```
rem_to_div  THM

⊢  ∀a:ℤ, n:ℤ^-0. (a rem n) = a-(a ÷ n)·n  by UnivCD
|
1. a : ℤ
2. n : ℤ^-0
⊢  (a rem n) = a-(a ÷ n)·n
| by Using [‘n’,((a ÷ n)·n)]
|    (BackThru
|     Thm* ∀a,b,n:ℤ. a+n = b+n ⇒ a = b    {add_cancel_in_eq})
|
⊢  (a rem n)+(a ÷ n)·n = a-(a ÷ n)·n+(a ÷ n)·n
  by Inst Thm* ∀a:ℤ, n:ℤ^-0. a = (a ÷ n)·n+(a rem n)    {div_rem_sum}
     [a;n]
END
```