```
rest_equi_rel  THM

⊢  ∀n:{1...}, m:ℕn, E:(ℕn→ℕn→Prop).
|  (EquivRel x,y:ℕn. x E y) ⇒ (EquivRel x,y:ℕm. x E y)
| by UnivCD THEN (Unfold `equiv_rel` 0)
|
1. n : {1...}
2. m : ℕn
3. E : ℕn→ℕn→Prop
4. EquivRel x,y:ℕn. x E y
⊢  Refl(ℕm;x,y.x E y) & Sym x,y:ℕm. x E y & Trans x,y:ℕm. x E y
| by Unfold `equiv_rel` 4 THEN ExRepD
|
4. Refl(ℕn;x,y.x E y)
5. Sym x,y:ℕn. x E y
6. Trans x,y:ℕn. x E y
⊢   by Analyze 0
|
|\
| ⊢  Refl(ℕm;x,y.x E y)
|   by BackThru
|      Thm* ∀n:{1...}, m:ℕn, E:(ℕn→ℕn→Prop).
|           Refl(ℕn;x,y.x E y) ⇒ Refl(ℕm;x,y.x E y)
|      {rest_refl_rel}
|
.\
. ⊢  Sym x,y:ℕm. x E y & Trans x,y:ℕm. x E y  by Analyze 0
. |
. |\
. | ⊢  Sym x,y:ℕm. x E y
. |   by BackThru
. |      Thm* ∀n:{1...}, m:ℕn, E:(ℕn→ℕn→Prop).
. |           Sym x,y:ℕn. x E y ⇒ Sym x,y:ℕm. x E y
. |      {rest_symm_rel}
. |
. .\
. . ⊢  Trans x,y:ℕm. x E y
. .   by BackThru
. .      Thm* ∀n:{1...}, m:ℕn, E:(ℕn→ℕn→Prop).
. .           Trans x,y:ℕn. x E y ⇒ Trans x,y:ℕm. x E y
. .      {rest_tran_rel}
END
```