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CSC-366

Examples for H1 - if sameP(A,B) ^ zeroP(C,D,E) ^ oneP(G) then
 ((A/B) + zeroX(C,D,E))
 1.) Numbers: [1,1,0,0,0] Goal: [1]
     a.) ((1 / 1) + ((0 + 0) + 0))
 2.) Numbers: [5,4,5,1,3] Goal: [1]
     a.) ((5 / 5) + ((4 - 3) - 1))
 3.) Numbers: [6,7,4,6,0] Goal: [1]
     a.) ((6 / 6) + ((7 - 4) * 0))

Examples for H2 - if sameP(A,B) and goalP(C,D,E) then
 ((A - B) + goalX(C,D,E))
 1.) Numbers: [5,4,3,2,5] Goal: [9]
     a.) ((5 - 5) + ((2 + 3) + 4))
 2.) Numbers: [0,0,3,4,6] Goal: [7]
     a.) ((0 - 0) + ((4 - 3) + 6))
 3.) Numbers: [9,2,2,8,2] Goal: [5]
     a.) ((2 - 2) + (9 - (8 / 2)))

Examples for H3 - if zeroP(A) and goalP(B) and numbersP(C,D,E) then
 (B + (A * (C * (D * E))))
 1.) Numbers: [1,0,3,4,5] Goal: [5]
     a.) (5 + (0 * (1 * (3 * 4))))
 2.) Numbers: [6,6,5,0,3] Goal: [3]
     a.) (3 + (0 * (6 * (6 * 5))))
 3.) Numbers: [9,4,0,4,4] Goal: [9]
     a.) (9 + (0 * (4 * (4 * 4))))

Examples for H4 - if sameP(A,B) and goalP(C) and numbersP(D,E) then
 (C + ((A - B) * (D * E)))
 1.) Numbers: [2,4,2,6,8] Goal: [4]
     a.) (4 + ((2 - 2) * (6 * 8)))
 2.) Numbers: [1,1,1,5,4] Goal: [1]
     a.) (1 + ((1 - 1) * (5 * 4)))
 3.) Numbers: [9,3,3,6,7] Goal: [9]
     a.) (9 + ((3 - 3) * (6 * 7)))

Examples for H5 - if oneP(A) and zeroP(B,C,D) and onemoreP(E,G) then
  ((E - A) + zeroX(C,D,E))
  1.) Numbers: [1,4,5,5,1] Goal: [3]
      a.) ((4 - 1) + ((5 / 5) - 1))
  2.) Numbers: [6,1,4,3,0] Goal: [5]
      a.) ((6 - 1) + ((4 - 3) * 0))
  3.) Numbers: [3,2,1,1,9] Goal: [8]
      a.) ((9 - 1) + ((3 - 2) - 1))

Examples for H6 - if oneP(A) and oneP(B) and zeroP(C,D) and twomoreP(E,G) then
  ((E - (A + B)) + zeroX(C,D))
  1.) Numbers: [1,1,5,0,6] Goal: [4]
      a.) ((6 - (1 + 1)) + (5 * 0))
  2.) Numbers: [8,4,4,1,1] Goal: [6]
      a.) ((8 - (1 + 1)) + (4 - 4))
  3.) Numbers: [2,5,1,0,1] Goal: [0]
      a.) ((2 - (1 + 1)) + (5 * 0))

Examples for H7 - if sameP(A,B) and sameP(C,D) and twomoreP(E,G) then
  (E - ((A / B)) + (C / D)))
  1.) Numbers: [8,3,4,3,4] Goal: [6]
      a.) (8 - ((3 / 3) + (4 / 4)))
  2.) Numbers: [3,5,5,6,6] Goal: [1]
      a.) (3 - ((5 / 5) + (6 / 6)))
  3.) Numbers: [7,6,6,7,5] Goal: [3]
      a.) (5 - ((6 / 6) + (7 / 7)))

Examples for H8 - if twoP(A,B) and zeroP(C,D) and twomoreP(E,G) then
  ((E - twoX(A,B)) + zeroX(C,D))
  1.) Numbers: [9,2,0,5,5] Goal: [7]
      a.) ((9 - (2 - 0)) + (5 - 5))
  2.) Numbers: [2,1,7,4,0] Goal: [5]
      a.) ((7 - (2 / 1)) + (4 * 0))
  3.) Numbers: [8,4,0,0,3] Goal: [1]
      a.) ((3 - (8 / 4)) + (0 + 0))

Examples for H9 - if sameP(A,B,C,D,E,G) then
(A + ((B - C) + (D - E)))
1.) Numbers: [1,1,1,1,1] Goal: [1]
     a.) (1 + ((1 - 1) + (1 - 1)))
2.) Numbers: [7,7,7,7,7] Goal: [7]
     a.) (7 + ((7 - 7) + (7 - 7)))
3.) Numbers: [5,5,5,5,5] Goal: [5]
     a.) (5 + ((5 - 5) + (5 - 5)))