Can we prove the refinement

\[ P \iff t := t + 1. \ P \]

for \( P = t' = 5 \)? Does this mean that execution will terminate at time 5? What is wrong?

§ Yes, we can prove it.

\[ t := t + 1. \ t' = 5 \]

use Substitution Law

\[ \equiv t' = 5 \]

Yes, it means that execution will terminate at time 5. What's wrong is this specification is unimplementable.

\[ \forall \sigma \cdot \exists \sigma'. \ t' = 5 \land t' \geq t \]

specialize to \( t = 6 \)

\[ \Rightarrow \exists \sigma'. \ t' = 5 \land t' \geq 6 \]

\[ \equiv \bot \]