```
div_floor_mod_sum  THM

⊢  ∀a:ℤ, n:ℕ+ . a = (a ÷↓ n)·n+(a mod n)
  by Def of a ÷↓ n | a mod n
     THEN
     SplitOnConclITEs THEN ElaborateDivision Auto 0
END
```