## Results

## December 12, 2011

## Properties

	plain	simple ind	approx	fixpoint ind	struct ind
$prop_{add_{comm}}$ +! x y = +! y x					
$prop_{add_{ident_{left}}}$ $x = +!$ zero $x$					$\checkmark_{\infty}$
$prop_{add_{ident_{right}}}$ $x = +! x zero$		$\checkmark_{\infty}$	√∞		$\checkmark_{\infty}$
$prop_{add_{inv_{left}}} + ! (neg x) x = zero$					√ fin
$prop_{add_{inv_{right}}} + ! x (neg x) = zero$					√ <sub>fin</sub>
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
$prop_{mul_{ident_{left}}}$ $x = *!$ one $x$					$\checkmark_{\infty}$
$prop_{mul_{ident_{right}}}$ $x = *! x one$					$\checkmark_{\infty}$
$prop_{neg_{involutive}}$ x = neg (neg x)					√ fin
$prop_{sign_{assoc}}$ *% s (*% t u) = *% (*% s t) u		$\checkmark_{\infty}$	√∞		$\checkmark_{\infty}$
$prop_{sign_{ident_{left}}}$ *% s (Pos) = s		$\checkmark_{\infty}$	√∞		$\checkmark_{\infty}$
$prop_{sign_{ident_{right}}}$ *% (Pos) s = s		$\checkmark_{\infty}$	√ <sub>∞</sub>		$\checkmark_{\infty}$
$prop_{sign_{opposite}_{involutive}}$ opposite (opposite s) = s		$\sqrt{\infty}$	√ <sub>∞</sub>		$\checkmark_{\infty}$
$\begin{array}{cccc} prop_{sign_{triple}} \\ *\$ & \texttt{S} & (*\$ & \texttt{S} & \texttt{S}) & = & \texttt{S} \end{array}$		$\sqrt{\infty}$	√ <sub>∞</sub>		$\checkmark_{\infty}$

## Summary

	total	plain	simple ind	approx	fixpoint ind	struct ind	
$\checkmark_{\infty}$	9/14		6/9	6/9		9/9	
√ fin	3/14					3/3	