nat_extra[4,23]

STM: id_increasing

STM: increasing_implies

STM: increasing_implies_le

STM: compose_increasing

STM: increasing_inj

STM: increasing_le

STM: increasing_is_id

STM: increasing_lower_bound

STM: injection_le

STM: disjoint_increasing_onto

STM: bijection_restriction

ABS: primrec(n;b;c) **primrec**

STM: primrec_wf

STM: primrec_add

ABS: nondecreasing(f;k) **nondecreasing**

STM: nondecreasing_wf

STM: const_nondecreasing

ABS: fadd(f;g) **fadd**

STM: fadd_wf

STM: fadd_increasing

ABS: fshift(f;x) **fshift**

STM: fshift_wf

STM: fshift_increasing

ABS: finite(T) **finite**

STM: finite_wf

STM: nsub_finite

ABS: $f[n:=x]$ **fappend**

STM: fappend_wf

STM: increasing_split

ABS: $\mathrm{sum}(f(x) \mid x < k)$ **sum**

STM: sum_wf

STM: non_neg_sum

STM: sum_linear

STM: sum_scalar_mult

STM: sum_constant

STM: sum_functionality

STM: sum_difference

STM: sum_le

STM: sum_bound

STM: sum_lower_bound

STM: sum-ite

STM: sum_arith1

STM: sum_arith

STM: finite-partition

STM: pigeon-hole

STM: isolate_summand

STM: empty_support

STM: singleton_support_sum

STM: pair_support

STM: sum_split

ABS: $\mathrm{sum}(f(x;y) \mid x < n; y < m)$ **double_sum**

STM: double_sum_wf

STM: pair_support_double_sum

STM: double_sum_difference

STM: double_sum_functionality

ABS: $R\,\hat{}\,n$ **rel_exp**

STM: rel_exp_wf

STM: decidable__rel_exp

STM: rel_exp_add

ABS: $R_1 => R_2$ **rel_implies**

STM: rel_implies_wf

STM: rel_exp_monotone

ABS: R preserves P **preserved_by**

STM: preserved_by_wf

STM: preserved_by_monotone

ABS: when P, $R_1 => R_2$ **cond_rel_implies**

STM: cond_rel_implies_wf

STM: cond_rel_exp_monotone

ABS: R^* **rel_star**

STM: rel_star_wf

STM: rel_star_monotone

STM: cond_rel_star_monotone

STM: rel_star_transitivity

STM: rel_star_monotonic

STM: cond_rel_star_monotonic

STM: preserved_by_star

STM: rel_star_closure

STM: rel_star_closure2

STM: rel_star_of_equiv

STM: cond_rel_star_equiv

STM: rel_rel_star

STM: rel_star_trans

STM: rel_star_weakening

ABS: R^{-1} **rel_inverse**

STM: rel_inverse_wf

STM: rel_inverse_exp

STM: rel_inverse_star

STM: rel_star_symmetric

STM: rel_star_symmetric_2

STM: preserved_by_symmetric

ABS: $R_1 \lor R_2$ **rel_or**

STM: rel_or_wf

STM: rel_implies_or_left

STM: rel_implies_or_right

STM: symmetric_rel_or

STM: preserved_by_or

ABS: P as strong as Q **as_strong**

STM: as_strong_wf

STM: as_strong_transitivity

ABS: f^n **fun_exp**

STM: fun_exp_wf

STM: comb_for_fun_exp_wf

STM: fun_exp_compose

STM: fun_exp_add

STM: fun_exp_add1

STM: fun_exp_add1_sub

STM: iteration_terminates

ABS: (i, j) **flip**

STM: flip_wf

STM: sum_switch

STM: flip_symmetry

STM: flip_bijection

STM: flip_inverse

STM: flip_twice

ABS: search$(k;P)$ **search**

STM: search_wf

STM: search_property

STM: search_succ

ABS: $P \wedge Q$ **prop_and**

STM: prop_and_wf

STM: and_preserved_by

ABS: (ternary) R preserves P **preserved_by2**

STM: preserved_by2_wf

STM: and_preserved_by2