Evaluating Functions on the TI-89

We can evaluate a function for various values of x without having to reenter the entire function each time.

Evaluating \( f(x) = x^2 - 6 \) for \( x = -1, \ x = 3, \ x = 0, \ x = \frac{3}{4} \)

Diamond Y=
(Clear previously saved functions)
Y1 = \( x^2 - 6 \)

HOME
Key in \( Y1(-1) \)  Gives an answer of  -5
\( Y1(3) \)  Gives an answer of  3
\( Y1(0) \)  Gives an answer of  -6
\( Y1(3/4) \)  Gives an answer of  -87/16

Another method uses the table key.

Diamond Y=
Y1 = \( x^2 - 6 \)

Diamond TblSet
Arrow Down to Independent
Arrow Right and Select 2:  Ask
Enter

Diamond Table
(Some values may be given.  \( F1 \) then 8 and Enter to clear the table) Enter a value for x. Enter.  Answer will show in Y1 column.