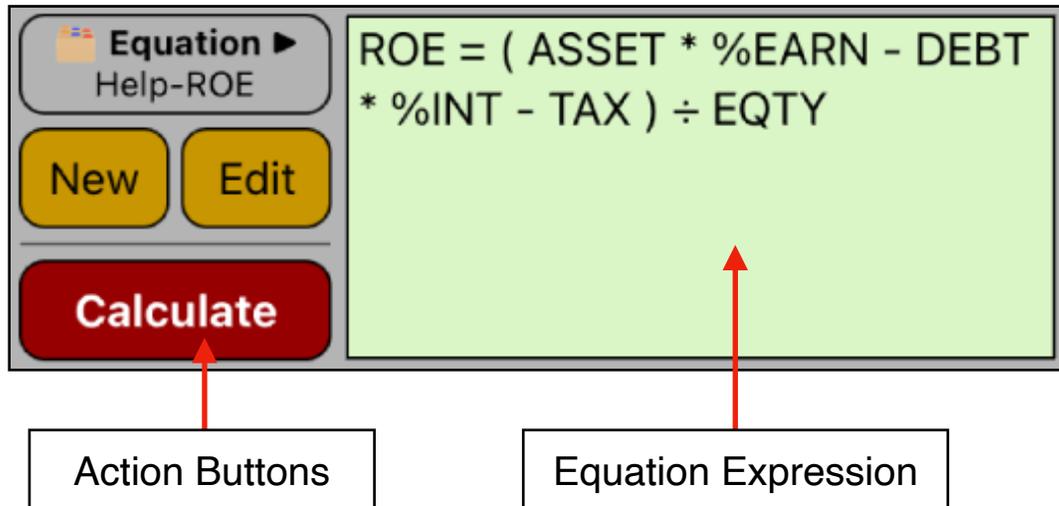# Equation Solver Worksheet

The calculator has a powerful Equation Solver worksheet to calculate and edit equations that you enter in the "**Solver Equation Editor**" view.

The Solver menu has two areas: the action buttons and the equation area with the current equation name and its mathematical expression.

Solver Menu Actions	
[📇 Equation ▶]	Shows a menu to load a previously saved equation.
[New]	Opens the "**Solver Equation Editor**" to create a new equation.
[Edit]	Shows the "**Solver Equation Editor**" to edit the current equation.
[Calculate]	Creates a menu with all the variables of the current equation. Then any variable can be calculated using the values stored in the others.

To create an Equation, see the "**Solver Equation Editor**" document to learn all about entering algebraic expressions and functions. Once an equation text is entered, the Solver check the syntax and identify the variables that the equation has.

Example: Return on Equity

Find the ROE of a small firm with $2,000 in assets. The assets earned 10% while its debt cost it 8%. The assets were financed using $500 of common equity and $1,500 of debt. The firm paid no taxes.

The Formula is: **ROE = (ASSET * %EARN - DEBT * %INT - TAX) ÷ EQTY**

Solution: With the Solver menu displayed in the calculator, follow the next sequence :

Keystrokes	Description
[New]	Shows and empty "**Solver Equation Editor**" ready to enter the equation.
In the keyboard type: **R O E [123] [=] [( ] [ABC] A S S E T [*] [123] % [ABC] E A R N [-] D E B T [*] [123] % [ABC] I N T [-] T A X [ )] [÷] E Q T Y**	
[🗃 Name: ▶] 📝 Name…	Long touch in the top bar button to display the actions menu and select the "Name…" option.
"Help-ROE" **[Done]**	In the name input form, type "Help-ROE" as the equation name.
[Save]	Touch the "Save" button to check the expression. If the expression has no errors, the variable ordering view is shown.
ASSET %EARN DEBT %INT TAX EQTY ROE	Sort the variables as shown by dragging it to the proper position.
[Save]	Save the equation, close the editor and get back to solver menu.
[Calculate]	Show the ROE equation menu ready to calculate any variable.

ROE Equation Worksheet

ASSET 2,000.00	%EARN 10.00	DEBT 1,500.00
%INT 8.00	TAX 0.00	EQTY 500.00
	ROE 16.00	

Keystrokes	Description
2000 [ASSET]	Input the $2,000 in assets into the ASSET variable.
10 [%EARN]	Input the asset earnings of 10% into %ERN variable.
1500 [DEBT]	Input $1,500 debt amount into DEBT variable.
8 [%INT]	Input the 8% debt cost into %INT variable.
0 [TAX]	Input 0 taxes paid into TAX variable.
500 [EQTY]	Input $500 common equity into EQTY variable.
[ROE]	Calculates ROE. **Result = 16.00**
If any other key is pressed before one of the Blue keys, the displayed number is stored in the corresponding variable. Otherwise, the variable is calculated.	