Last X

Last X is the name of the register reserved for storing the last number displayed that precedes the last function performed. Last X is set to zero when you switch the calculator ON and it remains unchanged until a calculation is performed. At such time the number displayed is saved in Last X as an automatic prelude to the calculation. The saved value is recallable to the X-register (repeatedly, if desired) by pressing **g** **LST X**.

Last X is particularly useful in expressions like the following:

$$\frac{\sin x}{x}, \quad y^x - \sqrt{x}, \quad \sin x + \cos^3 x$$

Let's try the first expression in an example to see how this works.

Sample Case. Calculate $\dfrac{\sin x}{x}$ for $x = 52.47°$. (*Assume degrees mode is set.*)

Press	See Displayed
52.47	52.47
f **SIN**	0.79
g **LST X**	52.47
÷	0.02

Last X is also useful in recovering from accidental wrong keystrokes such as pressing the wrong arithmetic key or entering a wrong number. For example, if you were performing a long calculation where you meant to subtract 3 from 12 and you divided instead, you could compensate as follows:
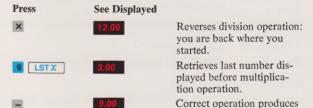
Press	See Displayed	
12 **ENTER↑** 3 ÷	4.00	Oops — you wanted to subtract.
g **LST X**	3.00	Retrieves last number preceding division operation.

Press	See Displayed	
×	12.00	Reverses division operation: you are back where you started.
g **LST X**	3.00	Retrieves last number displayed before multiplication operation.
−	9.00	Correct operation produces desired results.

If you want to correct a number in a long calculation, Last X can save you from starting over. For example, divide 12 by 2.157 after you have divided by 3.157 by mistake.

Press	See Displayed	
12 **ENTER↑** 3.157 ÷	3.80	You wanted to divide by **2.157,** not **3.157.**
g **LST X**	3.16	Retrieves last number displayed preceding operation.
×	12.00	You're back at the beginning.
2.157 ÷	5.56	Correct operation produces desired results.

The following operations (*including inverses*) save the X value in Last X: **+** , **−** , **×** , **÷** , **→D.MS** , **D.MS+** , **INT** , **LN** , **LOG** , **→OCT** , **R→P** , **SIN** , **COS** , **TAN** , **n!** , **√x** , **1/x** , **y^x** , **ABS** . Note that: **CLX** , **STO** **+** **n** , **STO** **−** **n** , **STO** **×** **n** , **STO** **÷** **n** , **x≠y** , **x≤y** , **x=y** , and **x>y** do not affect the Last X register.

Recalling π

π is a fixed constant provided in your HP-65. Merely press **g** **π** whenever you need it in a calculation.

Sample Case: Calculate the area of a circle with a radius of 3. Area $= \pi 3^2$.