```
mul_cancel_in_assoced  THM

⊢  ∀a,b:ℤ, n:ℤ⁻⁰. ((n·a) ∼ (n·b)) ⇒ (a ∼ b)
| by UnivCD
|    THEN
|    (OnMCls [0;-1]
|     (RWH
|      (LemmaC
|       Thm* ∀a,b:ℤ. (a ∼ b) ⟺ a = b ∨ a = -b    {assoced_elim})))
|
1. a : ℤ
2. b : ℤ
3. n : ℤ⁻⁰
4. n·a = n·b ∨ n·a = -n·b
⊢  a = b ∨ a = -b  by Analyze 4
|
|\
| 4. n·a = n·b
| ⊢  a = b ∨ a = -b
|   by (Sel 1 (Analyze 0))
|      THEN
|      (FwdThru
|       Thm* ∀a,b:ℤ, n:ℤ⁻⁰. n·a = n·b ⇒ a = b    {mul_cancel_in_eq}
|       [4])
|
.\
. 4. n·a = -n·b
. ⊢  a = b ∨ a = -b
.   by (Sel 2 (Analyze 0))
.      THEN
.      (Using [`n',n]
.       (BackThru
.        Thm* ∀a,b:ℤ, n:ℤ⁻⁰. n·a = n·b ⇒ a = b
.        {mul_cancel_in_eq}))
END
```