CP346

Piecewise Defined Functions

Graph the function below in Graph and Table.

$$f(x) = \begin{cases} 3 - x^2 & -1 \le x < 2 \\ x - 3 & x \ge 2 \\ 2 & Elsewhere \end{cases}$$

Start by entering the piecewise template in **y1** using the Math3 keyboard (tap it twice).

Enter the functions, their domains and tap **EXE**.

Note: Leave the last domain blank for elsewhere.



(Tap **Zoom, Initialise** to achieve the scale shown.)

Note that piecewise functions entered this way in Graph and Table <u>cannot</u> be integrated and so on over their entire domain.

An alternative and more flexible method is shown in a video in the Intermediate - Main section, also titled Piecewise Defined Functions.







