Alphabetic List of Paths

Standard Dictionary for Path Semantics

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A

add[(= 0)] <=> and
add[(¬= 0)] <=> or
$add_{\mathbb{C},\mathbb{Q},\mathbb{R},\mathbb{Z}}[neg_{\mathbb{C},\mathbb{Q},\mathbb{R},\mathbb{Z}}]$ <=> $add_{\mathbb{C},\mathbb{Q},\mathbb{R},\mathbb{Z}}$
$add_{\mathbb{N}}[even]$ <=> eq
$add_{\mathbb{N}}[odd]$ <=> xor
$add_{\mathbb{R}}[swap \rightarrow id]$ <=> $add_{\mathbb{R}}$
$add_{\mathbb{R}}[exp]$ <=> $mul_{\mathbb{R}}$
and[not] <=> or

C

concat[len] <=> add
concat[sum] <=> add
concat[min] <=> min_2
concat[max] <=> max_2
cos[neg → id] <=> cos
cross{[vec_dim] 3, [vec_dim] 3}[unit × unit → vec_dim] <=> $construct_3$

D

dec{(¬= 0)}[even] <=> not
$div_{\mathbb{R}}\{(¬= 0), (¬= 0)\}[swap \rightarrow id]$ <=> inv · div

E

eq[not] <=> xor
exc[not] <=> nrexc
$exp_{\mathbb{R}}[ln]$ <=> $exp_{\mathbb{R}}$

I

id[id] <=> id
$\text{id}_A[\text{id} \to f]$ <=> f $f : A \to B$
$\text{id}_A[f]$ <=> id_B $f : A \to B$
$\text{id}_A[f \to \text{id}_A]$ <=> f^{-1} $f : A \to B$
inc[even] <=> not
inc[inc] <=> inc

L

$\ln[\exp_\mathbb{R}]$ <=> ln

M

mat_id[id $\to$ trace] <=> id
mat_inv{[det] ($\neg= 0$)}[id $\to$ mat_inv] <=> id
mat_mul[det] <=> mul
mat_mul[fst $\cdot$ dim $\times$ snd $\cdot$ dim $\to$ dim] <=> id
$\text{mul}_\mathbb{N}[(= 0)]$ <=> or
$\text{mul}_\mathbb{N}[(\neg= 0)]$ <=> and
$\text{mul}_\mathbb{N}\{(>= 0), (>= 0)\}[(>= 0)]$ <=> true_1
$\text{mul}_\mathbb{N}\{(\neg= 1), (\neg= 1)\}[\text{prime}]$ <=> false_1
$\text{mul}_\mathbb{N}[(\% k: (\neg= 0))]$ <=> (% k) $\cdot$ $\text{mul}_\mathbb{N}$
$\text{mul}_\mathbb{N}[\text{even}]$ <=> or
$\text{mul}_\mathbb{N}[\text{odd}]$ <=> and
mull $n_R[\text{neg} \to \text{id}]$ <=> $\text{mul}_\mathbb{N}$
$\text{mul}_\mathbb{R}[\ln]$ <=> $\text{add}_\mathbb{R}$
mul[swap $\to$ id] <=> mul

N

nand[not] <=> nor
nexc[not] <=> rexc
nor[not] <=> nand
not[not] <=> not
nrexc[not] <=> exc

O

or[not] <=> and
not[not] <=> not

P

push[len × unit → len] <=> inc
push[sum × id → sum] <=> add
push[max × id → max] <=> max_2
push[min × id → min] <=> min_2
pop{[len] (¬= 0)}[len → len · fst] <=> dec
pop{[len] (¬= 0)}[(sum, snd · pop) → sum · fst] <=> sub
pop{[len] (¬= 0)}[(sum, fst · pop) → sum · snd] <=> sub

R

rexc[not] <=> nexc

S

sin[neg] <=> sin
$sort_f$[unit → $sorted_f$] <=> $true_1$
split(_)[id → join] <=> id
$sub_\mathbb{R}$[swap → id] <=> neg

T

transpose[el(i, j) → el(j, i)] <=> id
transpose[dim] <=> swap

U

unit[unit] <=> unit

X

xor[not] <=> eq