

[Return to List of Lessons](#)

Calculator Lesson 13

Sigma Notation

In this lesson we will learn to use the sigma notation $\sum_{k=m}^n f(k)$. We will discuss two methods of accomplishing this. In each case we will use $\sum_{k=0}^5 (k^2 + 1)$ as an example.

The first method is direct use of RPN. We need to put the index (k in this example) on level 4 of the stack, the starting value (0 in this example) on level 3, the end value (5 in this example) on level 2, and the function of the index ($k^2 + 1$ in this example) on level 1. Enter the following sequence:

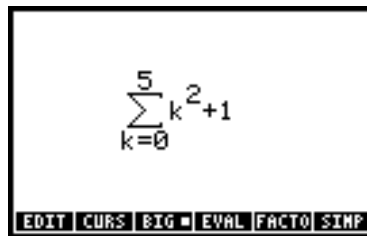
‘ AS LS K ENTER 0 ENTER 5 ENTER ‘ AS LS K Y^X 2 + 1 ENTER RS Σ

You should now see the answer 61.

The second method uses the equation writer. Get into the equation write and enter the sequence:

RS Σ AS LS K RA 0 RA 5 RA AS LS K Y^X 2 RA + 1

The screen should now look like the figure to the right. Press ENTER to put it on the command line then either EVAL or RS NUM to evaluate the expression. You should now see the answer 61.



[Return to List of Lessons](#)