```
stamps_why_8cents  THM

⊢  ¬(∃m,n:ℕ. 3•m+5•n = 7)  by Analyze THEN ExistHD Hyp:-1
|
1. m : ℕ
2. n : ℕ
3. 3•m+5•n = 7
⊢  False  by m ∈ ℕ3 | n ∈ ℕ2  Asserted
|
4. m ∈ ℕ3
5. n ∈ ℕ2
⊢  False  by IntSegElim Hyp:4 THEN IntSegElim Hyp:5
|
|\
| 6. m = 0 ∈ ℕ3
| 7. n = 0 ∈ ℕ2
| ⊢  False  by Auto
|
|\
| 6. m = 0 ∈ ℕ3
| 7. n = 1 ∈ ℕ2
| ⊢  False  by Auto
|
|\
| 6. m = 1 ∈ ℕ3
| 7. n = 0 ∈ ℕ2
| ⊢  False  by Auto
|
|\
| 6. m = 1 ∈ ℕ3
| 7. n = 1 ∈ ℕ2
| ⊢  False  by Auto
|
|\
| 6. m = 2 ∈ ℕ3
| 7. n = 0 ∈ ℕ2
| ⊢  False  by Auto
|
.\
. 6. m = 2 ∈ ℕ3
. 7. n = 1 ∈ ℕ2
. ⊢  False  by Auto
END
```