## HOW TO PROGRAM INVT INTO TI-83/TI-83 PLUS CALCULATOR

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PROGRAM: INVT

:Input "AREA LEFT: ",A

:Input "DF: ",D

:1→S

:If A<.5

:Then

:-1→S

:End

:abs(2*A-1)→A

:TInterval 0,√(D+1),(D+1),A

:Disp upper*S

:
```

Press the PRGM key, then NEW. Name it INVT.

Input is found in PRGM, I/O, option 1: Input

<u>All letters, spaces, quotation marks, and colons</u> are found using the ALPHA key, and finding what you need in green. (The space key is above 0. Quotation marks are above +. The colon is above the decimal point.)

<u>Arrow key</u> is STO $\rightarrow$ 

< is found in CATALOG (scroll up to find it, it's near the bottom) OR 2nd, MATH (to get to TEST), option 5: <

Then is in PRGM, CTL, 2

End is in PRGM, CTL, 7

abs( is in CATALOG or MATH, NUM, 1

**<u>TInterval</u>** is found in STAT, TESTS, 8

Disp is found in PRGM, I/O, 3. upper is in VARS, 5: Statistics, TEST, scroll up... I: upper

Press enter again and leave last line blank, then 2nd, MODE (for QUIT)

You're done!

To run the program, press PRGM, EXEC 1: INVT, press enter

Press enter again, then put in the area to the left, press enter.

Enter in degrees of freedom, or df.

It will calculate your t-score for you!

\*Note: If you make any mistakes at any point, just go back into PRGM, EDIT, and keep going where you left off.

## Example:

AREA LEFT: .98 ← for 96% confidence level. There is .02 in the left tail, so we must add it to .96.

DF 10 ← if n=11, df = 11 - 1 = 10

The t-score is 2.35931462

YouTube link:

http://www.youtube.com/watch?v=5Ft5eZVJtPk