Things to check:

check for undeclared variable usage (in parser)

"Given x st something(y)" : y was never defined

prevent variables with same name as something in scope (mostly for quantifiers?)

"Given a,a st..." (in parser)

do typechecking (in chainer)

this is a big thing we talked about a lot that takes a lot of thinking. We may want to put this off till later

warn if desired output has nothing to do with input

"Given x st something(x); Find y st something(y)"

illegal syntax is caught by the xtext compiler already, but we may want to add specific error messages?

NOTES:  
Given x,y st lessThan(x,y) & peelable(x)

somewhere in the theorem database...

lessThan(x,y) :- type\_number(x) & type\_number(y)

peelable(x) :- type\_potato(x)

type\_potato(x) :- !type\_number(x)

so should give a conflict!