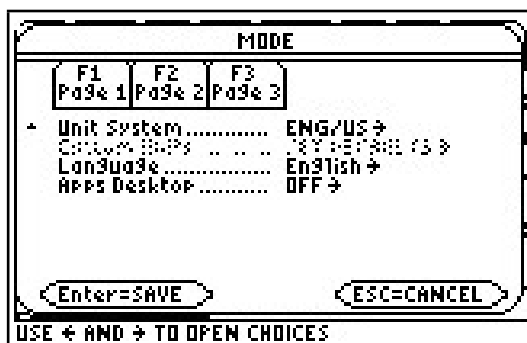
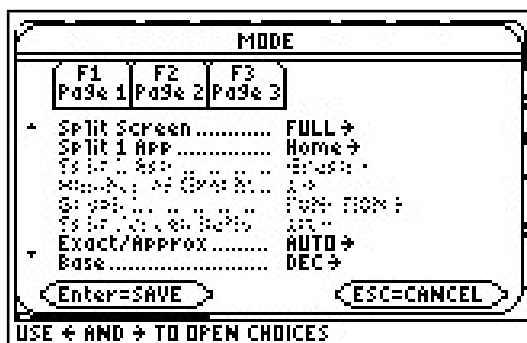
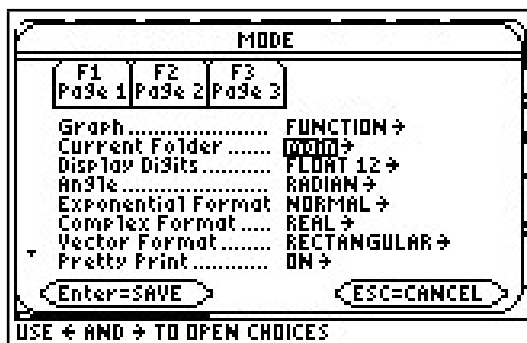


Starting 89

The TI-89 is very dependent on its mode settings. Press the **MODE** key to bring up your mode screens. Change your mode settings to the ones on the following screens.



Press **ENTER** to save these settings.

All entries into the stack should be followed by hitting **ENTER**. This is how you let the calculator evaluate what you entered.

Basics

$5 + 3$	Performs addition.
$10 - 7$	Performs subtraction.
$6 * 4$	Performs multiplication.
$5 / 4$	Gives $\frac{5}{4}$.
9^2	Squares 9.
2^{10}	Raises 2 to the tenth power.
π	Returns the value of π by pushing 2nd ^ ◇ ENTER .
$\sqrt{(17)}$	Returns the square root $\sqrt{17}$.
$e^{(1.)}$	Gives the natural base by hitting ◇ X keys.
-6	Gives negative six by hitting (-) . Do Not use — .
$-8 * -4$	Is the product of two negative numbers.
$5 - 6 / 2 + 1$	The calculator uses the order of operations from math.
$(5 - 6) / (2 + 1)$	The grouping symbols make the calculator do what's in the parentheses first.
$(3 * 4)^2$	This multiplies first.

To clear the screen you press **F1** **8**.

The **CLEAR** key clears the input line.

Editing

To do basic editing we use the arrow keys and backspace, **←** .

$(7 - 2)/6$	Enter the expression.
ans(1)	Returns the previous answer by 2nd (-) .
ans(1)*6	Gives $\frac{5}{6} * 6$.
500*(1.03)^5	Gives the exponential function.
40 * x^2	Gives the expression $40x^2$.
500*(1.03)^5	Cursor up and highlight the previous expression. Press ENTER to put it on the input line.
500*(1.03)^10	Edit the expression and evaluate the new expression.
52500*(1.03)^10	Use arrow key to insert 25 into the previous expression.
Clear your screen.	

Menus

Many useful operations and functions are stored away in menus. The keys **ESC** or **2nd** **ESC** get you out of most menus.

$(512)^{(1/3)}$	Gives the cube root of 512.
$(1024)^{(1/5)}$	Gives the fifth root of 1024.
$22/7$	Returns the fraction.
<code>exact(.625)</code>	Converts a decimal to a fraction. TYPE IT.

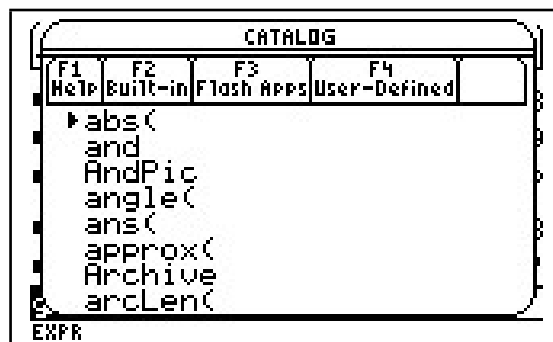
Scientific notation is written using the **EE** key.

$8.72E6$	Gives 8.72×10^6 by using EE key.
$8.72E6/100$	Does the operation.
2^{63} .	Gives the answer in scientific notation. Note the decimal point after 63.
$2E999$	This is a big number.
$2E1000$	This is a big number indeed.

When you see the E , you are in scientific notation.

Catalog

There is a convenient list of many of the calculator's functions. It is called the **catalog**. Press the **CATALOG** key to bring up the catalog. You should see something like this.



The catalog is in alphabetic order. To jump to a certain function press the first letter in the function name. The arrow keys move you up and down. **2nd** **△** and **2nd** **▽** move you up and down by pages.

Suppose, you want to find the **exact** function. Press **E** to move to the functions beginning with E. Press **2nd** **▽** to move down.

Find the `exact(` , then press **ENTER** .

Get `exact(.615)`

On your own use the catalog to find

`lcm(12,14)`

`lcm` is the least common multiple function.

Done in L^AT_EX.