

III. Definitions

Each main entry in the body of the dictionary is headed by a line beginning with the informal name of the monadic case of the function, and ending with the informal name of the dyadic case. The line also contains the formal name of the function, consisting of one character or two, the last of which is a period or colon. In the case of a conjunction, the formal name is preceded by *m* or by *u* (denoting a noun or a verb argument) and is followed by *n* or *v*. An adverb has no symbol to its right.

The three ranks (in the order monadic, left, and right) are also indicated, using the symbol $_$ for an infinite (unbounded) rank, and with ranks dependent on the ranks of argument verbs shown as *mu*, *lv*, etc.

Examples are provided with each definition, and the more complex of them may use auxiliary functions as yet unfamiliar. These examples may be approached by ignoring all but the immediately relevant aspects of such auxiliaries, and by examining (and perhaps entering for execution) component phrases that can be used to build up the final result.

For example, in the discussion of the adverb $_$, the sentences below display various uses of it for convenient comparison:

$x=: 1\ 2\ 3\ 4\ 5$ [$y=: 7\ 5\ 3$
 $(, .x) ; (x+/y) ; y ; (x*/y) ; (+/y) ; (* /y)$

1	8	6	4	7	5	3	7	5	3	15	105
2	9	7	5				14	10	6		
3	10	8	6				21	15	9		
4	11	9	7				28	20	12		
5	12	10	8				35	25	15		

Even if the auxiliary functions $_$ and $_$ are unfamiliar, their relevant effects are probably evident; if not, they may be clarified by the following experiments:

$x ; y$	$, .7\ 8$	$\$, .7\ 8$
-----+	7	2 1
1 2 3 4 5 7 5 3	8	
-----+		

Although a name (such as foreign for $_$!) is suggested for each word, others can be used in addition to or instead of them. Thus, *joy* might be used for $_$! since the exclamation mark derives from an *I* placed above an *o*, an abbreviation of the Latin *io*. Similarly, *iota* might be used instead of *integers* and *index* of for $_$!