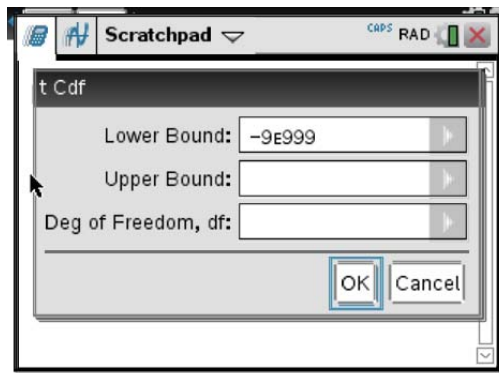


21. Computing P-values from t distributions on the calculator

You can use the $tCDF$ command on the TI-Nspire to calculate areas under a t distribution curve. The syntax is $tCDF(\text{lower bound}, \text{upper bound}, \text{df})$. To use this command:

- Press $\left(\frac{\square}{\square}\right)$ (or $\left(\frac{\square}{\square}\right)$ on **A**) to insert a *Calculator Scratchpad*.
- Press $\left(\frac{\square}{\square}\right)$ \rightarrow *Statistics* \rightarrow *Distributions* \rightarrow *t Cdf*.
- A dialogue box will appear in which you will enter your lower and upper bound and degrees of freedom.



Let's use the $tCDF$ command to compute the P -values from the examples on pages 586 and 589.

- *Better batteries*: To find $P(t \geq 1.55)$, use Lower Bound: 1.55, Upper Bound: 10000, and $df: 14$.
- *Two-sided test*: To find the P -value for the two-sided test with $df = 36$ and $t = -3.17$, execute the command $2 \cdot tCDF(-1000, -3.17, 36)$.

