PPL Assignment 5

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Question 4:

1. unify[t(s(s), G, s, p, t(K), s), t(s(G), G, s, p, t(K), U)]

   s={G=s} t(s(s), s, s, p, t(K), s)
   t(s(s), s, s, p, t(K), U)
   s={G=s, U=s} t(s(s), s, s, p, t(K), s)
   t(s(s), s, s, p, t(K), s)

   s={G=s, U=s}

2. unify[g(l, M, g, G, U, g, v(M)), g(l, v(U), g, v(M), v(G), g, v(M))]

   - s={M=v(U)} g(l, v(U), g, G, U, g, v(v(U)))
     g(l, v(U), g, v(v(U)), v(G), g, v(v(U)))
   - s={M=v(U), G=v(v(U))}$_{A \circ s}$ = g(l, v(U), g, v(v(U)), U, g, v(v(U)))
     g(l, v(U), g, v(v(U)), v(v(v(U))), g, v(v(U)))

   Circular occurrence.

3. unify[m(M,N), n(M,N)]
   A= m(M,N)
   B= n(M,N)

   no such substitution

4.

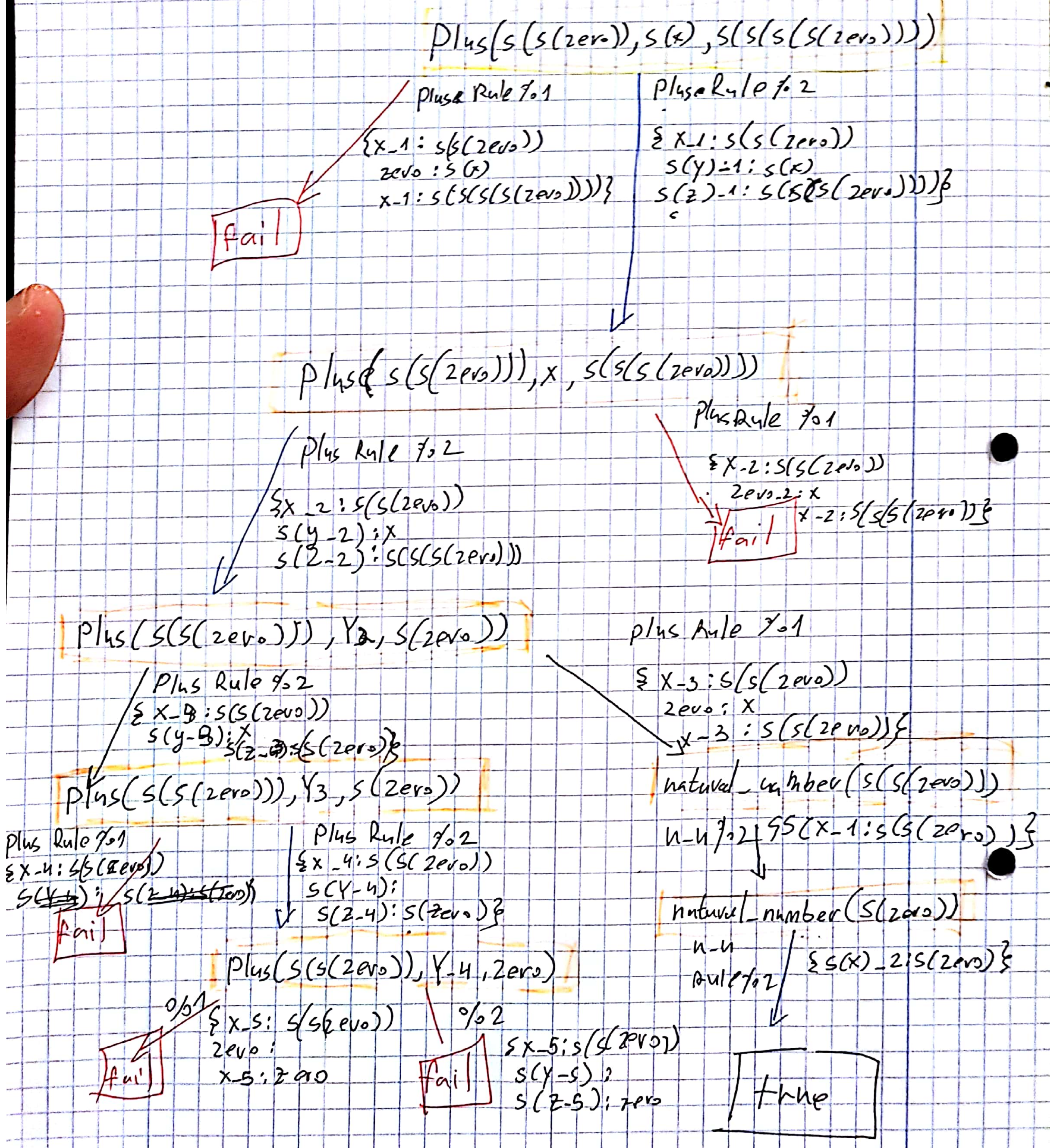
unify[p([v | [V | VV]]), p([[v | V] | VV])]
A= p([v | [V | VV]])
B= p([[v | V] | VV])

no such substitution

5.

unify[g([T]), g(T)]
A= g([T])
B= g(T)

Circular occurrence



{x=s(zero)}

b)

c) כן הצלחה, היה עץ עם הריק true בסוף

d) סופי כי בכל עץ הגענו לתשובה סופית