```
coprime_elim_a  THM

⊢  ∀a,b:ℤ. CoPrime(a,b) ⟺ (gcd(a;b) ∼ 1)  by RepD
|
1. a : ℤ
2. b : ℤ
⊢  CoPrime(a,b) ⟺ (gcd(a;b) ∼ 1)
| by FunElim (gcd(a;b) = y) THEN Unfold ‘coprime‘ 0 THEN GenRepD
|
|\
| 3. y : ℤ
| 4. GCD(a;b;y)
| 5. GCD(a;b;1)
| ⊢  y ∼ 1
|   by FwdThru
|      Thm* ∀a,b,y1,y2:ℤ. GCD(a;b;y1) ⇒ GCD(a;b;y2) ⇒ (y1 ∼ y2)
|      {gcd_unique}
|      [4;5]
|
.\
. 3. y : ℤ
. 4. GCD(a;b;y)
. 5. y ∼ 1
. ⊢  GCD(a;b;1)  by RWH (HypC 5) 4
END
```