## $int_{-}1^{12,41}$

COM:  $int_1$ -begin

COM:  $int_1$ \_summary

COM:  $int_1_intro$ 

 $COM: INT\_DEFS\_acom$ 

STM:  $le_wf$ 

 $COM: ge\_gt\_wf\_com$ 

STM: gt\_wf

 $STM: comb\_for\_gt\_wf$ 

STM:  $ge_wf$ 

STM:  $comb\_for\_ge\_wf$ 

 $STM: comb\_for\_le\_wf$ 

ABS:  $i \leq j < k$  lelt

ABS:  $i \leq j \leq k$  lele

ABS:  $\mathbb{N}$  nat

STM: nat\_wf

STM:  $nat\_properties$ 

ABS:  $\mathbb{N}^+$  nat\_plus

STM:  $nat\_plus\_wf$ 

STM:  $nat_plus_properties$ 

ABS:  $\mathbb{Z}^{-\circ}$  int\_nzero

STM: int\_nzero\_wf

STM:  $int\_nzero\_properties$ 

ABS:  $\{i...\}$  int\_upper

STM:  $int\_upper\_wf$ 

STM:  $comb\_for\_int\_upper\_wf$ 

STM:  $int\_upper\_properties$ 

ABS:  $\{\ldots i\}$  int\_lower

STM: int\_lower\_wf

STM: int\_lower\_properties

ABS:  $\{i..j^-\}$  int\_seg

STM:  $int\_seg\_wf$ 

 $STM: comb\_for\_int\_seg\_wf$ 

STM:  $int\_seg\_properties$ 

STM:  $decidable\_equal\_int\_seg$ 

ABS:  $\{i \dots j\}$  int\_iseg

STM: int\_iseg\_wf

STM:  $int\_iseg\_properties$ 

 $STM: int\_lt\_to\_int\_upper$ 

 $STM: int\_le\_to\_int\_upper$ 

COM: INT\_INCLUSIONS\_tcom

STM: nat\_plus\_inc\_nat

STM: nat\_plus\_inc

STM: nat\_plus\_inc\_int\_nzero

 $COM: INDUCTION\_tcom$ 

 $STM: nat\_ind\_a$ 

STM: nat\_ind\_tp

STM: nat\_ind

 $STM: comp\_nat\_ind\_tp$ 

STM: comp\_nat\_ind\_a

 $STM: nat\_well\_founded$ 

COM: OLD\_INDUCTION

STM:  $complete\_nat\_ind$ 

ABS: suptype(S; T) **suptype** 

STM: complete\_nat\_ind\_with\_y

COM: int\_1\_end