Unit 1: Program Basics | **Skill Builder 2: Arguments and Expressions**

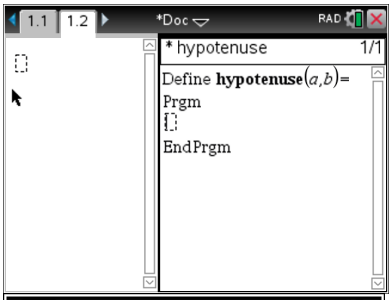
In this second lesson for Unit 1, you will learn about sending arguments into a program and displaying results of expressions.

Objectives:

- Use arguments in a program
- Use expressions in *Disp* statements

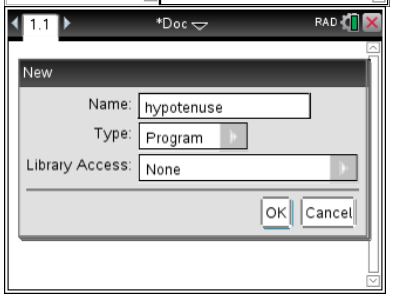
Why does a program need parentheses?

The parentheses after a program name are always required and allow a program to accept arguments. There are two forms of the arguments: the formal arguments which are always variables and the actual arguments which are values, variables, or expressions that produce a value.

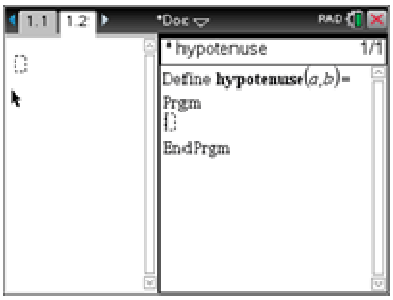


Let's write a program that computes the hypotenuse of a right triangle.

First, add a Calculator app on a new page and start a new program by selecting:
Menu> Functions and Programs> Program Editor> New



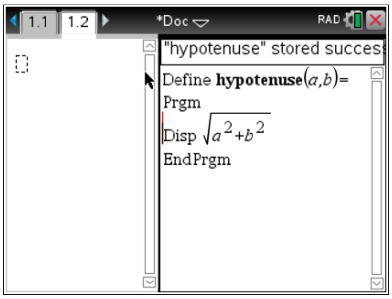
Name the program **hypotenuse** and select [enter]
Inside the parentheses after the program name, type the formal arguments **a,b** then move your cursor into the dotted box.



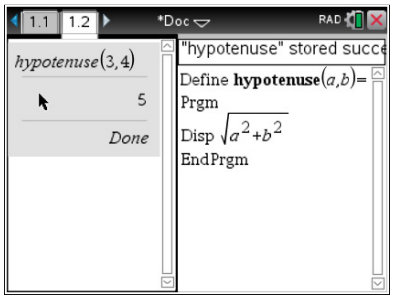
The Code

In this program, we use one statement to display the value of the hypotenuse of a right triangle whose leg lengths are passed as arguments to the program.

Disp √(a^2 + b^2)



When the code has been entered, 'Check Syntax & Store' the program by selecting **menu> Check Syntax & Store> Check Syntax & Store** (or use the shortcut **ctrl-B** on the handheld.)



Run the program

Now, switch to the Calculator app and type the name of the program, a left parenthesis and two values separated by a comma (inside the two parentheses provided) and select [enter]. Be sure to use values for which you know the answer to test that the program is working properly!

You can also use expressions in place of numbers, such as:

hypotenuse(2*7, 9-5)

Save your document to save the program.