I'm trying to build the list that represents the lambda expression, and I'm getting some extra parenthesis that is messing up my evaluation.

With the example of

\[(\text{iterator } i (\text{list } 1 \ 2 \ 3 \ 4) (\text{inspect } i) (\text{inspect } (* \ i \ i)))\]

My list ends up as

\[(\text{lambda } (i) ((\text{inspect } i) (\text{inspect } (* \ i \ i))))\]

The extra parenthesis at the beginning of the body of the lambda breaks my evaluation, as it tries to call INTEGER as a function. Does anyone have any ideas?

$l$ is already a list. Are you doing something like (list $) or (cons $ nil)? If so, that's where you are getting your extra set of parens.

That was the issue, thank you!