Factorial function

Christian Hemmingsen

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

1 Definition

Here we define the factorial function.

First we define a pyk name: [factorial $\stackrel{\text{pyk}}{\rightarrow}$ "factorial"] then a TeX aspect [x! $\stackrel{\text{tex}}{\rightarrow}$ "#1.!"] and lastly the mathematical (logical) definition [x! $\stackrel{\text{val}}{\rightarrow}$ If(x $\approx 0, 1, x \cdot x - 1$!)]

2 Tests

We test for different values

 $[1! \approx 1]^{\circ}$

 $[2! \approx 2]^{\cdot}$

 $[3! \approx 6]$

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

 $[4! \approx 4 \cdot 6]^{\cdot}$