```
and_via_all_intseg_split_last  THM

⊢  ∀a,b:ℤ, P:({a..b⁻}→Prop).
   a<b ⇒ ((∀i:{a..b⁻}. P(i)) ⟺ (∀i:{a..(b-1)⁻}. P(i)) & P(b-1))
  by UnivCD
     THEN
     Inst:
     Thm*  ∀a,b:ℤ, P:({a..b⁻}→Prop).
           a<b
           ⇒
           (∀c:ℤ.
            b = c+1
            ⇒
            ((∀i:{a..b⁻}. P(i)) ⟺ (∀i:{a..c⁻}. P(i)) & P(c)))
     {and_via_all_intseg_notnull}
     Using:[a | b | P | b-1]
END
```