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Results for CXP (in 00:00:00.610):
  NB EV: 4
  AP: AP2
  NB AP: 2
  NB_MAY: -1
  NB_MUST_MINUS: -1
  NB MUST PLUS: -1
  NB MUST SHARP: -1
  NB AS: 3
  NB AS RCHD: 2
  TAU AS: 66.67
  NB AT: 11
  NB_AT_RCHD: 6
  TAU AT: 54.55
  NB_EXPECTED_AS: 3
  NB_EXPECTED_AS_RCHD: 2
  TAU EXPECTED AS: 66.67
  NB EXPECTED AT: 2
  NB EXPECTED AT RCHD: 0
  TAU_EXPECTED_AT: 0.00
  NB CS: 21
  NB CS RCHD: 5
  NB CT: 16
  NB CT RCHD: 6
  RHO CS: 23.81
  RHO CT: 37.50
  NB TESTS: 2
  NB_STEPS: 8
  TESTS:
      \texttt{c0q1} = \texttt{bat(1)} = 9, \ \texttt{bat(2)} = 9, \ \texttt{bat(3)} = 9, \ \texttt{bat(4)} = 9, \ \texttt{bat(5)} = 9, \ \texttt{bat(6)} = 9, \ \texttt{bat(7)} = 9, \ \texttt{bat(8)} = 9, \ \texttt{h=7}, \ \texttt{sw=1} - [ \ \texttt{Fail} \ ] -> \ \texttt{c2q3} = \ \texttt{bat(1)} = 9, \ \texttt{bat(2)} = 9, \ \texttt{bat(3)} = 9, \ \texttt{bat(3)
  bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 c2q3 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, bat(8)=
C2q3 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[ Fait ]-> Cq3 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(7)=8, bat(8)=8, h=7, sw=1 -[ Repair ]-> c2q3 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(6)=9, bat(7)=8, bat(7)=8, bat(8)=8, h=7, sw=1 -[ Repair ]-> c2q3 = bat(1)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[ Repair ]-> c0q1 = bat(1)=9, bat(2)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[ Repair ]-> c0q1 = bat(1)=9, bat(2)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=8, h=7, sw=1 -[ Repair ]-> c0q1 = bat(1)=9, bat(2)=9, bat(2)=9, bat(3)=9, bat(3)=9, bat(4)=9, bat(3)=9, bat(3)
bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(6)=9, bat(7)=9, bat(8)=9, bat(8)=8, bat(8)=9, bat(8)
c0q1 = bat(1)=9, bat(2)=9, bat(3)=9, bat(4)=9, bat(5)=9, bat(6)=9, bat(7)=9, bat(8)=9, bat(8)=9, bat(9)=9, bat(9)=9
      \begin{array}{l} \textbf{QL} = \textbf{QL}(\textbf{DL}) \\ \textbf{QL} = -(\textbf{p0} = \overline{\textbf{J}}(\textbf{nb}).(\textbf{and}(\textbf{and}(\textbf{nb} \in [1..n]), \ \textbf{and}(\textbf{bat}(\textbf{nb}) = \textbf{ko}[8])))), \ (\textbf{p1} = \overline{\textbf{J}}(\textbf{i}, \ \textbf{j}).(\textbf{and}(\textbf{and}(\textbf{i} \in [1..n], \ \textbf{j} \in [1..n]), \ \textbf{and}(\textbf{i} \neq \textbf{j}, \ \textbf{bat}(\textbf{i}) = \textbf{ok}[9], \ \textbf{bat}(\textbf{j}) = \textbf{ok}[9]))) \\ \textbf{bat}(\textbf{j}) = \textbf{ok}(\textbf{j}) \\ \textbf{ok}(\textbf{j}) \\ \textbf{ok}(\textbf{j}) = \textbf{ok}(\textbf{j}) \\ \textbf{ok}(\textbf{j}) \\
                                                                                                                                              \overrightarrow{\exists} (\mathsf{nb}). (\mathsf{and} (\mathsf{and} (\mathsf{nb} \in [1..n]), \ \mathsf{and} (\mathsf{bat} (\mathsf{nb}) = \mathsf{ko}[8])))), \ \neg (\mathsf{p1} = \exists (\mathsf{i}, \mathsf{j}). (\mathsf{and} (\mathsf{and} (\mathsf{i} \in [1..n]), \mathsf{j} \in [1..n]), \ \mathsf{and} (\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat} (\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{ok}[9]) ) ) ) 
                                                                    (p0
  bat(i)=ok[91))))
                                                                                                                                = \exists (nb) \cdot (and(and(nb \in [1..n]), and(bat(nb) = ko[8])))), (p1 = \exists (i, j) \cdot (and(and(i \in [1..n], j \in [1..n]), and(i \neq j, bat(i) = ok[9], and(and(i \in [1..n]), and(i \neq j, bat(i) = ok[9], and(and(i \in [1..n]), and(and(i \in
  bat(j)=ok[9]))))
    \vec{q1} = \neg(\vec{p0} = \exists (nb).(and(and(nb \in [1..n]), \ and(bat(nb) = ko[8])))), \ (\vec{p1} = \exists (i, j).(and(and(i \in [1..n]), j \in [1..n]), \ and(i \neq j, \ bat(i) = ok[9], \ and(bat(nb) = bat(nb) = bat(n
  bat(j)=ok[9]))))
  q3 = (p0 = \exists(nb) \\ bat(j)=ok[9])))
                                                               (p0 = \exists (nb).(and(and(nb \in [1..n]), and(bat(nb) = ko[8])))), (p1 = \exists (i, j).(and(and(i \in [1..n], j \in [1..n]), and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[9], bat(i) = ok[9], and(i \neq j, bat(i) = ok[
   \begin{split} & \mathsf{SET\_RCHD\_EXPECTED\_AS:} \\ & \mathsf{q1} = \neg(\mathsf{p0} = \exists(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \ \mathsf{and}(\mathsf{bat}(\mathsf{nb}) = \mathsf{ko}[8])))), \ (\mathsf{p1} = \exists(\mathsf{i}, \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \mathsf{j} \in [1..n]), \ \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \ \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{ok}(\mathsf{i}) = \mathsf{ok}(\mathsf{i}) = \mathsf{ok}[9], \ \mathsf{ok}[9]
  bat(j)=ok[9]))))
                                                                                                                                        \exists (nb).(and(and(nb \in [1..n]), and(bat(nb)=ko[8])))), (p1 = \exists (i, j).(and(and(i \in [1..n], j \in [1..n]), and(i \neq j, bat(i)=ok[9], and(i)=ok[9], and(i \neq j, bat(i)=ok[9], and(i \neq j, bat(i)=ok[9], and
                                                               (p0 :
  bat(j)=ok[9]))))
  SET EXPECTED AT:
   \begin{array}{l} \exists \text{Li} = \text{Li
   \begin{array}{lll} \text{and}(i\neq j, \text{bat}(i) = \text{bk}[9], \text{bat}(j) = \text{bk}[9]))) \\ \text{q3} &= (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \\ \text{pat}(j) &= \text{bk}(j) = \text{bk}(j) \\ \text{bat}(j) &= \text{bk}(j) = \text{bk}(j) \\ \text{bat}(j) &= \text{bk}(j) &= \text{bk}(j) \\ \text{bk}(j) 
  and(i \neq j, bat(i)=ok[9], bat(j)=ok[9]))))
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 \begin{split} & \mathsf{SET}_\mathsf{RCHD}_\mathsf{AT}: \\ & \mathsf{q1} = \neg(\mathsf{p0} = \mathsf{3}(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \, \mathsf{and}(\mathsf{bat}(\mathsf{nb}) = \mathsf{ko}[8])))), \, \, (\mathsf{p1} = \mathsf{3}(\mathsf{i}, \, \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \, \mathsf{j} \in [1..n]), \, \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \, \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9]), \\ & \mathsf{at}(\mathsf{j}) = \mathsf{ok}[9])))) \cdot [\, \mathsf{Fail} \, \big] - \mathsf{v}_\mathsf{q3} = \, (\mathsf{p0} = \mathsf{3}(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \, \mathsf{and}(\mathsf{bat}(\mathsf{nb}) = \mathsf{ko}[8])))), \, \, (\mathsf{p1} = \mathsf{3}(\mathsf{i}, \, \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n], \, \mathsf{j} \in [1..n]), \, \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \, \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9])))), \\ & \mathsf{q1} = \neg(\mathsf{p0} = \mathsf{3}(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nd} \in [1..n]), \, \mathsf{and}(\mathsf{bat}(\mathsf{nb}) = \mathsf{ko}[8])))), \, \, (\mathsf{p1} = \mathsf{3}(\mathsf{i}, \, \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n]), \, \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \, \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9]), \, \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9]))), \\ & \mathsf{q3} = (\mathsf{p0} = \mathsf{3}(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \, \mathsf{and}(\mathsf{bat}(\mathsf{nb}) = \mathsf{ko}[8])))), \, \, (\mathsf{p1} = \mathsf{3}(\mathsf{i}, \, \mathsf{j}).(\mathsf{and}(\mathsf{and}(\mathsf{i} \in [1..n]), \, \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \, \mathsf{bat}(\mathsf{i}) = \mathsf{ok}[9]), \, \mathsf{and}(\mathsf{i} \neq \mathsf{j}, \, \mathsf{bat}(\mathsf{j}) = \mathsf{ok}[9]))), \\ & \mathsf{q3} = (\mathsf{p0} = \mathsf{3}(\mathsf{nb}).(\mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \, \mathsf{and}(\mathsf{and}(\mathsf{nb} \in [1..n]), \, \mathsf{j} \in [1.
  \begin{array}{lll} \text{Dat}(j) = \text{Ok}(9j))) & -\{ \text{ Repair } j > \text{ Q3} = \{ pb = \exists (nb).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(i) = \text{ok}[9], bat(j) = \text{ok}[9])))), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9]))), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9]))), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9]))), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), \text{ and}(1 \neq j, bat(j) = \text{ok}[9], & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [1..n]), & \{ p1 = \exists (1, j).(\text{and}(\text{and}(1 \in [1..n], j \in [
     SET RCHD EXPECTED AT:
     SET_UNRCHD_AS:
     q_2 = (p_0 = \exists (nb).(and(and(nb \in [1..n]), and(bat(nb)=ko[8])))), \neg (p_1 = \exists (i, j).(and(and(i \in [1..n], j \in [1..n]), and(i \neq j, bat(i)=ok[9], bat(j)=ok[9]))))
     SET_UNRCHD_EXPECTED_AS: q2 = (p0 = \exists (nb).(and(and(nb \in [1..n]), and(bat(nb)=ko[8])))), \neg (p1 = \exists (i, j).(and(and(i \in [1..n], j \in [1..n]), and(i \neq j, bat(i)=ok[9], and(i \neq j, bat(i)=ok[9])))
     bat(j)=ok[9]))))
 \begin{split} & \text{SET\_UNRCHD\_AT:} \\ & \text{q1} = \neg(\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{ and}(i \neq j, \text{bat}(i) = \text{ok}[9]), \\ & \text{bat}(j) = \text{ok}[9])))) \cdot [\text{Commute }] -> \text{q1} = \neg(\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \\ & \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9], \text{bat}(j) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9], \\ & \text{bat}(j) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9], \\ & \text{bat}(j) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{and}(i \neq j, \text{bat}(i) = \text{ok}[9])))) \\ & \text{q2} = (\text{p0} = \exists (\text{p0}).(\text{q3}) = \text{q3}) \\ & \text{q3} = (\text{p0}) = \exists (\text{p0}).(\text{q3}) = (\text{p0}) = \exists (\text{p0}).(\text{q3}) = (\text{p0}) = \exists (\text{p0}).(\text{q3}) = (\text{p0}) = \text{q3} = (\text{p0}) = \text{q3} = (\text{p0}) = \text{q3} = (\text{p0}) = \text{q3} = (\text{p0}) = \text
 \begin{array}{l} \text{bat}(j) = \text{ok}[9]))) \ -[\text{Tic }] > \text{q2} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg(\text{p1} = \exists (i, j).(\text{and}(\text{and}(i \in [1..n], j \in [1..n]), \text{ and}(i \neq j, \text{ bat}(i) = \text{ok}[9], \text{ bat}(j) = \text{ok}[9])))) \\ \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (p1 = \exists (i, j).(\text{and}(\text{and}(i \in [1..n]), \text{ and}(i \neq j, \text{ bat}(i) = \text{ok}[9], \text{ bat}(j) = \text{ok}[9])))) \\ \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (p1 = \exists (i, j).(\text{and}(\text{and}(i \in [1..n]), \text{ and}(i \neq j, \text{ bat}(i) = \text{ok}[9], \text{ bat}(j) = \text{ok}[9])))) \\ \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (p1 = \exists (i, j).(\text{and}(\text{and}(i \in [1..n]), \text{ and}(i \neq j, \text{ bat}(i) = \text{ok}[9], \text{ bat}(j) = \text{ok}[9]))) \\ \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (p1 = \exists (i, j).(\text{and}(\text{and}(i \in [1..n]), \text{ and}(i \neq j, \text{ bat}(i) = \text{ok}[9], \text{ bat}(i) = \text{ok}[9], \text{ bat}(i) = \text{ok}[9]))) \\ \text{q3} = (p0 = \exists (\text{nb}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(\text{q3}).(
   \begin{split} & \text{SET\_UNRCHD\_EXPECTED\_AT:} \\ & \text{Q2} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{ and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ \neg (\text{p1} = \exists (\text{i, j}).(\text{and}(\text{and}(\text{i} \in [1..n], \text{j} \in [1..n]), \text{ and}(\text{i} \neq \text{j, bat}(\text{i}) = \text{ok}[9], \text{bat}(\text{j}) = \text{ok}[9]))) \\ & \text{and}(\text{i} \neq \text{j, bat}(\text{i}) = \text{ok}[9], \text{bat}(\text{j}) = \text{ok}[9]))) \\ & \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (\text{p1} = \exists (\text{i, j}).(\text{and}(\text{and}(\text{i} \in [1..n], \text{j} \in [1..n]), \text{and}(\text{i} \neq \text{j, bat}(\text{j}) = \text{ok}[9], \text{bat}(\text{j}) = \text{ok}[9]))) \\ & \text{q3} = (p0 = \exists (\text{nb}).(\text{and}(\text{and}(\text{nb} \in [1..n]), \text{and}(\text{bat}(\text{nb}) = \text{ko}[8])))), \ (\text{p1} = \exists (\text{i, j}).(\text{and}(\text{and}(\text{i} \in [1..n]), \text{and}(\text{i} \neq \text{j, bat}(\text{i}) = \text{ok}[9], \text{bat}(\text{j}) = \text{ok}[9
     and(i \neq j, bat(i)=ok[9], bat(j)=ok[9])))
     TIME ATS: 00:00:00.610
```

TIME\_TESTS: 00:00:00.000