



Using a Calculator

Calculators are a great tool for speeding up calculations and solving problems, but it's important to know how to use them properly. For many of the things you need to do in math and science courses, a few tips and tricks can go a long way towards making you more efficient at calculations.

For what you do at VCC in Adult Basic Education, College Foundations or University Transfer courses, you're going to need a scientific calculator. There are two main styles of calculators. Older calculators use a system called **post-fix calculation**. The buttons that perform functions other than the four basic operations change the value on the display without needing the [=] key. Newer calculators have displays that show the symbols for these functions, and let you type things in the same order that you'd write them down or see them in your textbook. We'll call this **natural calculation**.

If you're not sure which kind of calculator you have, try this experiment: Clear your calculator and press these keys:

4 **5** **CE**

Note: no [=] key! If the number in the display has already changed to a decimal number at this stage, you have a postfix calculator. It might be worth buying a newer calculator, since they have more functionality, including some of the very useful features that are in the following tips and tricks.

HOW TO GET THE MOST OUT OF A SCIENTIFIC CALCULATOR

• Keep your numbers in your calculator while you're performing a sequence of calculations. **Don't use the Clear key between calculations** if you're continuing with the result of the previous calculation. Let's say you have to calculate $(8 + 7) \times 0.35$; many students will do this:

8	+	7	=	0.8571429	
C	C	C	C	C	0.
0	.	8	5	=	
8	.	3	5	=	0.2975

The answer sheet, however, says that it's 0.3 exactly. Is the student's answer wrong? Is it close enough? The reason the answers don't match exactly is that the student rounded (by clear-clear-clearing the calculator and typing only the beginning of the number — it's not even rounded properly!) and the person who wrote the answer sheet didn't. The instructor probably kept the 0.8571429 (and any other digits that the calculator doesn't have room to show, but are still in memory) and typed [=][0][.] [8][5][=] to get a more accurate answer.