```
reduce_wf  THM

⊢  ∀A,B:Type, f:(A→B→B), k:B, as:A List. reduce(f;k;as) ∈ B
| by UnivCD
|
1. A : Type
2. B : Type
3. f : A→B→B
4. k : B
5. as : A List
⊢  reduce(f;k;as) ∈ B  by ListInd 5
|
|\
| ⊢  reduce(f;k;nil) ∈ B
|   by RWH (RecUnfoldC ‘reduce‘) 0 THEN AbReduce 0
|
.\
. 6. u : A
. 7. v : A List
. 8. reduce(f;k;v) ∈ B
. ⊢  reduce(f;k;u.v) ∈ B  by RecUnfold ‘reduce‘ 0 THEN AbReduce 0
. |
. ⊢  f(u,reduce(f;k;v)) ∈ B  by Analyze
. |
. |\
. | ⊢  f(u) ∈ B→B  by Auto
. |
. .\
. . ⊢  reduce(f;k;v) ∈ B  by Trivial
END
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