Alphabetic List of Paths

Standard Dictionary for Path Semantics

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A

add[(= 0)] <=> and
add[(¬= 0)] <=> or
add[even] <=> eq
add[odd] <=> xor
add[neg] <=> add
add[swap → id] <=> add
and[not] <=> or

C

concat[len] <=> add
concat[sum] <=> add
concat[min] <=> $\min_2$
concat[max] <=> $\max_2$

D

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

E

eq[not] <=> xor
exc[not] <=> nrexc

I

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

M

mat_id[id → trace] <=> id
mat_inv{[det] (¬= 0)}[id → mat_inv] <=> id
mat_mul[det] <=> mul
mat_mul[fst · dim × snd · dim → dim] <=> id
$\text{mul}_{\mathbb{N}}$[(= 0)] <=> or
$\text{mul}_{\mathbb{N}}$[(¬= 0)] <=> and
$\text{mul}_{\mathbb{N}}${(>= 0), (>= 0)}[(>= 0)] <=> true_1
$\text{mul}_{\mathbb{N}}${(¬= 1), (¬= 1)}[prime] <=> false_1
$\text{mul}_{\mathbb{N}}$[(% k: (¬= 0))] <=> (% k) · $\text{mul}_{\mathbb{N}}$
$\text{mul}_{\mathbb{N}}$[even] <=> or
$\text{mul}_{\mathbb{N}}$[odd] <=> and
$\text{mul}_{\mathbb{R}}$[neg → id] <=> $\text{mul}_{\mathbb{N}}$
mul[swap → 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

$sort_f$[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

X

xor[not] <=> eq