```
map_before  THM

⊢  ∀T,T':Type, f:(T→T'), x,y:T, s:T List.
|  x before y ∈ s ⇒ f(x) before f(y) ∈ map(f;s)
| by Auto THEN (RepeatFor 4 (ParallelOp -1)) THEN (All Reduce)
|    THEN
|    (Try Trivial)
|
1. T : Type
2. T' : Type
3. f : T→T'
4. x : T
5. y : T
6. s : T List
7. f1 : ℕ2→ℕ||s||
8. ∀j:ℕ2. [x; y][j] = s[(f1(j))]
⊢  ∀j:ℕ2. [(f(x)); (f(y))][j] = map(f;s)[(f1(j))]
| by (((ParallelOp -1)
|      THEN
|      (RWO
|       Thm* ∀f:(A→B), as:A List, n:ℕ||as||. map(f;as)[n] = f(as[n])
|       {map_select}
|       0))
|     THEN
|     (RevHypSubst -1 0))
|    THENA
|    (Auto THEN (Reduce 0))
|
1. T : Type
2. T' : Type
3. f : T→T'
4. x : T
5. y : T
6. s : T List
7. f1 : ℕ2→ℕ||s||
8. ∀j:ℕ2. [x; y][j] = s[(f1(j))]
9. j : ℕ2
10. [x; y][j] = s[(f1(j))]
⊢  [(f(x)); (f(y))][j] = f([x; y][j])
  by (CaseNat 0 `j') THEN (Reduce 0) THEN (CaseNat 1 `j')
     THEN
     (Reduce 0)
END
```