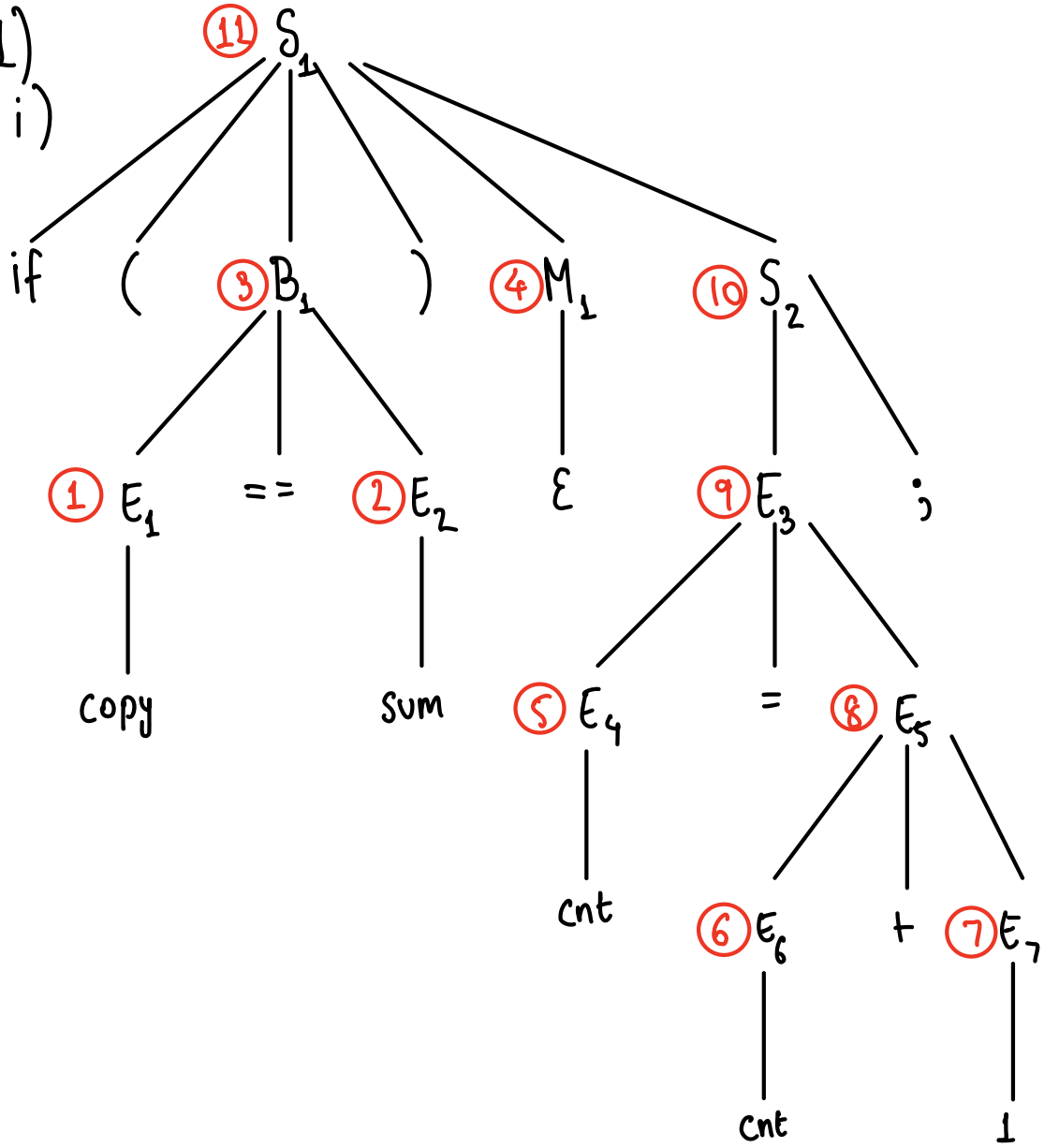
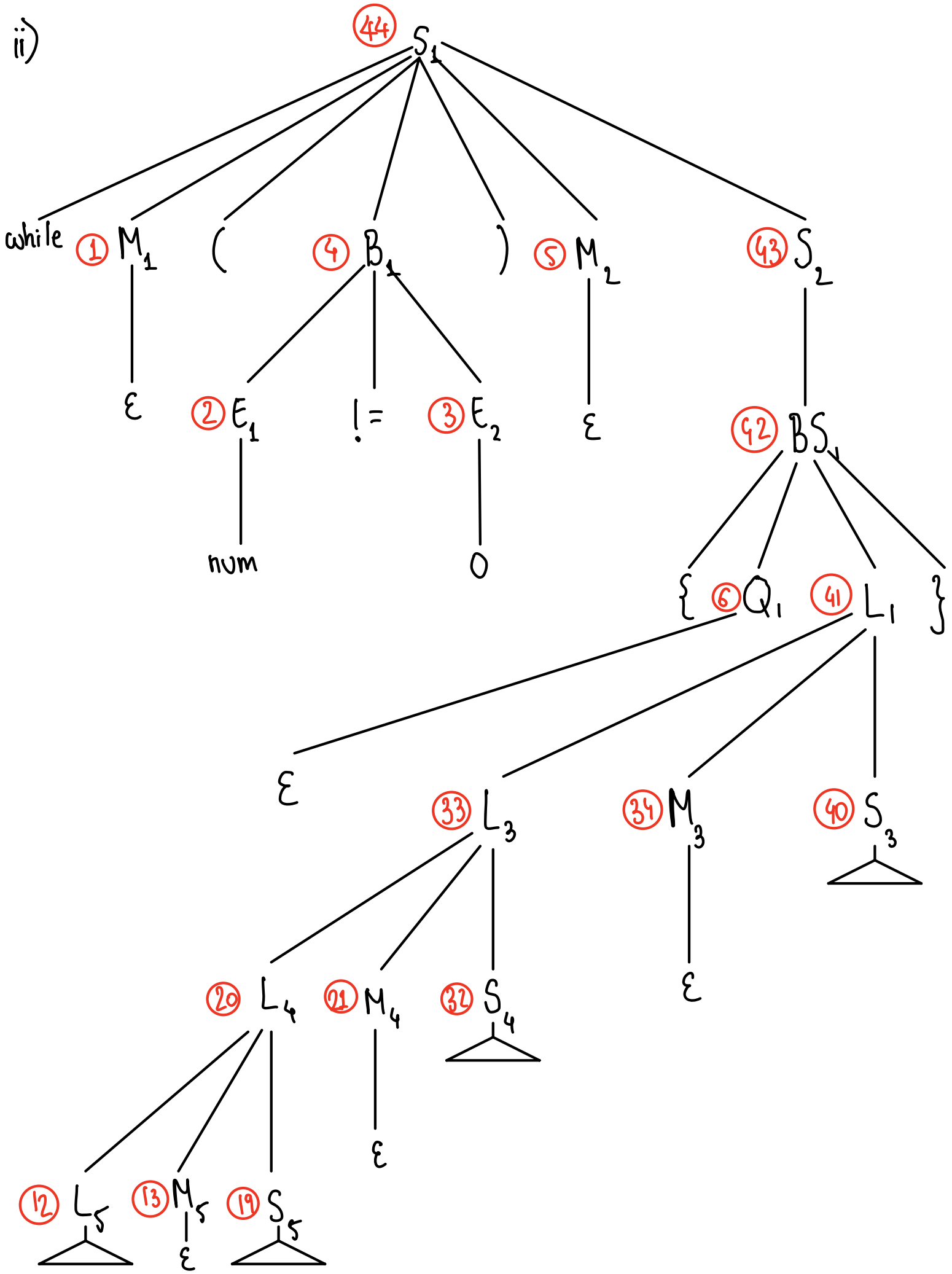
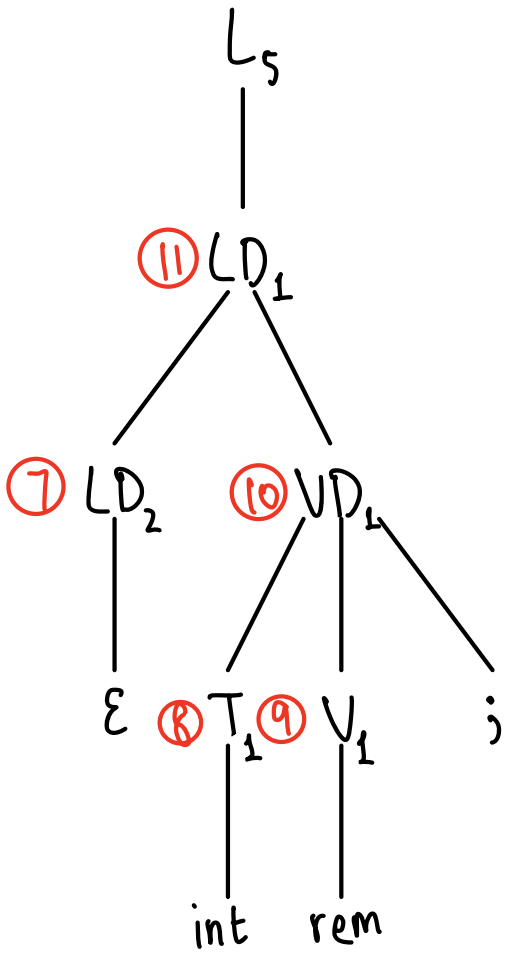
Q1)
a) i)

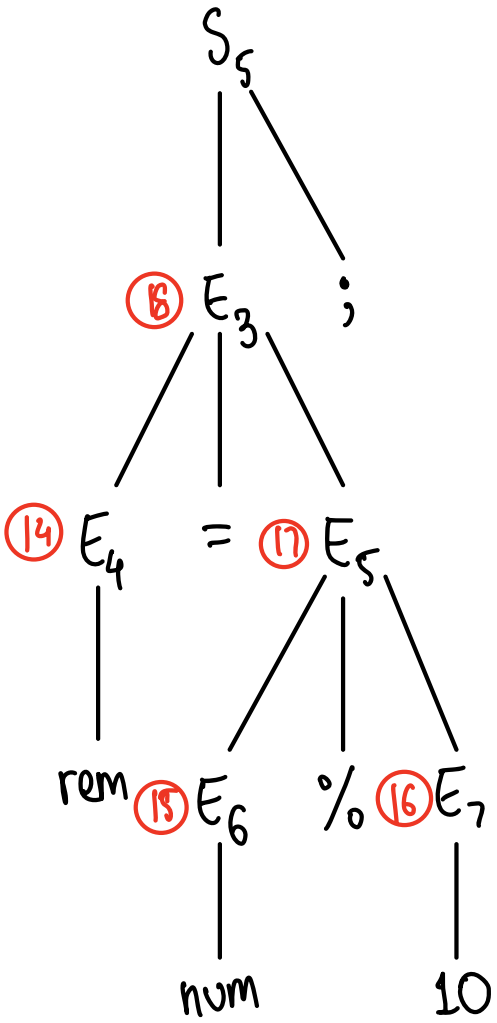


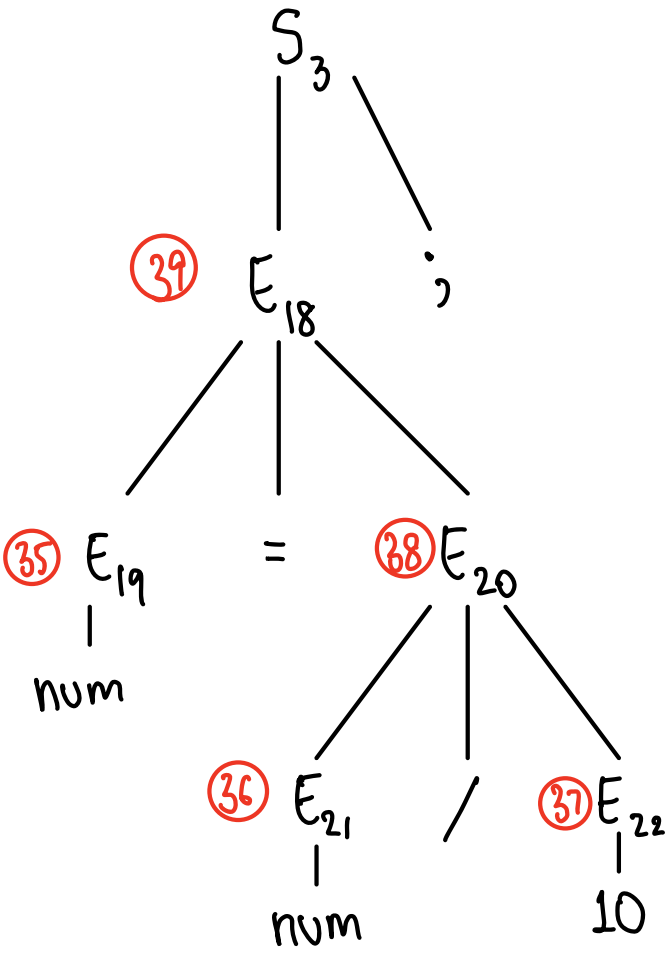
10. S_2.nextlist } Depends on quads

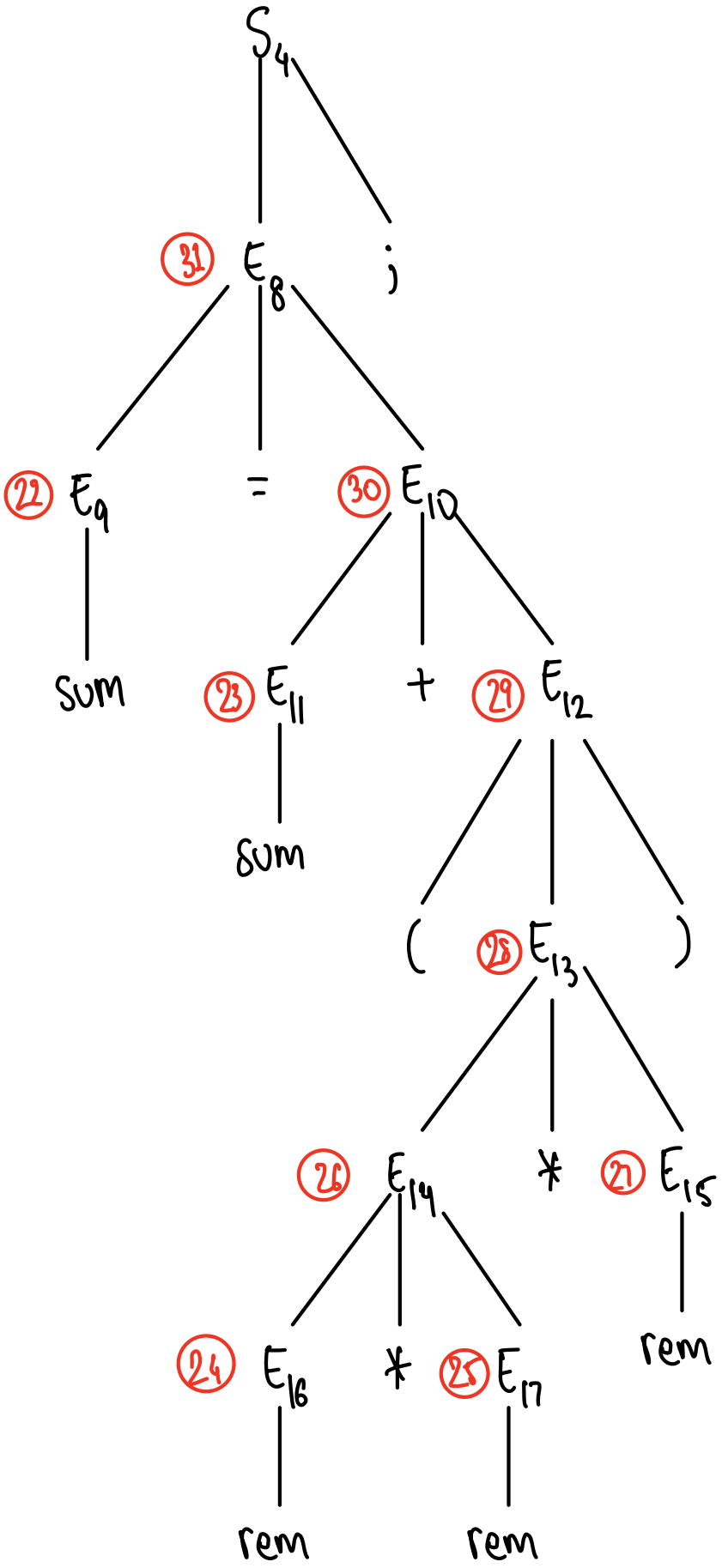
ii)


44 S1
while
1 M1
(
4 B1
)
5 M2
43 S2
ε
2 E1
!=
3 E2
ε
42 BS1
num
0
{
6 Q1
41 L1
}
ε
33 L3
34 M3
40 S3
ε
20 L4
21 M4
32 S4
ε
12 L5
13 M5
19 S5
ε

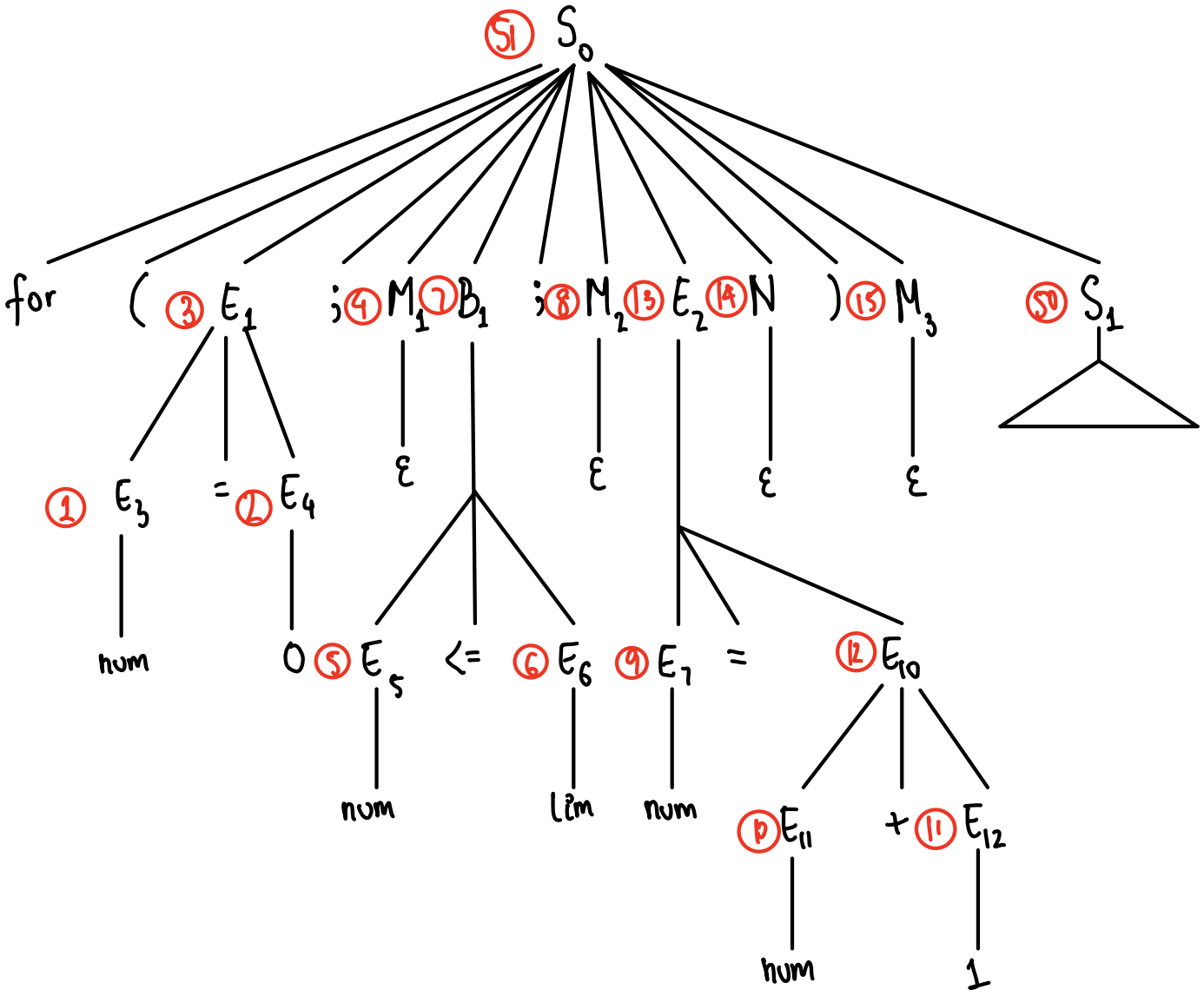

L_5
11 LD_1
7 LD_2
10 VD_1
ε
8 T_1
9 V_1
;
int
rem

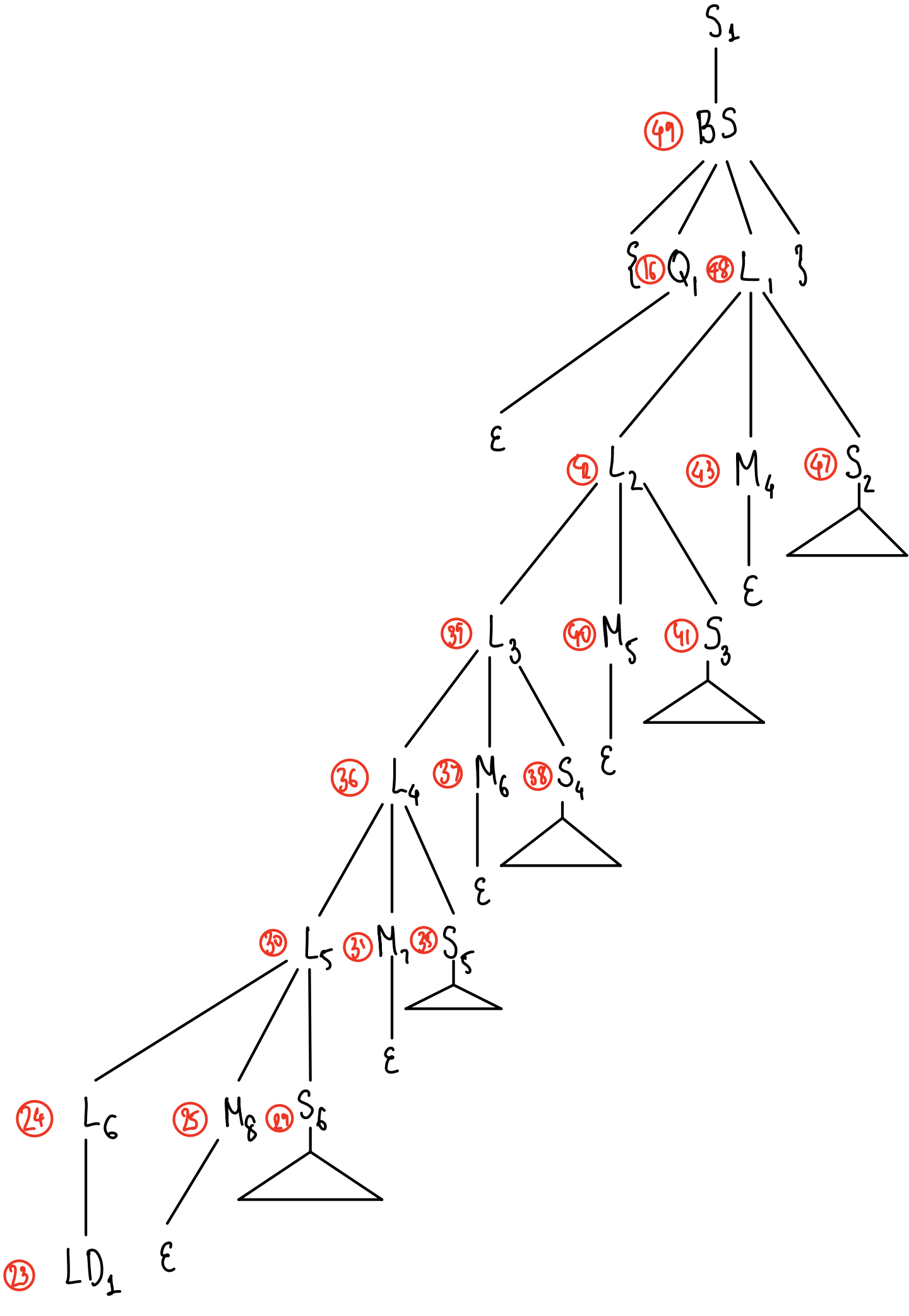

S_5
6 E_3
;
14 E_4
=
17 E_5
rem
15 E_6
%
16 E_7
num
10

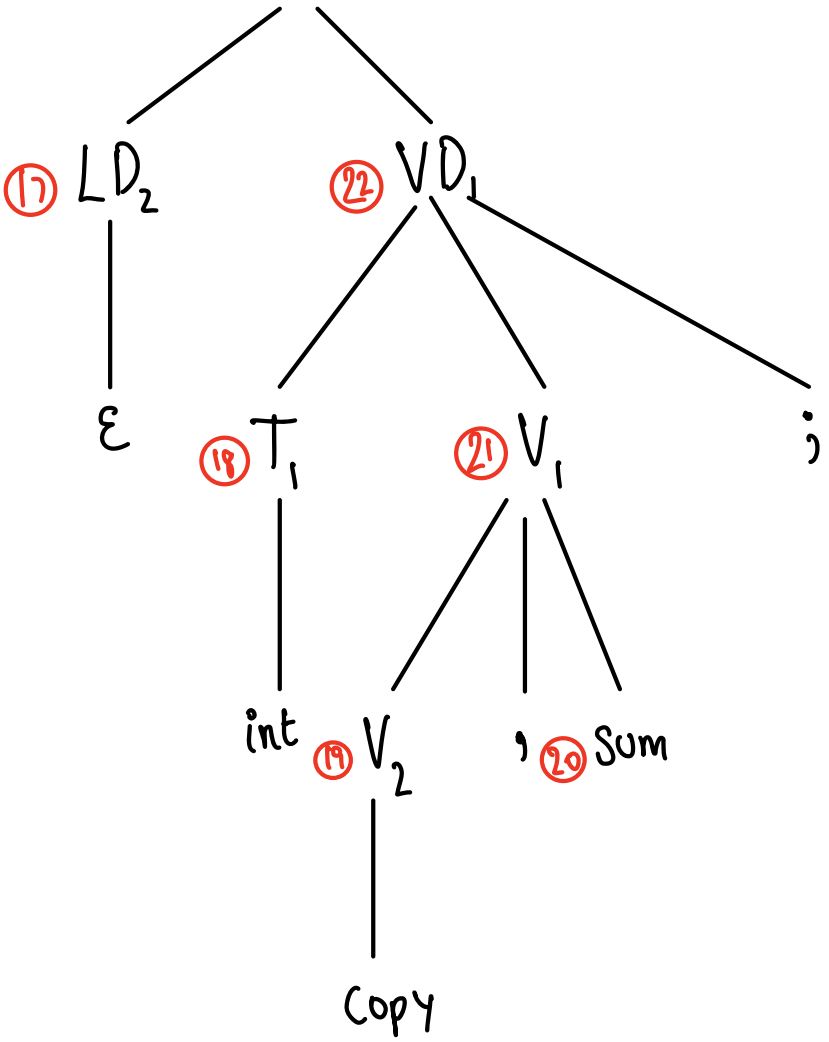

S_3
39 E_{18}
;
35 E_{19}
=
38 E_{20}
num
36 E_{21}
/
37 E_{22}
num
10

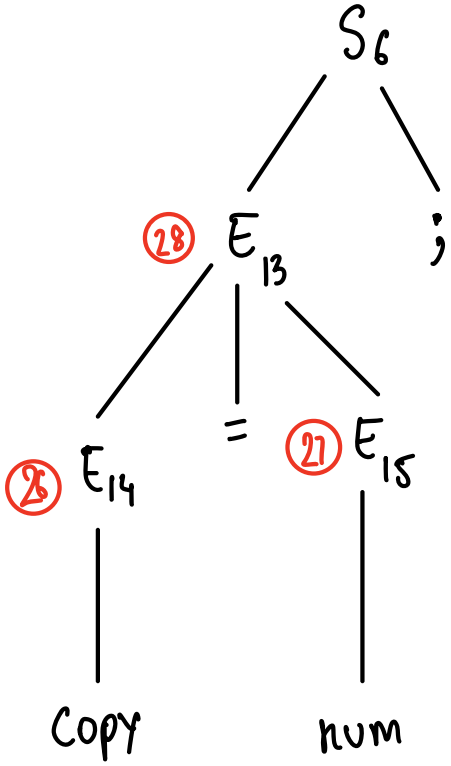

S4
31
E8
;
22
E9
=
30
E10
Sum
23
E11
+
29
E12
sum
(
28
E13
)
26
E14
*
27
E15
24
E16
*
25
E17
rem
rem
rem

iii)

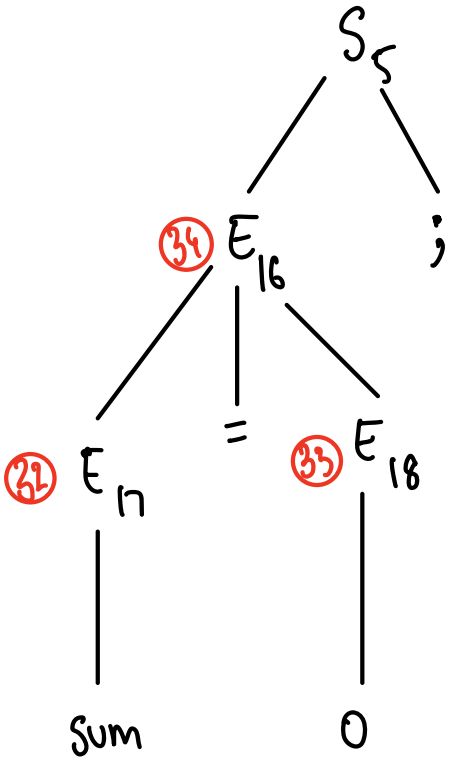

51 S0
for
(3 E1
; 4 M1 7 B1
; 8 M2 13 E2 14 N
) 15 M3
50 S1
1 E3
= 2 E4
num
0
ε
ε
ε
ε
5 E5
<=
6 E6
9 E7
=
12 E10
num
lim
num
10 E11
+ 11 E12
num
1

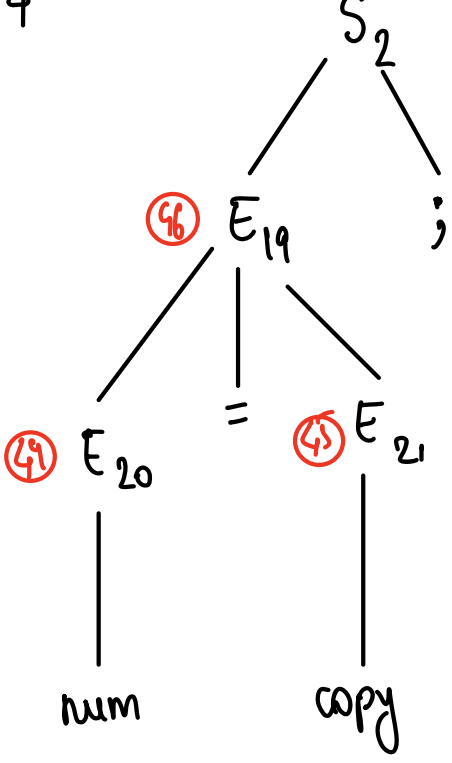

S1
49 BS
{ 16 Q1 48 L1 }
ε
42 L2
43 M4
47 S2
ε
39 L3
40 M5
41 S3
ε
36 L4
37 M6
38 S4
ε
30 L5
31 M7
35 S5
ε
24 L6
25 M8
27 S6
ε
23 LD1


17 LD2
22 VD1
ε
18 T1
21 V1
;
int
19 V2
,
20 Sum
Copy

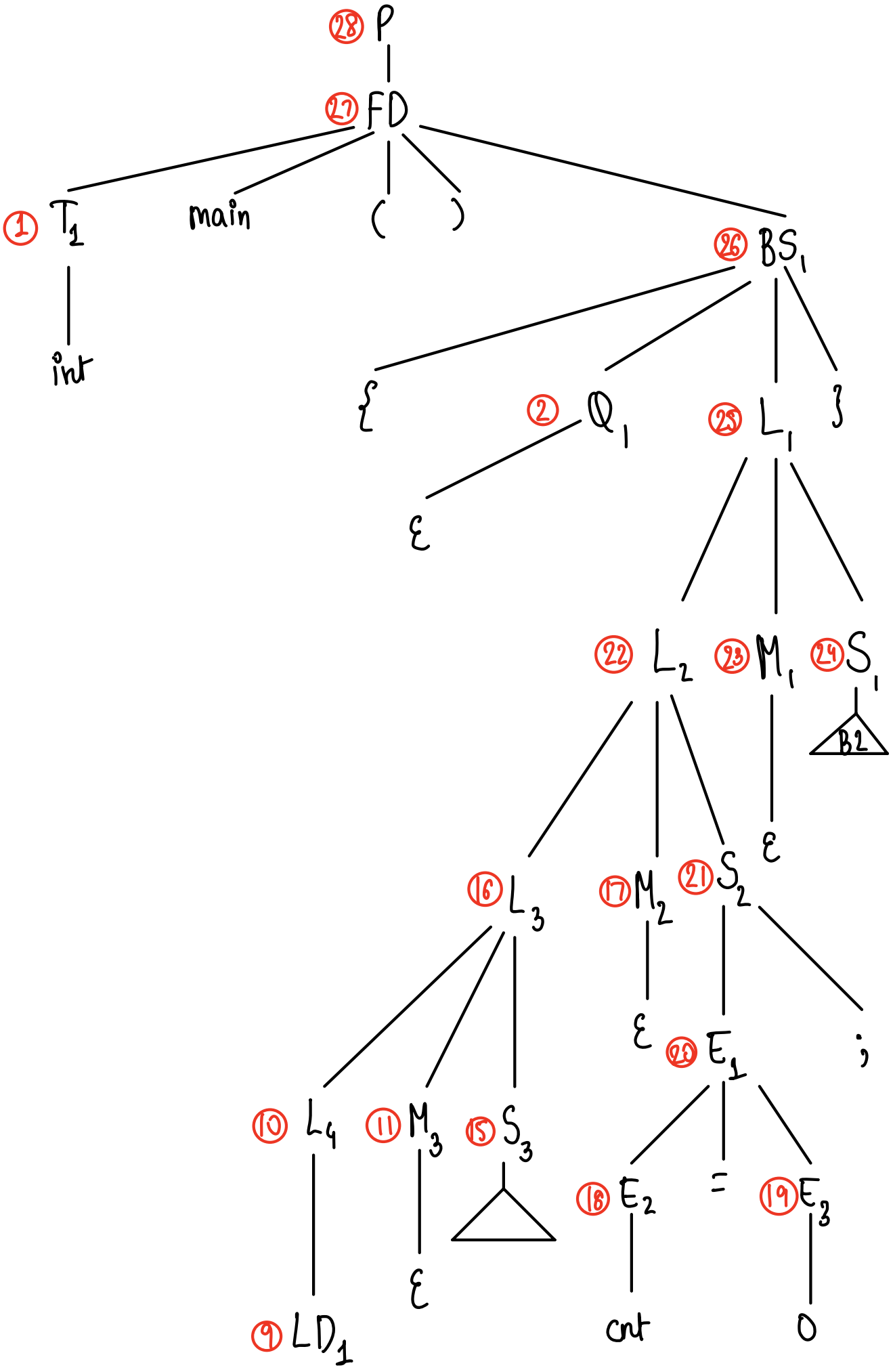

S6
28 E13
;
26 E14
=
27 E15
Copy
num

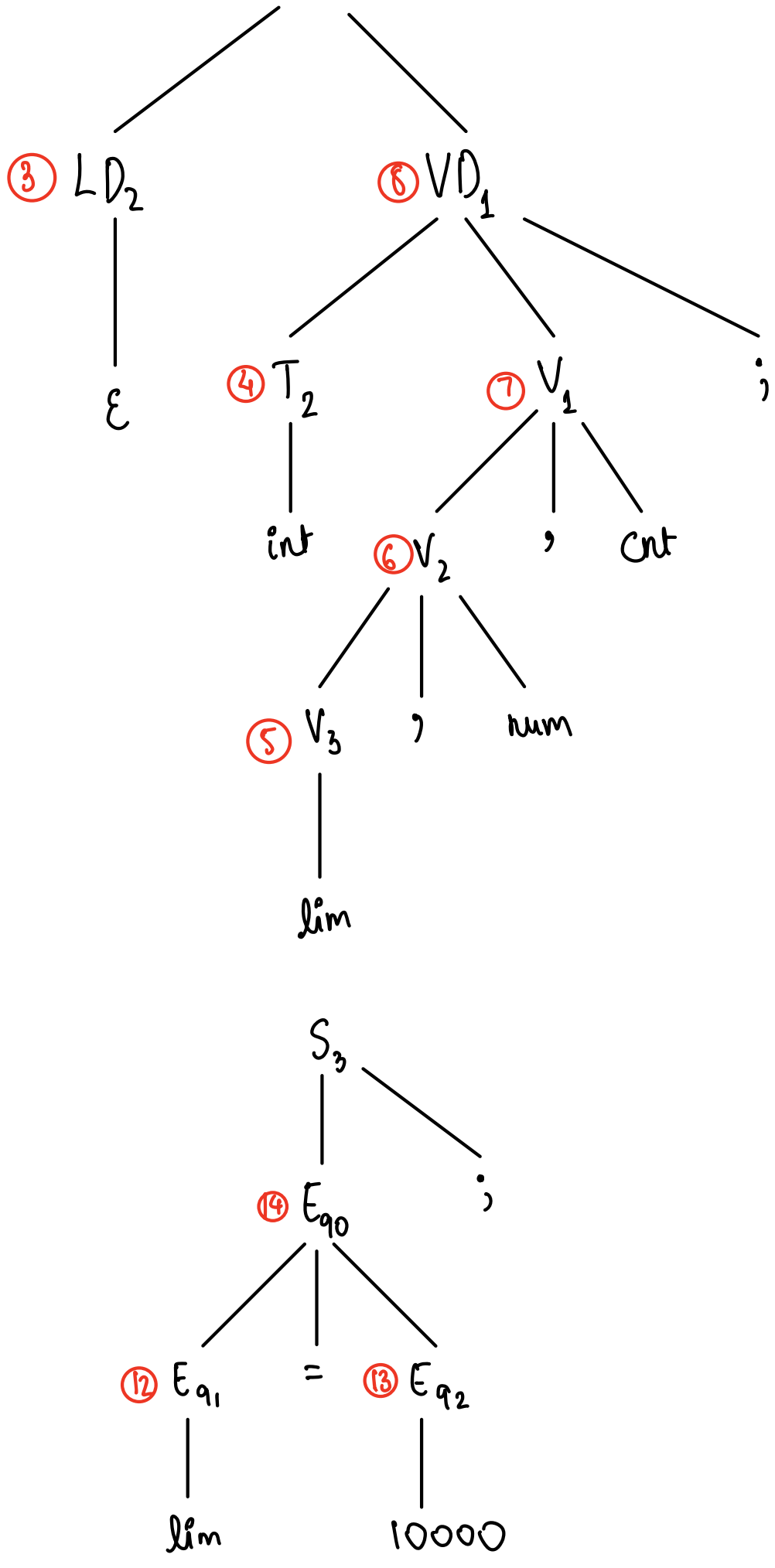
S4 : B3 S3 : B4


S5
34 E16
;
32 E17
=
33 E18
Sum
0


S2
46 E19
;
49 E20
=
43 E21
num
copy

iv)


28 P
27 FD
1 T1
int
main
( )
26 BS1
{
2 Q1
ε
25 L1
}
22 L2
23 M1
24 S1
B2
ε
16 L3
17 M2
21 S2
ε
29 E1
;
10 L4
11 M3
15 S3
ε
9 LD1
18 E2
cnt
=
19 E3
0


③ LD_2
⑧ VD_1
ε
④ T_2
⑦ V_1
;
int
⑥ V_2
,
cnt
⑤ V_3
,
num
lim
S_3
⑭ E_{q0}
;
⑫ E_{q1}
=
⑬ E_{q2}
lim
10000