Since Algorithm 1 $\in$ ***GI*** and solves the ... problem, it is in ***GI***

Algorithm 1: *Fitting algorithm for* $\mathrm{FO[S]}$

Input: *Set of labeled examples for* $\mathrm{FO[S]}$*:* $E \subseteq \mathcal{X}_{\mathrm{FO[S]}} \times \{+, -\}$

Output: *A concept* $\varphi \in C_{\mathrm{FO[S]}}$ *if fitting concepts for* E *exist, else "None Exists"*

```
1  φ ← ⊥
2  foreach (A, +) ∈ E
3      φ ← φ ∨ φ_A; where φ_A is the canonical example for A constructed as in (a)
4      foreach (B, −) ∈ E // test if φ fits the negative examples
5          if A ≅_iso B
6              return "None Exists"
7  return True
```