## A Logiweb page defining a factorial function

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This document defines and tests a function for calculating the factorial of an integer. First we define then name of the page:

 $[factorial \stackrel{pyk}{=} "factorial"],$ 

which we shall call fact. Having done this we next define the  $T_EX$  rendering of the fact function, which is what decides how the text appears when using the function later on:

 $[x! \stackrel{\text{tex}}{=} "#1.!"].$ 

Next we declare the value of the function:

 $[\mathbf{x}! \doteq \mathbf{x} \approx 0 \begin{cases} 1 \\ \mathbf{x} \cdot (\mathbf{x} - 1)! \end{cases}^{1}$ 

And the test:

 $[1! \approx 1]^{\cdot}$ .

Another test:

 $[3! \approx 6]^{\cdot}$ .

 $<sup>{}^{1}[</sup>x! \stackrel{pyk}{=} "* factorial"]$