, follow these steps:

1. Turn on your TI-84 calculator and access the "DISTR" menu by pressing the "2ND" and "VARS" buttons.

2. Scroll down to the "T" option using the arrow keys and press "ENTER."

3. Enter the degrees of freedom (df) for your T distribution. This value can usually be found in the problem you are trying to solve.

4. Decide on the confidence level you need, such as 90% or 95%. To find the T critical value for a confidence level of 90%, enter "0.90" and press "ENTER."

5. The T critical value will be displayed on the screen. If you need to find the T critical value for a different confidence level, simply repeat the steps and enter the new confidence level.

Knowing how to find the T critical value on a TI-84 calculator is useful for statistical analysis and hypothesis testing. It allows you to quickly and accurately determine the cutoff point for a T distribution, making it an essential tool for any statistical analysis.

Find the T Critical Value on a TI-84 Calculator

When you conduct a t-test, you will get a test statistic as a result. To determine if the results of the t-test are statistically significant, you can compare the test statistic to a T critical value. If the absolute value of the test statistic is greater than the T critical value, then the results of the test are statistically significant.

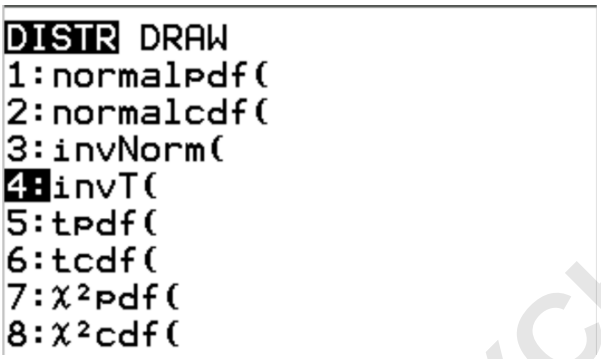
To find the T critical value on a TI-84 calculator, we can use the following function:

invT(probability, v)

where:

probability: the significance levelv: the degrees of freedom

You can access this function on a TI-84 calculator by pressing 2nd and then pressing vars. This will take you to a DISTR screen where you can then use invT():

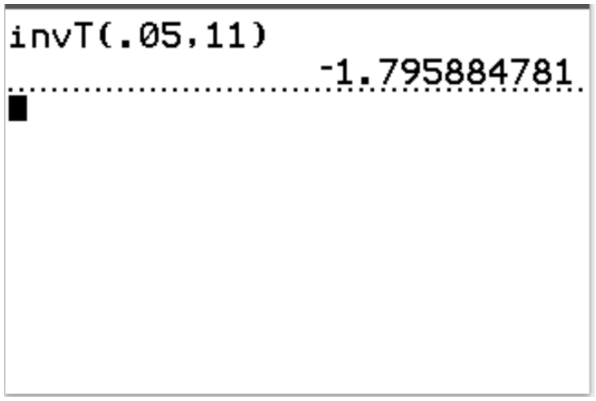


This tutorial shares several examples of how to use the invT() function to find T critical values on a TI-84 calculator.

Example 1: T Critical Value for a Left-Tailed Test

Question: Find the T critical value for a left-tailed test with a significance level of 0.05 and degrees of freedom = 11.

Answer: invT(.05, 11) = -1.7959

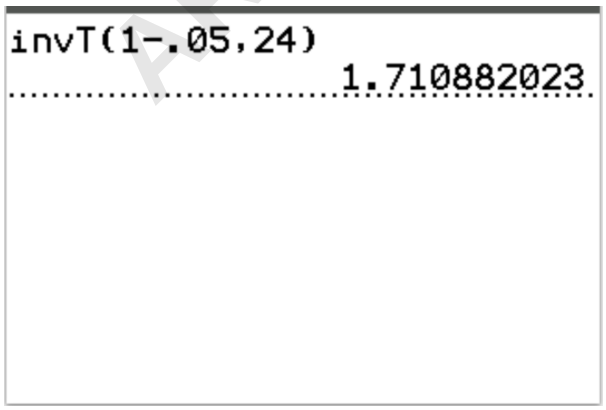


Interpretation: If the test statistic of the t-test is less than -1.7959, then the results of the test are statistically significant at α = 0.05.

Example 2: T Critical Value for a Right-Tailed Test

Question: Find the T critical value for a right-tailed test with a significance level of 0.05 and degrees of freedom = 24.

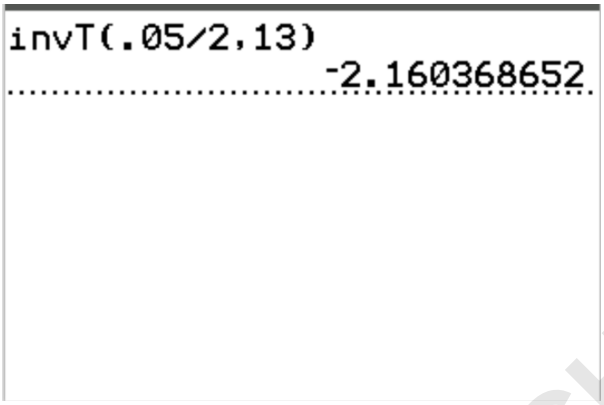
Answer: invT(1-.05, 24) = 1.71088



Example 3: T Critical Value for a Two-Tailed Test

Question: Find the T critical value for a two-tailed test with a significance level of 0.05 and degrees of freedom = 13.

Answer: invT(.05/2, 13) = -2.1604, 2.1604



Interpretation: Since this is a two=tailed test, we actually have two critical values: -2.1604 and 2.1604. If the test statistic of the t-test is less than -2.1604 or greater than 2.1604, then the results of the test are statistically significant at α = 0.05.