```
rem_3_to_1  THM

⊢  ∀a:{...0}, n:{...-1}. (a rem n) = -((-a) rem -n)
  by Auto
     THEN
     Rewrite by
     Thm* ∀a:ℤ, b:ℤ⁻⁰. ((-a) rem b) = -(a rem b)    {rem_antisym}
     THEN
     Rewrite by Thm* ∀a:ℤ, b:ℤ⁻⁰. (a rem -b) = (a rem b)    {rem_sym}
END
```