

Factorial function

Christian Hemmingsen

GRD-2005-06-29.UTC:01:03:50.943925

1 Definition

Here we define the factorial funktion.

First we define a pyk name:

$[\text{factorial} \stackrel{\text{pyk}}{=} \text{“factorial”}]$

then a TeX aspect

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

and lastly the mathematical (logical) definition

$[\text{x}! \doteq \text{If}(\text{x} \approx 0, 1, \text{x} \cdot (\text{x} - 1)!)]$

2 Tests

We test for different values

$[1! \approx 1]$.

$[2! \approx 2]$.

$[3! \approx 6]$.

This next one is tricky since 24 is not defined as cardinal in pyk. However there's a way around that

$[4! \approx 4 \cdot 6]$.