decidable__prime THM

```
⊢  ∀x:ℤ. Dec(prime(x))  by ∀x:ℕ. Dec(prime(x))  Asserted
|
|\
| .....assertion .....
| ⊢  ∀x:ℕ. Dec(prime(x))
|   by Rewrite by
|      Thm*  ∀x:ℕ. prime(x) ⟺ 2≤x & ¬(∃i:{2..x⁻}. i | x)
|      {prime_nat}
|
.\
. 1. ∀x:ℕ. Dec(prime(x))
. ⊢  ∀x:ℤ. Dec(prime(x))  by UnivCD
. |
. 2. x : ℤ
. ⊢  Dec(prime(x))  by Decide: x<0
. |
. |\
. | 3. x<0
. | ⊢  Dec(prime(x))
. |   by Rewrite by Thm*  ∀y:ℤ. prime(-y) ⟺ prime(y)    {prime_neg}
. |
. .\
. . 3. ¬x<0
. . ⊢  Dec(prime(x))  by Auto
END
```