```
hda  THM

⊢  all
   (λk:hnum. all
             (λn:hnum. implies
                       (lt(0,n)
                       ,exists
                        (λr:hnum. exists
                                  (λq:hnum. and
                                            (equal(k,add(mult(q,n),r))
                                            ,lt(r,n)))))))
  by HOL "hda"
END
```