algebra tree

sorts tree, elem, bool

ops

empty :		$\rightarrow$	tree
maketree :	tree $\times$ elem $\times$ tree	$\rightarrow$	tree
key :	tree	$\rightarrow$	elem
left,right :	tree	$\rightarrow$	tree
isempty :	tree	$\rightarrow$	bool

sets

bool $= \{\text{true,false}\}$

elem : beliebige Menge

tree $= \{\langle\ \rangle\} \cup \{\langle l, x, r\rangle | x \in \text{elem},\ l, r \in \text{tree}\}$

functions

empty()	$= \langle\ \rangle$
maketree(l, x, r)	$= \langle l, x, r\rangle$
Sei $t = \langle l, x, r\rangle$;	sonst sind key, left, right undefiniert.
key(t)	$= x$
left(t)	$= l$
right(t)	$= r$
isempty(t)	$= (t \stackrel{?}{=} \langle\ \rangle)$