```
division_typing1a_sfa  THM

⊢  ∀a:ℕ, n:ℕ+. (a ÷ n) ∈ ℕ  by Auto THEN ElaborateDivision Auto 0
|
1. a : ℕ
2. n : ℕ+
3. a = (a ÷ n)·n+(a rem n)
4. (a rem n) ∈ ℕn
⊢  0≤(a ÷ n)
  by FwdThru:
     Thm* ∀k:ℕ+, r1,r2:ℕk, q1,q2:ℤ. q1·k+r1≤q2·k+r2 ⇒ q1≤q2
     {division_mono1_sfa}
     on [ 0·n+0≤(a ÷ n)·n+(a rem n) ]
END
```