TNT Rules

Specification: remove ∀x: and replace x with any term you like

from ∀a:(a⋅0)=0 make (SSS0⋅0)=0 or (a⋅0)=0 or ((Sb+a)⋅0)=0

Generalization: add ∀x: to a string when x is a free variable in it

from a=0 make ∀a:a=0 (can't always do this inside a fantasy)

Interchange: ∀x:~ and ~∃x: are interchangeable

from ~∃a:(a+0)=Sa make ∀a:~(a+0)=Sa

Existence: replace any term in a string by x and add ∃x:

from (S0+S0)=SS0 make ∃a:(S0+a)=SS0 or ∃b:b=SS0

TNT Rules

Symmetry: if r=s is a theorem, so is s=r

from (S0+S0)=SS0 make SS0=(S0+S0)

Transitivity: if r=s and s=t are theorems, so is r=t

from S(0+0)=(0+S0) and (0+S0)=S0 make S(0+0)=S0

Add S: if r=t is a theorem, so is Sr=St

from S0=0 make SS0=S0

Drop S: if Sr=St is a theorem, so is r=t

from S(0+0)=S0 make (0+0)=0