

Hypergeometric $m H. n \ 0 \ 0 \ 0$

The conjunction $H.$ applies to two numeric lists to produce a monad which is the hypergeometric function defined in Section 15 of Abramowitz and Stegun [13]; it is the limit of the dyadic case, whose left argument restricts the number of terms of the approximating series.

As discussed in Iverson [14], the conjunction is defined as follows:

```
rf=: 1 : '(,x.)"_ ^!.1/ i.@['          Rising factorial
L1=: 2 : 'x.rf %&(*) y.rf'
L2=: (i.@[ ^~ ])% (!@i.@[)
H=: L1 (+/ . *) L2
```

For example:

```
'a b'=: 2 3 5; 6 5
a L1 b
(2 3 5"_ ^!.1/ i.@[) %&(*) 6 5"_ ^!.1/ i.@[
t=: 4 [ z=: 7
t a L1 b z
1 1 1.71429 4.28571

t (a H b , a H. b) z
295 295

f=: 1 H. 1
8 f i. 6
1 2.71825 7.38095 19.8464 51.8063 128.619

f i. 6
1 2.71828 7.38906 20.0855 54.5982 148.413

^ i. 6
1 2.71828 7.38906 20.0855 54.5982 148.413
```