







# benchmark results

for elm-rope

## List

all	runs / second	goodness of fit
recursive	277,659 	99.38%
not (any isBad) with let isBad = not ...	270,058 	99.71%
not (any (not ...))	269,773 	99.48%
not (any (not << ...))	31,285 	99.61%





## Rope




fold -l vs -r	runs / second	goodness of fit
foldl	10,007 	99.6%
foldr	8,286 	99.55%




toList	runs / second	goodness of fit
with foldr preserving last list	7,965 	99.51%
with foldr	7,803 	99.46%
with foldl  > reverse	7,554 	99.64%

all	runs / second	goodness of fit
nested	434,933 	99.49%
not (any (not ...))	410,227 	99.55%



















sum (also applies to product)	runs / second	goodness of fit
nested	27,795 	99.62%
with foldl	9,937 	99.58%
with foldr	8,286 	99.58%

minimum (also applies to maximum)	runs / second	goodness of fit
with nested fold	10,547 	98.76%
with filterMap	6,430 	99.57%
with foldr	5,346 	99.65%
with foldl	5,290 	99.57%

reverse	runs / second	goodness of fit
keep nested	16,994 	98.85%
foldl to flat	9,609 	99.51%
foldr to end to flat	3,841 	99.72%

filter	runs / second	goodness of fit
keep nested	10,292 	99.52%
foldr to flat	7,664 	99.4%
foldl  > reverse to flat	6,812 	99.35%
foldl to end to flat	5,025 	99.42%

filterMap	runs / second	goodness of fit
foldr to flat	6,893 	99.66%
foldl  > reverse to flat	6,224 	99.69%
foldl to end to flat	4,657 	99.63%

keep nested	1,872		99.48%
map	runs / second		goodness of fit
keep nested	9,089		98.67%
foldr to flat	6,884		99.44%
foldl  > reverse to flat	6,728		99.5%
indexedMap	runs / second		goodness of fit
with foldl  > reverse	4,772		99.64%
with foldl to end	3,173		99.56%
concat	runs / second		goodness of fit
nested	253,607		99.57%
with append	48,700		99.6%
with :: fold to Node	39,288		99.61%
concatMap	runs / second		goodness of fit
nested	6,360		98.99%
with :: fold to Node	5,266		99.52%
with append	4,323		99.43%
length	runs / second		goodness of fit
nested	21,052		99.54%
with foldl	11,197		99.58%
with foldr	8,978		99.44%
isEmpty	runs / second		goodness of fit
nested	58,508		99.72%
with foldl	43,014		99.55%
with foldr	19,928		99.72%