```
even_exists  THM

⊢  ∀n:ℕ. even(n) ⟺ (∃m:ℕ. n = 2·m)
  by RewriteOfThm
     Thm* all
          (λn:hnum. equal
                    (even(n)
                    ,exists(λm:hnum. equal(n,mult(2,m)))))
     {heven_exists}
     (SimpsetC [‘hol_to_nuprl‘;‘bequal‘])
END
```