```
¬ Vertex(V0) ∨ PeopleAt(V0,s) ∨ ¬Vertex(V1) ∨ PeopleAt(V1,s) ∨
                                                                                                                     ¬PickAll(s)
               \neg Vertex(V2) \lor PeopleAt(V2,s) \lor \neg Vertex(V3) \lor PeopleAt(V3,s)

∨ PickAll(s)

                                                           \neg Vertex(V0) \lor PeopleAt(V0,s) \lor \negVertex(V1) \lor PeopleAt(V1,s) \lor
             Vertex(V0)
                                                               \neg Vertex(V2) \lor PeopleAt(V2,s) \lor \neg Vertex(V3) \lor PeopleAt(V3,s)
                                                           PeopleAt(V0,s) \vee \neg Vertex(V1) \vee PeopleAt(V1,s) \vee
             Vertex(V1)
                                                               \neg Vertex(V2) \lor PeopleAt(V2,s) \lor \neg Vertex(V3) \lor PeopleAt(V3,s)
                                                           PeopleAt(V0,s) \times PeopleAt(V1,s) \times
              Vertex(V2)
                                                               \neg Vertex(V2) \lor PeopleAt(V2,s) \lor \neg Vertex(V3) \lor PeopleAt(V3,s)
                                                            PeopleAt(V0,s) \lor PeopleAt(V1,s) \lor PeopleAt(V2,s) \lor ¬Vertex(V3)
             Vertex(V3)
                                                            PeopleAt(V3,s)
                                                                                        \Rightarrow
                                                                                               PeopleAt(V0,s) ∨ PeopleAt(V1,s) ∨
(\neg Vertex(v) \lor \neg Loc(v,s) \lor \neg PeopleAt(v,s) \lor Terminated(s))
\vee \neg PeopleAt(v,Result(a,s))
                                                                                               PeopleAt(V2,s) \vee PeopleAt(V3,s)
                                                                                     {v=V1, s=Result(a,s')}
                                                                             PeopleAt(V0,s') \( \times \) PeopleAt(V3,s') \( \times \)
                                                                             PeopleAt(V2,s') \vee \neg Vertex(V1) \vee \neg Loc(V1,s')
                 Vertex(V1)
                                                                             ∨¬PeopleAt(V1,s) ∨Terminated(s')
                                                                            PeopleAt(V0,s') \times PeopleAt(V3,s') \times
               PeopleAt(V1,S0)
                                                                            PeopleAt(V2,s') \vee \neg Loc(V1,s') \vee \neg PeopleAt(V1,s)
                                                                            ∨Terminated(s')
                                                                             {s=S0 ,Result(a,s')=S0}
                                                                       PeopleAt(V0,s') \times PeopleAt(V3,s') \times
                                                                       PeopleAt(V2,s') \vee \neg Loc(V1,s') \vee Terminated(s')
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PeopleAt(V0,s') ∨ PeopleAt(V3,s') ∨
     \neg Loc(v,s) \lor \neg Edge(e,v,v') \lor \neg Weight(e,w) \lor
     Loc(v',Result(traverse(e),s))
                                                                   PeopleAt(V2,s') \vee \neg Loc(V1,s') \vee Terminated(s')
                                                                {v'=V1,s'=Result(traverse(e),s'')}
                                                                   PeopleAt(V0, Result(traverse(e),s")) \times
                                                                   PeopleAt(V3, Result(traverse(e),s")) \times
                                                                   PeopleAt(V2, Result(traverse(e),s")) \times
                                                                   Terminated(s') ∨
                                                                   \neg Loc(v,s'') \lor \neg Edge(e,v,V1) \lor \neg Weight(e,w)
      Edge(E1,V0,V1)
                                                                {v=V0,e=E1}
                                                                  PeopleAt(V0, Result(traverse(E1),s")) \times
                                                                  PeopleAt(V3, Result(traverse(E1),s")) \times
                                                                  PeopleAt(V2, Result(traverse(E1),s")) \times
                                                                  Terminated(s') ∨
                                                                  \neg Loc(V0,s'') \lor \neg Weight(E1,w)
        Loc(V0,S0)
                                                                 \{s''=S0\}
                                                          PeopleAt(V0, Result(traverse(E1),S0)) \rightarrow
                                                          PeopleAt(V3, Result(traverse(E1),S0)) \times
                                                          PeopleAt(V2, Result(traverse(E1),S0)) \( \times \)
       Weight(E1,4)
                                                          Terminated(s') ∨
                                                          \vee \negWeight(E1,w)
                                                          {w=4}
                                                           PeopleAt(V0, Result(traverse(E1),S0)) \rightarrow
                                                           PeopleAt(V3, Result(traverse(E1),S0)) \times
                                                           PeopleAt(V2, Result(traverse(E1),S0)) v
  PickAll(s') \lor \neg Terminated(s')
                                                           Terminated(s')
                                                           PeopleAt(V0, Result(traverse(E1),S0)) \times
                                                           PeopleAt(V3, Result(traverse(E1),S0)) \times
                                                           PeopleAt(V2, Result(traverse(E1),S0))
We can see that in this state we can from
this state we can remove each PeopleAt in
the same maner, meaning that we will
remove all sentences the same way.
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 $\bigstar$