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    a. [X, Y | Z] and [a, b, c | [d, e, Y]]

LHS: [X, Y | Z]
RHS: [a, b, c | [d, e, Y]] = [a, b, c, d, e, Y]
Therefore, this pair is identical as X = a, Y = b, Z = [c, d, e, b] => <u>match</u>

    b. [q, [A | [r, s]], t] and [q, [r, [r, s]] | B]

LHS: [q, [A | [r, s]], t] = [q, [A, r, s] , t]
RHS:[q, [r, [r, s]] | B] already in simplest form
q = q
[r, [r, s]] = [A, r, s] => right side has 2 elements and left side has 3 so
=> <u>no match</u>

    c. [[Cow | [cat, dog]], bird, bug, chicken] and [[ant, [cat, dog]] | Horse]

LHS: [[Cow | [cat, dog]], bird, bug, chicken] = [[Cow, cat, dog], bird, bug, chicken]
RHS: [[ant, [cat, dog]] | Horse] already in simplest form
Left side has the list of [Cow, cat, dog] where as right side has the nested list of [cat, dog]
=> <u>no match</u>

    d. [1, A, 2 | [A, 3, 4]] and [B | [2, C | [D | E]]]

LHS: [1, A, 2 | [A, 3, 4]] = [1, A , 2, A , 3 , 4]
RHS: [B | [2, C | [D | E]]] = [B | [2 , C , D | E]] = [B , 2 , C , D | E]
Identical pair with A=2 , B=1 , C=2 , D=2 , E=[3,4] => <u>match</u>

    e. [A | [A | [[A | [[A]]]]]] and [b | C]

LHS: [A | [A | [[A | [[A]]]]]] = [A | [A | [[A , [A]]]]] = [A | [A , [A , [A]]]]
= [A , A , [A , [A]]]
RHS: [b | C] simplest form
A = b then left side is [b , b , [b , [b]]] and C = [b , [b , [b]]] => <u>match</u>

    f. [X | [Y | [Z | [X]]]] and [all, around, the, world, Y]

LHS: [X | [Y | [Z | [X]]]] = [X | [Y | [Z , X]]] = [X | [Y , Z , X]] = [X , Y , Z , X]
RHS: [all, around, the, world, Y] already in simplest form
Left side has 4 elements in the list whereas right side has 5 elements => <u>no match</u>

   g. [1, 2 | [X | [Y, Z | X]]] and [Q | [R, S, [], [[Y]]]]

LHS: [1, 2 | [X | [Y, Z | X]]] = [1, 2 | [X , Y, Z | X]] = [1, 2 , X , Y, Z | X]
RHS: [Q | [R, S, [], [[Y]]]] = [Q , R, S, [], [[Y]]]
Q = 1 , R = 2 , X = S , Y = [] , Z = [[Y]] = [[[]]] => last element of left side needs to be empty too so X = S = [] => <u>match</u>

   h. [Lions, [[and], tigers], [and], bears, oh | [[my]]] and [[I, have] , [[A], Bad], Feeling | [About | This]]

LHS: [Lions, [[and], tigers], [and], bears, oh | [[my]]] =
[Lions, [[and], tigers], [and], bears, oh , [my]]
RHS: [[I, have], [[A], Bad], Feeling | [About | This]] =
 [[I, have], [[A], Bad], Feeling , About | This]
Lions = [I , have]
[[and], tigers] = [[A], Bad] => A = and , Bad = tigers
[and] = Feeling
bears = About
[oh , [my]] = This
Identical pair => <u>match</u>