

Inference at \*  
of proof for Lemma implies\_transitivity:

```
⊢∀P,Q,R:ℙ. (P ⇒ Q) ⇒ (Q ⇒ R) ⇒ {P ⇒ R}
  by (((Unfold 'guard' 0)
    CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
      ),(first_nat 3:n)) (first_tok :t) inil_term))))·)
    CollapseTHEN (HypBackchain))·
```