```
mul_assoc_from_cross_assoc  THM

⊢  ∀a,b,c:ℕ. a•b•c = a•b•c
| by UnivCD
|    {← We have to go out of our way to keep Auto from proving it.
|       This is just an amusing alternative derivation. }
|
|
1. a : ℕ
2. b : ℕ
3. c : ℕ
⊢  a•b•c = (a•b)•c
| by BackThru:
|    Thm*  ∀a,b:ℕ. (ℕa ~ ℕb) ⟺ a = b    {fin_card_vs_nat_eq} ...wℕ
|
⊢  ℕ(a•b•c) ~ ℕ((a•b)•c)
| by Repeat
|    Rewrite← by
|    Thm*  ∀a,b:ℕ. (ℕa×ℕb) ~ ℕ(a•b)    {nsub_mul_rw} ...wℕ
|
⊢  (ℕa×ℕb×ℕc) ~ ((ℕa×ℕb)×ℕc)
  by BackThru: Thm*  (A×B×C) ~ ((A×B)×C)    {simple_card_cross_assoc}
END
```