

Results for CXPASO (in 00:00:10.144):

NB_EV: 11
AP: AP2
NB_AP: 10
NB_MAY: -1
NB_MUST_MINUS: -1
NB_MUST_PLUS: -1
NB_MUST_SHARP: -1
NB_AS: 13
NB_AS_RCHD: 8
TAU_AS: 61.54
NB_AT: 53
NB_AT_RCHD: 24
TAU_AT: 45.28
NB_EXPECTED_AS: 13
NB_EXPECTED_AS_RCHD: 8
TAU_EXPECTED_AS: 61.54
NB_EXPECTED_AT: 53
NB_EXPECTED_AT_RCHD: 24
TAU_EXPECTED_AT: 45.28
NB_CS: 64
NB_CS_RCHD: 19
NB_CT: 54
NB_CT_RCHD: 24
RHO_CS: 29.69
RHO_CT: 44.44
NB_TESTS: 10
NB_STEPS: 49

TESTS:

c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[insert100]-> c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1
c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1 -[changeReq]-> c6q32 = AskChange=1, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1
c6q32 = AskChange=1, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1 -[backBalance]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[powerDown]-> c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0
c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[autoOut]-> c2q64 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=2
c2q64 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=2 -[powerDown]-> c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0
c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[insert50]-> c4q812 = AskChange=0, AskCof=0, Balance=50, CofLeft=6, Pot=0, Status=1
c4q812 = AskChange=0, AskCof=0, Balance=50, CofLeft=6, Pot=0, Status=1 -[insert100]-> c8q556 = AskChange=0, AskCof=0, Balance=150, CofLeft=6, Pot=0, Status=1
c8q556 = AskChange=0, AskCof=0, Balance=150, CofLeft=6, Pot=0, Status=1 -[insert50]-> c9q44 = AskChange=0, AskCof=0, Balance=200, CofLeft=6, Pot=0, Status=1
c9q44 = AskChange=0, AskCof=0, Balance=200, CofLeft=6, Pot=0, Status=1 -[changeReq]-> c17q32 = AskChange=1, AskCof=0, Balance=200, CofLeft=6, Pot=0, Status=1

c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[insert100]-> c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1
c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1 -[cofReq]-> c7q33 = AskChange=0, AskCof=1, Balance=100, CofLeft=6, Pot=0, Status=1
c7q33 = AskChange=0, AskCof=1, Balance=100, CofLeft=6, Pot=0, Status=1 -[serveCof]-> c12q32 = AskChange=1, AskCof=0, Balance=50, CofLeft=5, Pot=50, Status=1

c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[insert100]-> c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1
c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1 -[insert100]-> c9q44 = AskChange=0, AskCof=0, Balance=200, CofLeft=6, Pot=0, Status=1
c9q44 = AskChange=0, AskCof=0, Balance=200, CofLeft=6, Pot=0, Status=1 -[cofReq]-> c18q33 = AskChange=0, AskCof=1, Balance=200, CofLeft=6, Pot=0, Status=1

c0q128 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=0 -[powerUp]-> c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1
c1q864 = AskChange=0, AskCof=0, Balance=0, CofLeft=6, Pot=0, Status=1 -[insert100]-> c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1
c3q812 = AskChange=0, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1 -[changeReq]-> c6q32 = AskChange=1, AskCof=0, Balance=100, CofLeft=6, Pot=0, Status=1

SET_EXPECTED_AS:

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AskChange=0)), (p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~((p8 = 3(x).(and(and(x ∈ [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], MaxCof > CofLeft))), ~(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)))
q64 = ~(p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), ~(p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), ~(p2 = and(Status=off[0], CofLeft > 0, MaxPot > Pot)), (p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), ~(p4 = Status=on[1]), ~(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), ~(p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), ~(p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~(p8 = 3(x).(and(and(x ∈ [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], MaxCof > CofLeft))), ~(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)))
q812 = (p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), (p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), ~(p2 = and(Status=off[0], CofLeft > 0, MaxPot > Pot)), ~(p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), (p4 = Status=on[1]), ~(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), (p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), (p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~(p8 = 3(x).(and(and(x ∈ [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], MaxCof > CofLeft)))), ~(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)))
q864 = (p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), (p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), ~(p2 = and(Status=off[0], CofLeft > 0, MaxPot > Pot)), (p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), (p4 = Status=on[1]), ~(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), ~(p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), ~(p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~(p8 = 3(x).(and(and(x ∈ [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], MaxCof > CofLeft)))), ~(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)))

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SET_RCHD_AS:

SET RCHD EXPECTED AS:

SET_EXPECTED_AT:

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q128 = ~(p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), ~(p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), (p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), ~(p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0),
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SET_RCHD_AT:

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q128 = ~((p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), ~(p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), (p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), ~(p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), ~(p4 = Status=on[1]), ~(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), ~(p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), ~(p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~(p8 = 3(x).(and(and(x [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], MaxCof > CofLeft)))), ~(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)) - [ powerUp ] -> q864 = (p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), (p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), ~(p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), (p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), (p4 = Status=on[1]), ~(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), ~(p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), ~(p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), ~(p8 = 3(x).(and(and(x [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0],

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and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50)), (p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 100))), 
-(p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), -(p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), (p4 = 
Status=on[1]), -(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), (p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), (p7 = 
and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), -(p8 =  $\exists$ (x).(and(and(x  $\in$  [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], 
MaxCof > CofLeft)))), -(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0))
q864 = (p0 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50)), (p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= 
(Balance + 100))), -(p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), (p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), 
Status=error[2])), (p4 = Status=on[1]), -(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), -(p6 = and(Status=on[1], Balance >= 50, AskCof=0, 
AskChange=0)), -(p7 = and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), -(p8 =  $\exists$ (x).(and(and(x  $\in$  [1..MaxCof]), and(MaxCof >= (CofLeft + 
x), Status=off[0], MaxCof > CofLeft)))), -(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0)) - [ powerDown ] -> q128 = -(p0 = 
and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 50))), -(p1 = and(Status=on[1], AskChange=0, AskCof=0, MaxBal >= (Balance + 
100))), (p2 = and(Status=off[0], CofLeft > 0, MaxPot >= Pot)), -(p3 = or(and(Status=on[1], AskChange=0, AskCof=0, Balance=0), Status=error[2])), 
-(p4 = Status=on[1]), -(p5 = and(Status=off[0], Pot >= (MaxPot - 50))), -(p6 = and(Status=on[1], Balance >= 50, AskCof=0, AskChange=0)), -(p7 = 
and(Status=on[1], Balance > 0, AskCof=0, AskChange=0)), -(p8 =  $\exists$ (x).(and(and(x  $\in$  [1..MaxCof]), and(MaxCof >= (CofLeft + x), Status=off[0], 
MaxCof > CofLeft)))), -(p9 = and(Status=on[1], Balance >= 50, AskCof=1, CofLeft > 0))

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SET_RCHD_EXPECTED_AT:

SET_UNRCHD_AS:

SET_UNRCHD_EXPECTED_AS:

SET_UNRCHD_AT:

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q130 =  $\neg(p0 = \text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{MaxBal} \geq (\text{Balance} + 50)))$ ,  $\neg(p1 = \text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{MaxBal} \geq (\text{Balance} + 100)))$ ,  $(p2 = \text{and}(\text{Status}=\text{off}[0], \text{CofLeft} > 0, \text{MaxPot} \geq \text{Pot}))$ ,  $\neg(p3 = \text{or}(\text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{AskCof}=0, \text{Balance}=0), \text{Status}=\text{error}[2]))$ ,  $\neg(p4 = \text{Status}=\text{on}[1])$ ,  $\neg(p5 = \text{and}(\text{Status}=\text{off}[0], \text{Pot} \geq (\text{MaxPot} - 50)))$ ,  $\neg(p6 = \text{and}(\text{Status}=\text{on}[1], \text{Balance} \geq 50, \text{AskCof}=0, \text{AskChange}=0))$ ,  $\neg(p7 = \text{and}(\text{Status}=\text{on}[1], \text{Balance} > 0, \text{AskCof}=0, \text{AskChange}=0))$ ,  $(p8 = \exists(x).(\text{and}(\text{and}(x \in [1..\text{MaxCof}], \text{and}(\text{MaxCof} \geq (\text{CofLeft} + x), \text{Status}=\text{off}[0], \text{MaxCof} > \text{CofLeft}))))$ ,  $\neg(p9 = \text{and}(\text{Status}=\text{on}[1], \text{Balance} \geq 50, \text{AskCof}=1, \text{CofLeft} > 0))$  - [ addCof ] -> q128 =  $\neg(p0 = \text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{AskCof}=0, \text{MaxBal} \geq (\text{Balance} + 50)))$ ,  $\neg(p1 = \text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{AskCof}=0, \text{MaxBal} \geq (\text{Balance} + 100)))$ ,  $(p2 = \text{and}(\text{Status}=\text{off}[0], \text{CofLeft} > 0, \text{MaxPot} \geq \text{Pot}))$ ,  $\neg(p3 = \text{or}(\text{and}(\text{Status}=\text{on}[1], \text{AskChange}=0, \text{AskCof}=0, \text{Balance}=0), \text{Status}=\text{error}[2]))$ ,

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SET_UNRCHD_EXPECTED_AT:

TIME_ATS: 00:00:10.144

TIME_TESTS: 00:00:00.000