

*Procedure* **RESOLUTION**

- 1  $CLAUSES \leftarrow S$
- 2 **until** *NIL* is a member of *CLAUSES*, **do**:
- 3   **begin**
- 4       **select** two distinct, resolvable clauses  
           $c_i$  and  $c_j$  in *CLAUSES*
- 5       compute a resolvent,  $r_{ij}$  of  $c_i$   
          and  $c_j$
- 6        $CLAUSES \leftarrow$  The set produced by adding  $r_{ij}$   
          to *CLAUSES*
- 7   **end**

$$(1) \quad \sim R(x) \vee L(x)$$

$$(2) \quad \sim D(y) \vee \sim L(y)$$

$$(3a) \quad D(A)$$

$$(3b) \quad I(A)$$

$$(4') \quad \sim I(z) \vee R(z) .$$

dog(Fido)  
owns(Jack, Fido)  
 $\neg \text{dog}(y) \vee \neg \text{owns}(x, y) \vee \text{animalLover}(x)$   
 $\neg \text{animalLover}(z) \vee \neg \text{animal}(a) \vee \neg \text{kills}(z, a)$   
 $\text{kills}(\text{Jack}, \text{Tuna}) \vee \text{kills}(\text{Curiosity}, \text{Tuna})$   
cat(Tuna)  
 $\neg \text{cat}(b) \vee \text{animal}(b)$

$\neg \text{kills}(\text{Curiosty}, \text{Tuna})$