```
band_simp_4  THM

⊢  ∀b:𝔹. (false₂∧₂b) = false₂
| by ((Analyze 0) THEN (BoolInd 1)) THEN Simp THEN StrongAuto
|
|\
| ⊢  (false₂∧₂true₂) = false₂
|   by Unab [‘ifthenelse‘;‘bor‘;‘bnot‘;‘btrue‘;‘bfalse‘;‘band‘]
|      THEN
|      Reduce 0
|      THEN
|      StrongAuto
|      THEN
|      (Fold ‘btrue‘ 0 ORELSE Fold ‘bfalse‘ 0)
|      THEN
|      StrongAuto
|
.\
. ⊢  (false₂∧₂false₂) = false₂
.   by Unab [‘ifthenelse‘;‘bor‘;‘bnot‘;‘btrue‘;‘bfalse‘;‘band‘]
.      THEN
.      Reduce 0
.      THEN
.      StrongAuto
.      THEN
.      (Fold ‘btrue‘ 0 ORELSE Fold ‘bfalse‘ 0)
.      THEN
.      StrongAuto
END
```