Calculator Help

Welcome to Help for the *Math for the Real World* on-line Calculator.

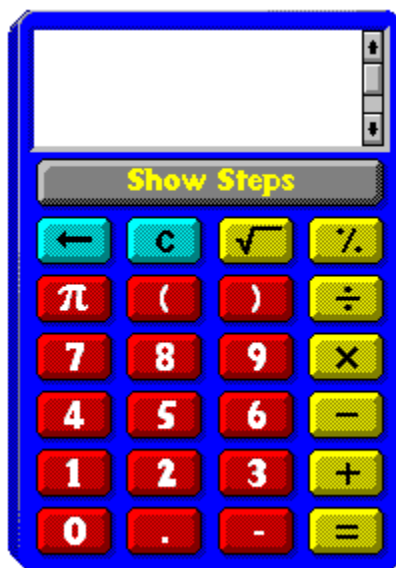To start the Calculator, select the Calculator icon from any problem screen.

The Calculator gives you a Standard Calculator for basic math, and an Advanced Calculator for more complex problems. Choose the one you want by selecting **Standard** or **Advanced** from the Calculator View menu.

Select a topic below to learn how to use the Calculator:

<u>The Standard Calculator</u>
<u>The Advanced Calculator</u>
<u>Calculator Menus</u>

The Standard Calculator

Explore the picture of the Standard Calculator below with the mouse (or with the TAB and ENTER keys) to learn what each part does:

To switch between the Standard and Advanced Calculator, select **Standard** or **Advanced** from the Calculator View menu.

Related Topic
The Advanced Calculator

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Related Topic
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Calculator Menus

Explore the pictures of the Calculator menus below with the mouse (or with the TAB and ENTER keys) to see what each menu item does:

The View Menu

```
View
√ Standard        Ctrl+S
  Advanced        Ctrl+A
√ Always on Top
  Exit            Alt+F4
```

The Answer Menu

```
Answer
  Decimal
  Pure Fraction
  Mixed Fraction
  Remainder
√ Automatic
```

The Help Menu

```
Help
  Help              F1
  About Calculator...
```

Standard

Select this to see the <u>Standard</u> Calculator for basic math problems.

Advanced

Select this to see the Advanced Calculator for more complex problems.

Always on Top

Select this to display the Calculator window on top of all other windows.

Exit

Select this to quit the Calculator (and close the Calculator window).

Answer

This list lets you choose how you want the answer to your problem to appear:
- as a decimal number,
- as a pure fraction (with no whole numbers),
- as a mixed fraction (whole number plus fraction),
- with a remainder,
- or automatically displayed according to the type of problem you're doing.

Help

Select this to see on-screen Help for the Calculator.

About

Select this to learn about the Calculator development team.

Display Window

This is where the problems you enter will appear. You can use the scroll bar to see more of a problem. A horizontal scroll bar will also appear if needed.

Note: The solution to your problem can be used as the starting point for a new problem. When you begin working with the solution, the rest of the old problem will disappear.

Show Steps

Use this button to see each step in problems that have several steps. Select the button again to turn Show Steps off.

Example:
Show Steps Off Show Steps On
(8 x 9) - (5 x 6) =   (8 x 9) - (5 x 6) =
42   72 - 5 x 6 =
                            72 - 30 =
                            42

Unit

Unit

Use this button to separate the parts of a mixed number.

Example: To enter the mixed number $5\frac{1}{4}$, first enter 5, then press the Unit button before entering the fraction $\frac{1}{4}$.

Keyboard alternative: Use the u key on your keyboard.

Fraction Bar

Use this button when entering a fraction. First enter the numerator, then enter the fraction bar, and then enter the denominator.

Example: To enter $\frac{1}{2}$, first enter 1, then use the Fraction Bar button, then enter 2.

Keyboard alternative: Use the SLASH (/) key on your keyboard or numeric keypad.

Simplify

Simplify

Use this button to simplify a fraction (that is, to convert it to the smallest possible numbers in the numerator and denominator).

Example: Use the Simplify button to change the fraction $\frac{4}{8}$ to its simplest form, $\frac{1}{2}$.

Keyboard alternative: Use the s key on your keyboard.

 Mixed Number

Use this button to change an improper fraction to a mixed number, or a mixed number to an improper fraction.

Example: Use the Mixed Number button to change the fraction $\frac{9}{5}$ to the mixed number $1\frac{4}{5}$. Use the button again to restore the improper fraction $\frac{9}{5}$.

Keyboard alternative: Use the M key on your keyboard.

 Fraction/Decimal

Use this to change a fraction to a decimal number, or a decimal number to a fraction.

Example: Use the Fraction/Decimal button to change the fraction $\frac{4}{5}$ to the decimal number 0.8. Use the button again to restore the fraction $\frac{4}{5}$.

Keyboard alternative: Use the F or D key on your keyboard.

 View Factor

Use this button after you use the Simplify button, if you want to see the number that was used to divide your fraction. Use the button again to restore the problem.

Example: After using the <u>Simplify</u> button to change the fraction $\frac{4}{8}$ to its simpler form

 use the View Factor button to see the number that was used to divide (simplify) the fraction: 4. Use the button again to restore the problem

$\frac{4}{8} =$

$\frac{1}{2}$ to view.

Keyboard alternative: Use the Y key on your keyboard.

Backspace

Use this button to remove the last character you entered into the calculator. If you keep pressing the Backspace button, it will remove characters one by one, in reverse order.

Example: If you enter the problem 12 x 35 and then decide you want to multiply 12 by 40 instead, use the Backspace button to delete the 5 and then the 3; then enter 40.

Note: If you complete a problem using the Equal Sign button, then using the Backspace button will delete the entire problem.

Keyboard alternative: Use the BACKSPACE key on your keyboard.

C

Clear Entry

Use this button to remove everything in the display window.

Pi

Use this button to enter the number pi:

3.14159265359

Pi is useful for geometry problems involving circles and spheres.

Keyboard alternative: Use the P key on your keyboard.

Left Parenthesis

Use this button to enter a left parenthesis:

    (

Keyboard alternative: Use SHIFT + 9 on your keyboard.

) Right Parenthesis

Use this button to enter a right parenthesis:

)

Keyboard alternative: Use SHIFT + 0 on your keyboard.

Numerals

Use one of these buttons to enter a numeral:

0, 1, 2, 3, 4,
5, 6, 7, 8, or 9

Keyboard alternative: Use the numeral keys on your keyboard or numeric keypad.

Decimal Point

Use this button to enter a decimal point:

.

Keyboard alternative: Use the PERIOD (.) key on your keyboard or the DECIMAL (.) key on your numeric keypad.

Negative

Use this button to enter the sign showing that the following number is negative.

Example: To add 6 and -3, enter the following characters. Use the Negative button to enter the negative sign:

6 + (-3)

Note: This is not the same as the <u>Subtract</u> button.

 Percent

Use this button to enter a percent sign:

       %

Keyboard alternative: Use SHIFT + 5 on your keyboard.

Divide

Use this button to enter a division sign:

÷

Keyboard alternative: Use SHIFT+ ; on your keyboard.

 Multiply

Use this button to enter a multiplication sign:

     x

Keyboard alternative: Use the X key or SHIFT+8 on your keyboard, or the MULTIPLY (*) key on your numeric keypad.

Subtract

Use this button to enter a subtraction sign:

-

Keyboard alternative: Use the HYPHEN (-) key on your keyboard or the SUBTRACT (-) key on your numeric keypad.

Note: This is not the same as the Negative button, which is used to show negative numbers.

Add

Use this button to enter an addition sign:

+

Keyboard alternative: Use SHIFT+ = on your keyboard or the ADD (+) key on your numeric keypad.

 Equal Sign

Use this button to enter an equal sign:

=

Doing this will calculate and display the answer to your equation.

Note: If you use the Equal Sign button to calculate your problem and then discover an error, you can use the <u>Backspace</u> button once to delete both the answer and the equal sign. From there, you can use Backspace to edit your problem.

Note: The solution to your problem can be used as the starting point for a new problem. When you begin working with the solution, the rest of the old problem will disappear.

Keyboard alternative: Use the EQUAL (=) key on your keyboard.

 Square Root

  Use this button to enter a radical (square root sign):

Numbers and math symbols you enter will appear under the radical sign.

Example: To find the square root of 3 + 1, use the Square Root button, enter the characters 3 + 1, and then use the Equal Sign button:

$$\sqrt{3+1} = 2$$

You can also enclose the radical within parentheses for more complex problems.

Keyboard alternative: Use SHIFT+ 6 on your keyboard.