

Bond $m \& v$ $u \& n$ $_$

<p>$m \& v$ y is defined as m v y; that is, the left argument m is bonded with the dyad v to produce a monadic function.</p>	
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For example:

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10&^. 2 3 10 100 200
0.30103 0.477121 1 2 2.30103

base10log=: 10&^.
base10log 2 3 10 100 200
0.30103 0.477121 1 2 2.30103

sine=: 1&o.
sine o. 0 0.25 0.5 1.5 2
0 0.707107 1 _1 0

```

Similarly, $u \& n$ y is defined as y u n ; in other words, as the dyad u provided with the right argument n to produce a monadic function (that is, a function whose dyadic case has an empty domain). For example:

```

^&3 (1 2 3 4 5)
1 8 27 64 125

^&2 3"0 (1 2 3 4 5)
1 1
4 8
9 27
16 64
25 125

```

Use of the bond conjunction is often called Currying in honor of Haskell Curry.

Compose $u \& v$ mv mv mv

$u \& v \ y \leftrightarrow u \ v \ y$. Thus $+: \&-$ 7 is $_14$ (double the negation). Moreover, the monads $u \& v$ and $u @ v$ are equivalent.	$x \ u \& v \ y \leftrightarrow (v \ x) \ u \ (v \ y)$. For example, $3 \ + \&! \ 4$ is 30, the sum of factorials.
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The monadic case is equivalent to the composition used in mathematics, but the dyadic case opens up other possibilities. For example:

$3 \ + \&^{\cdot} \ 4$ 2.48491	Sum of natural logarithms
$^{\cdot} 3 \ + \&^{\cdot} \ 4$ 12	Multiplication using natural logs
$3 \ + \&(10 \&^{\cdot} \) \ 4$ 1.07918	Sum of base ten logarithms
$10 \ ^{\cdot} 3 \ + \&(10 \&^{\cdot} \) \ 4$ 12	Multiplication using base ten logs
$3 \ + \&^{\cdot} \ 4$ 12	See the related conjunction under $(\& \cdot)$.
$3 \ + \& \cdot (10 \&^{\cdot} \) \ 4$ 12	

Compare the behavior of $\&$ with that of $\& \cdot$. They differ only in the ranks of the verbs that they produce.