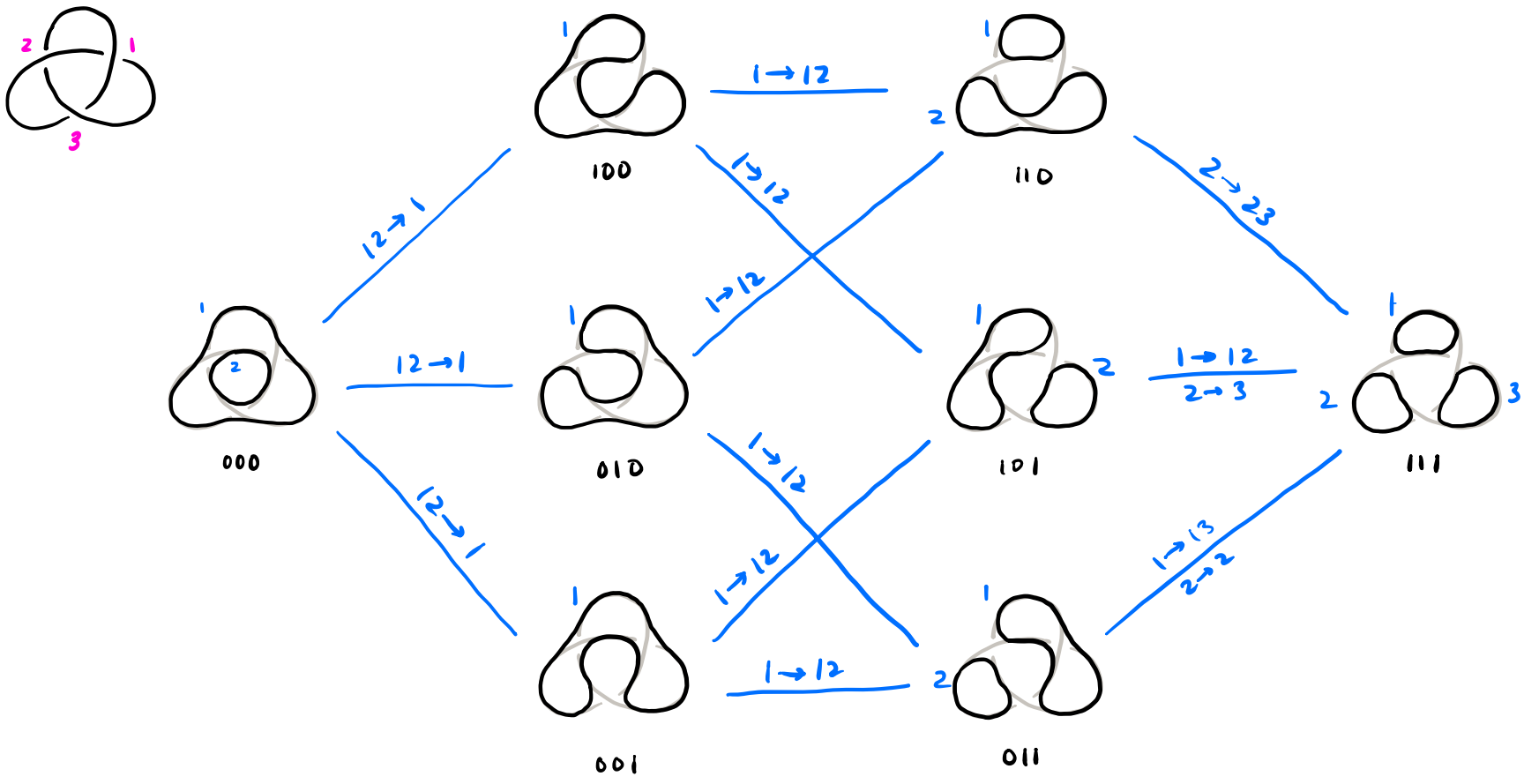
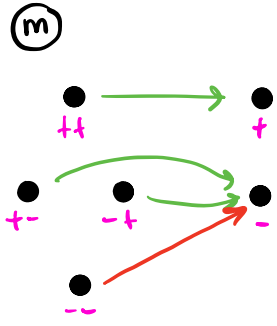
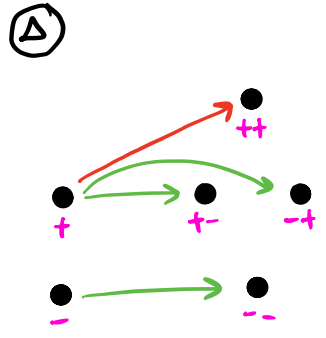


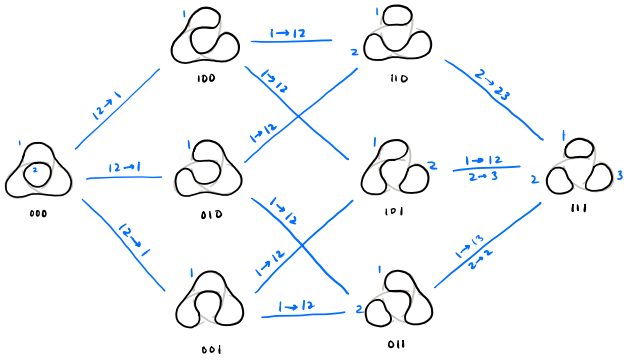

Bar-Natan differentials (over $\mathbb{F}_2$)

green: $d_{Kh}$ (deg 0)

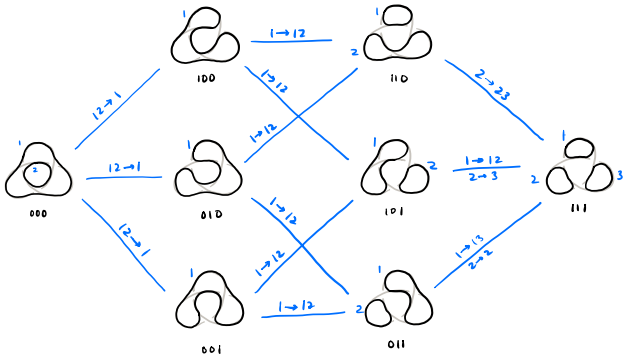
red: $\Phi_{BN}$ (deg 2)



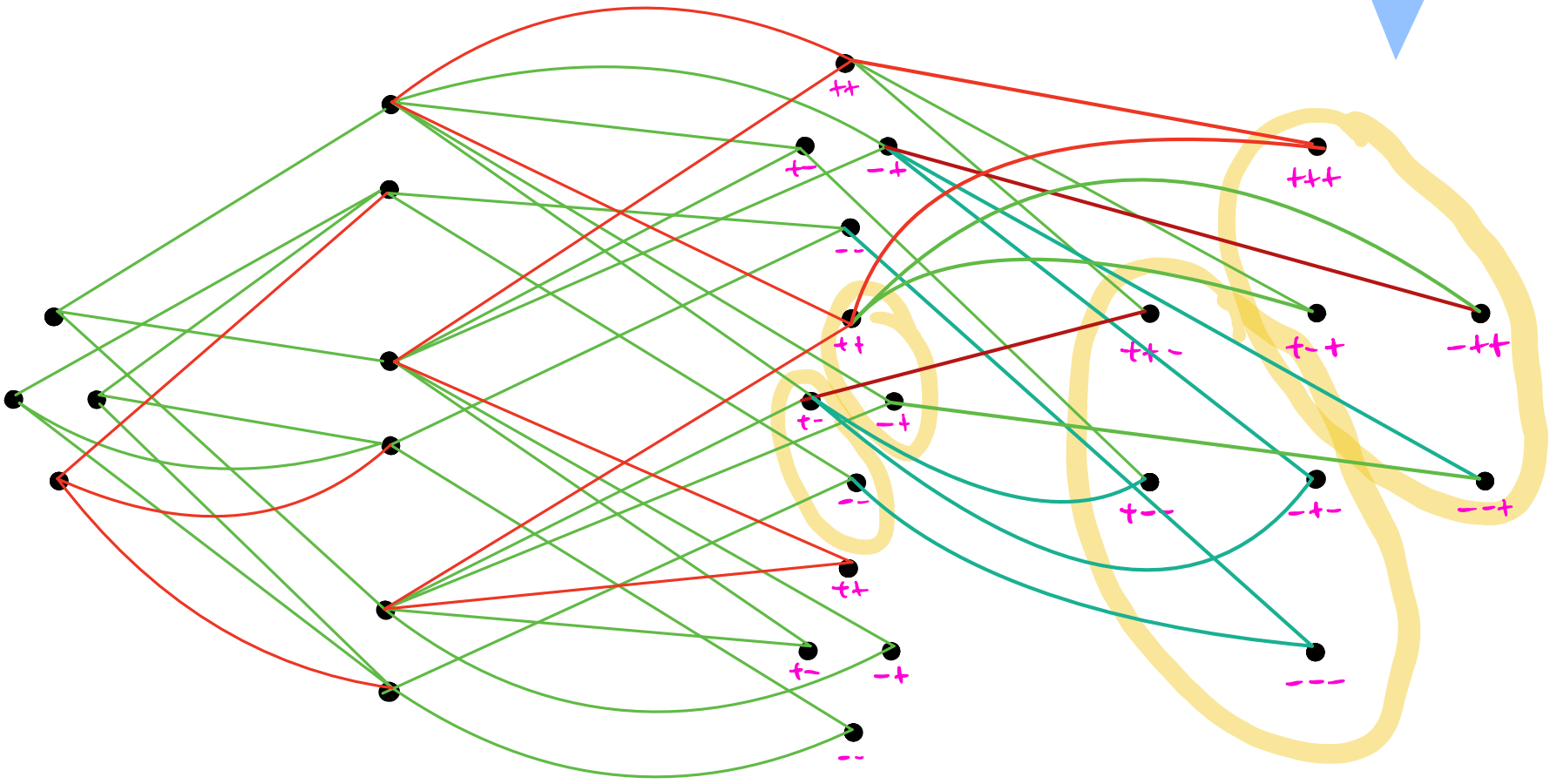

100
110
000
010
101
111
001
011
1→12
12→1
2→23
2→3
2→1

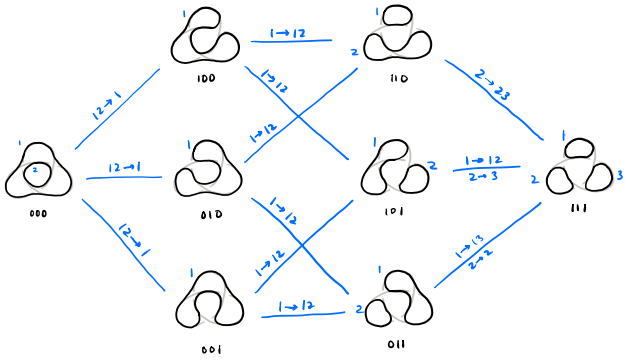

1→1
2→23
++
+-
-+
--
+++
++-
+-+
-++
+--
-+-
--+
---

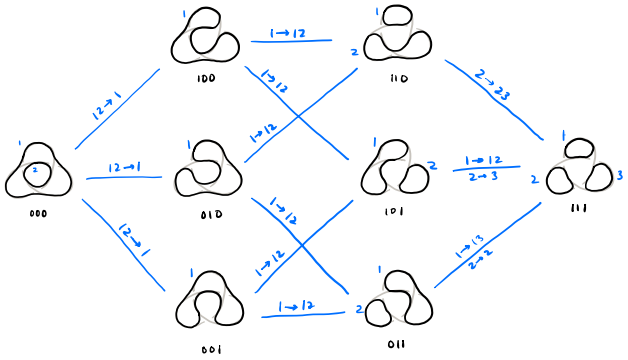



$1 \to 12$

$2 \to 3$

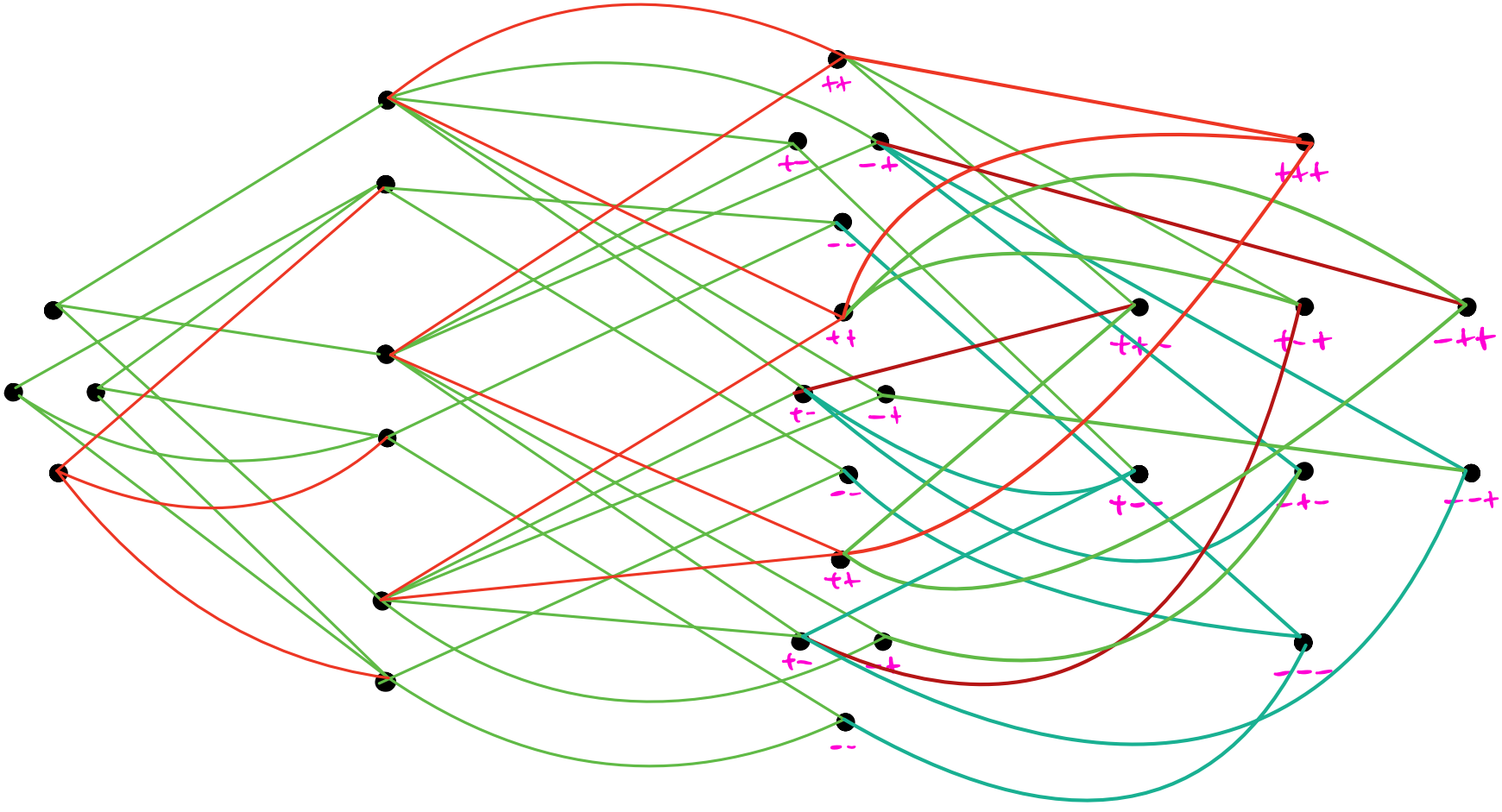


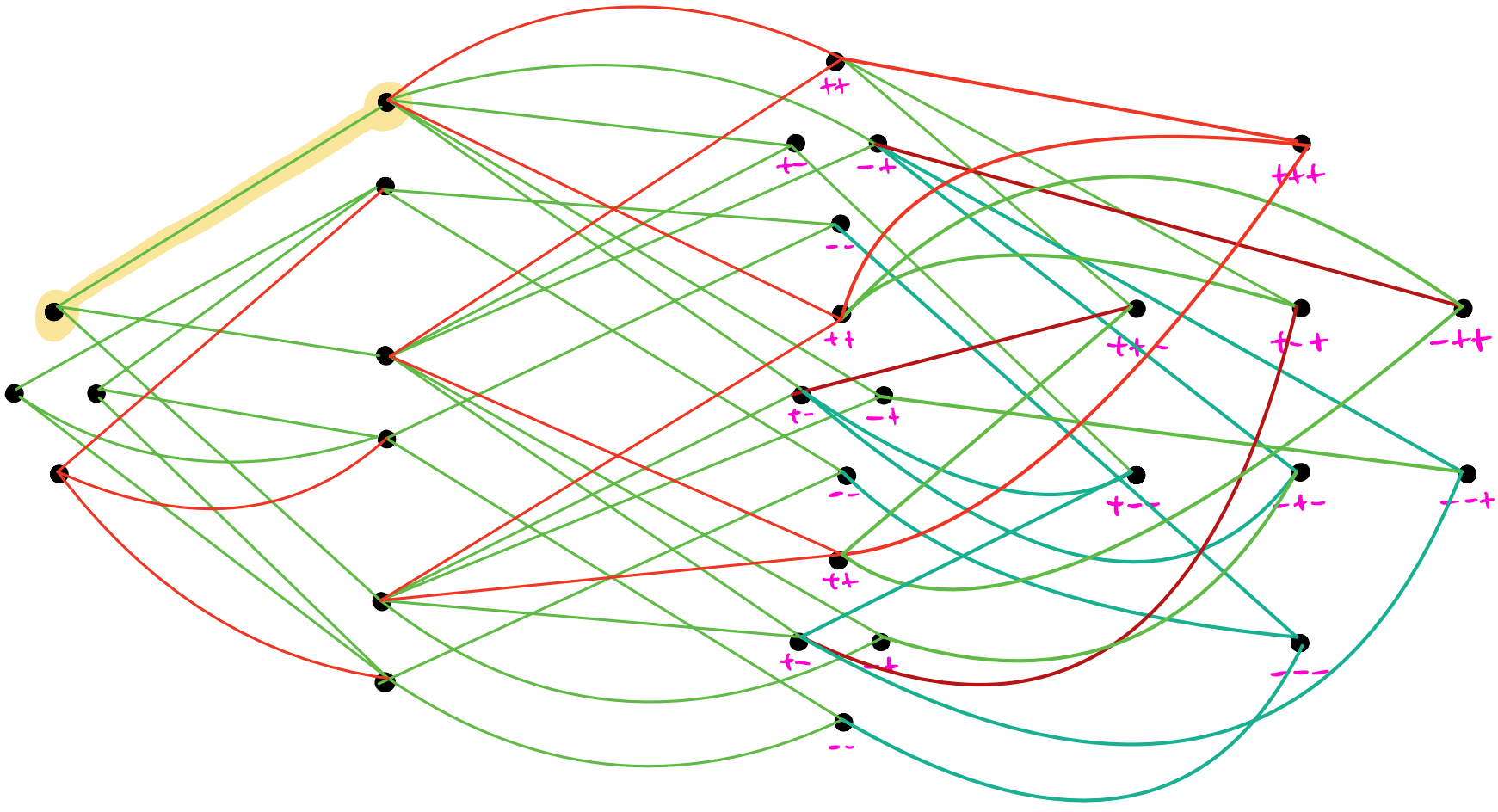

100
110
000
010
101
111
001
011
1→12
12→1
2→23
1→12
2→3
1→13
2→2

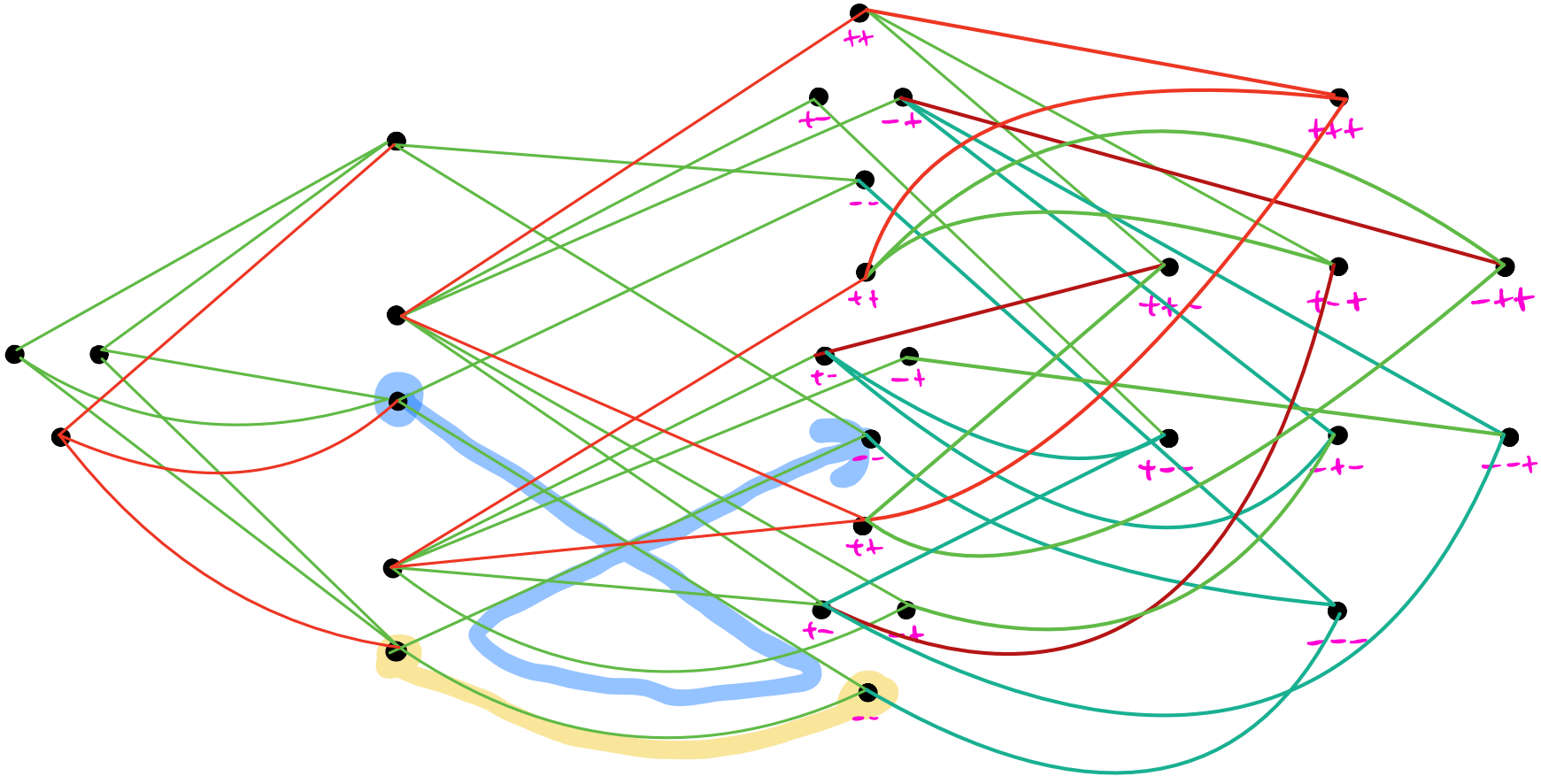


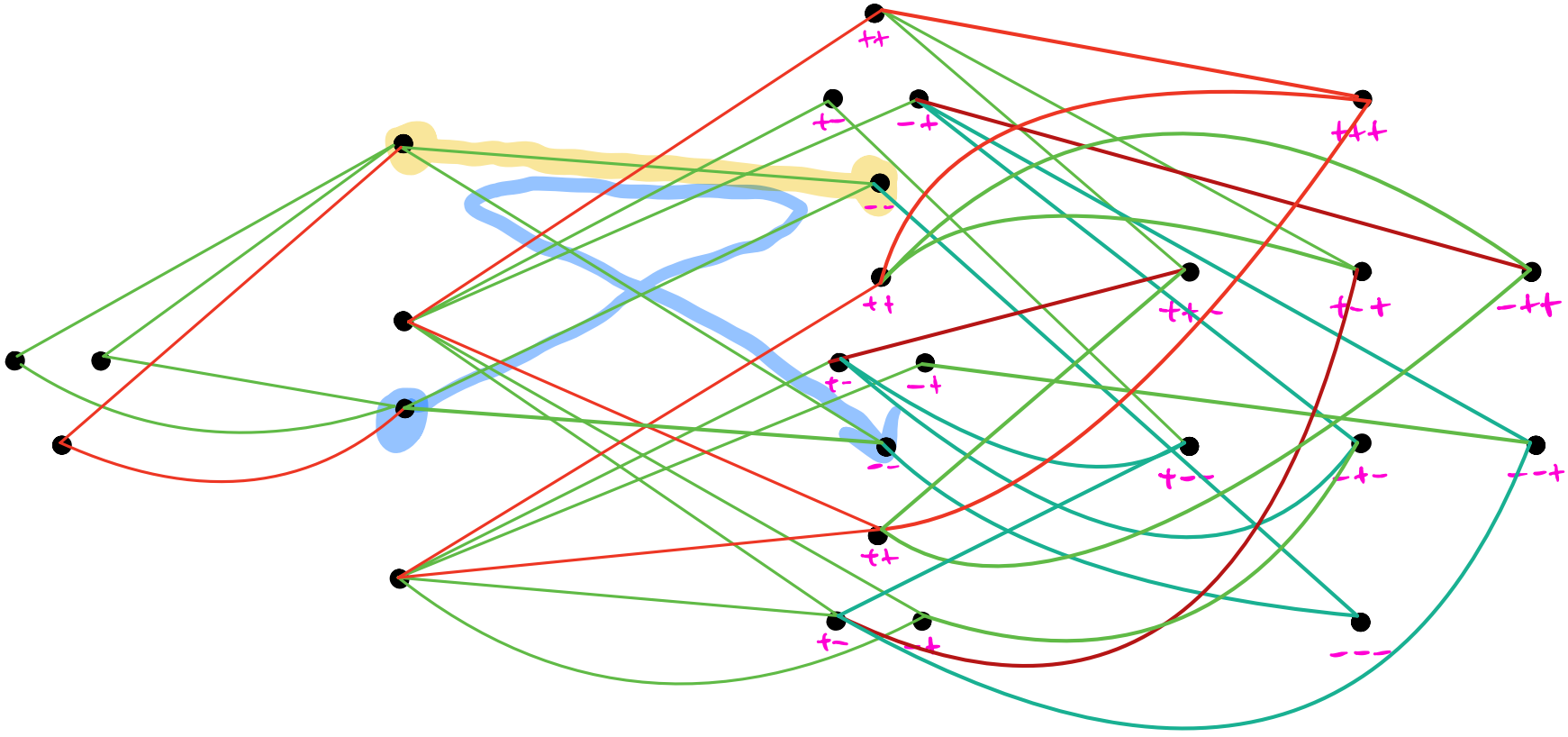

Here is the full Bar-Natan homology complex.

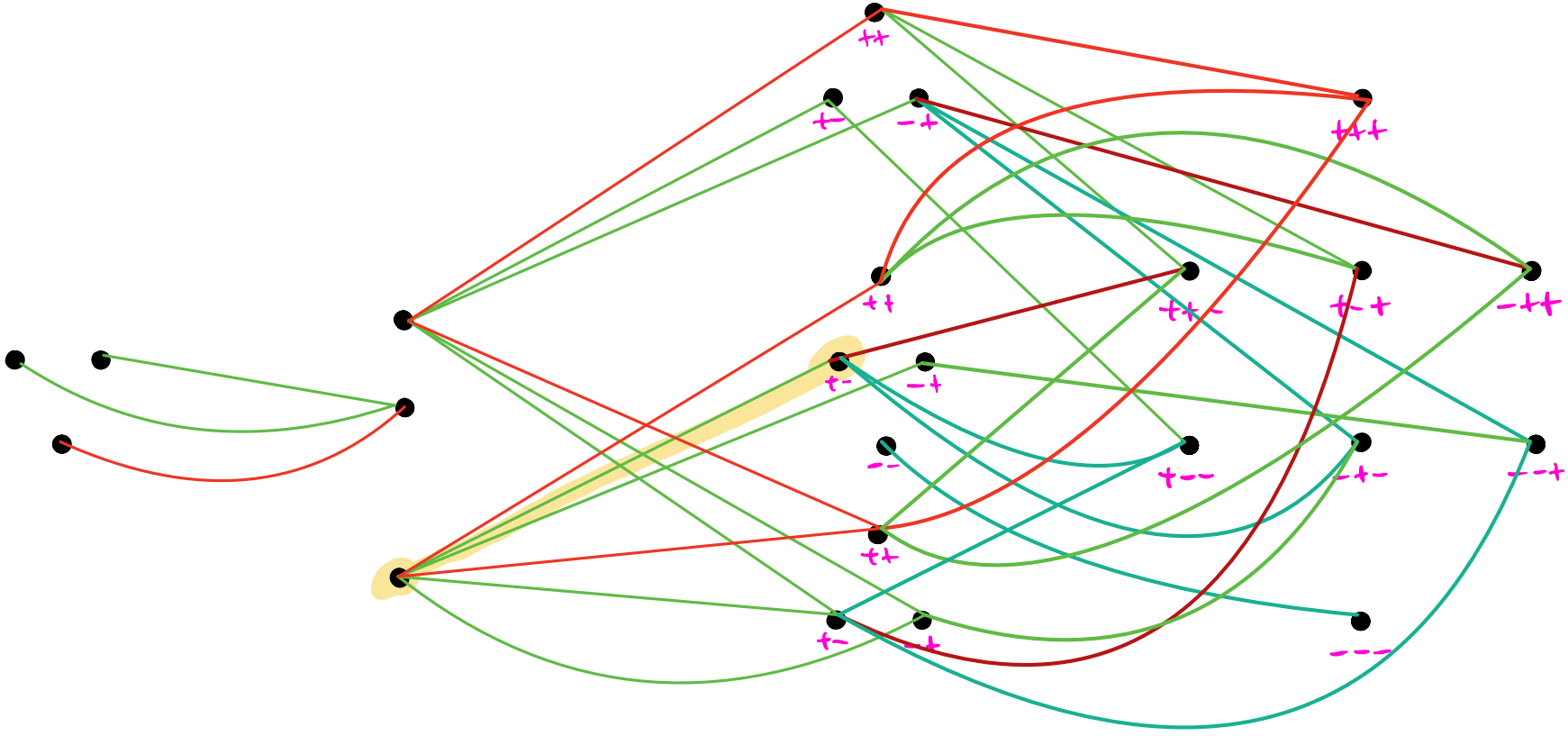
Start cancelling degree 0 arrows.

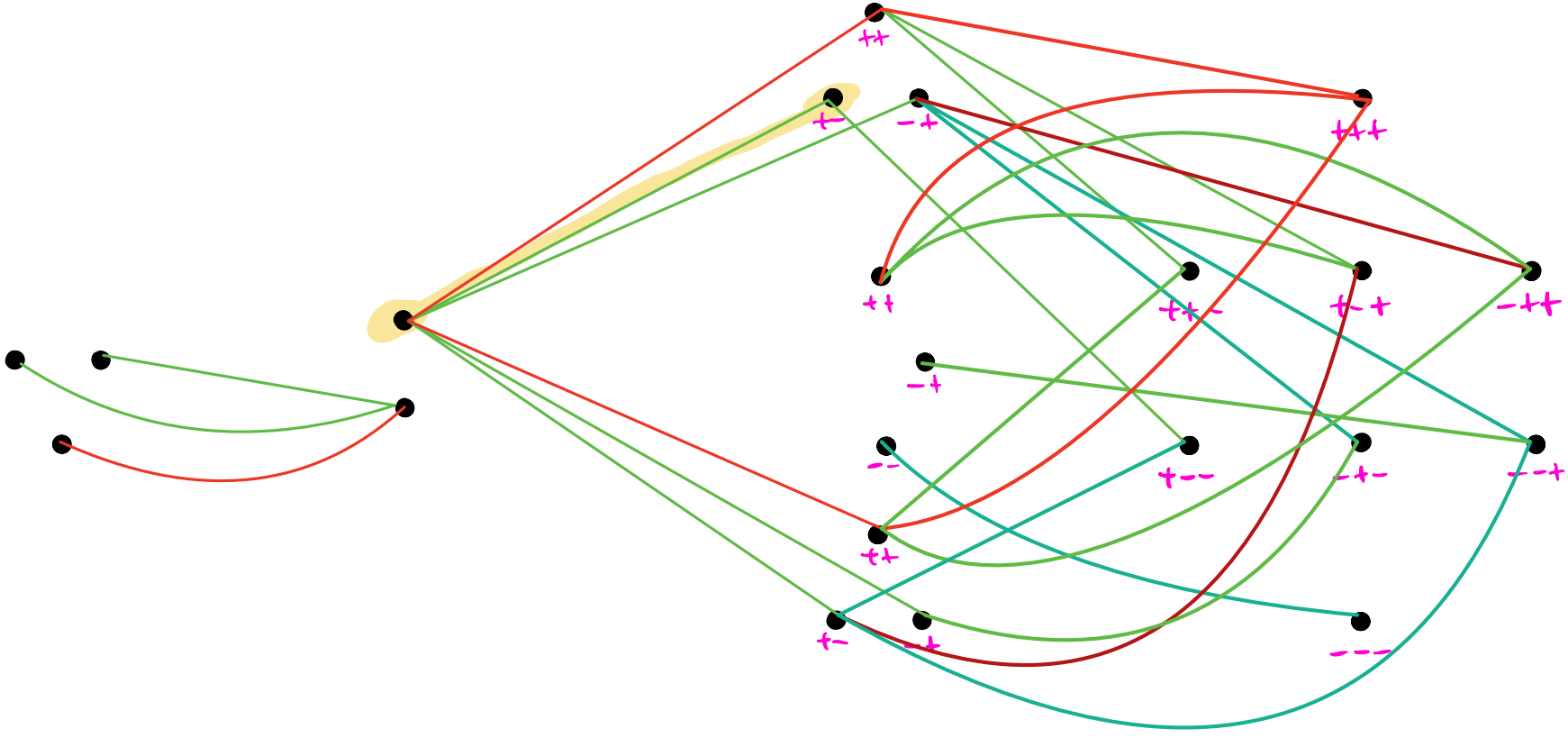


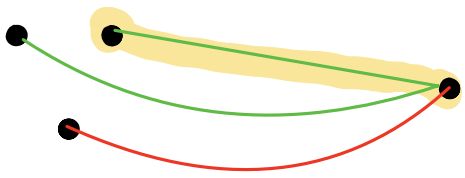


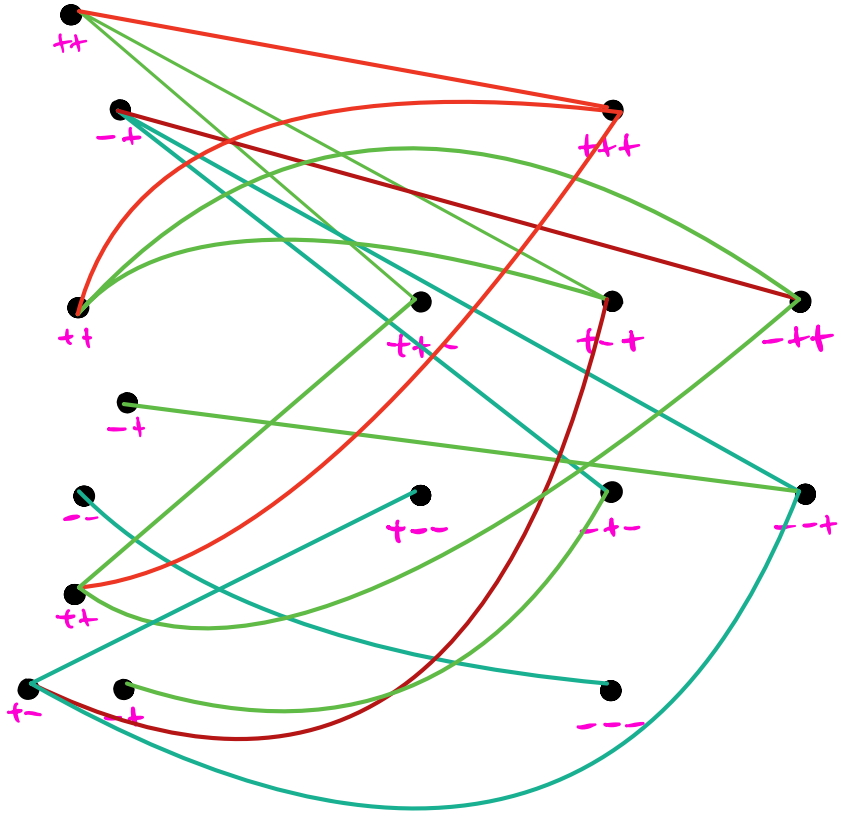


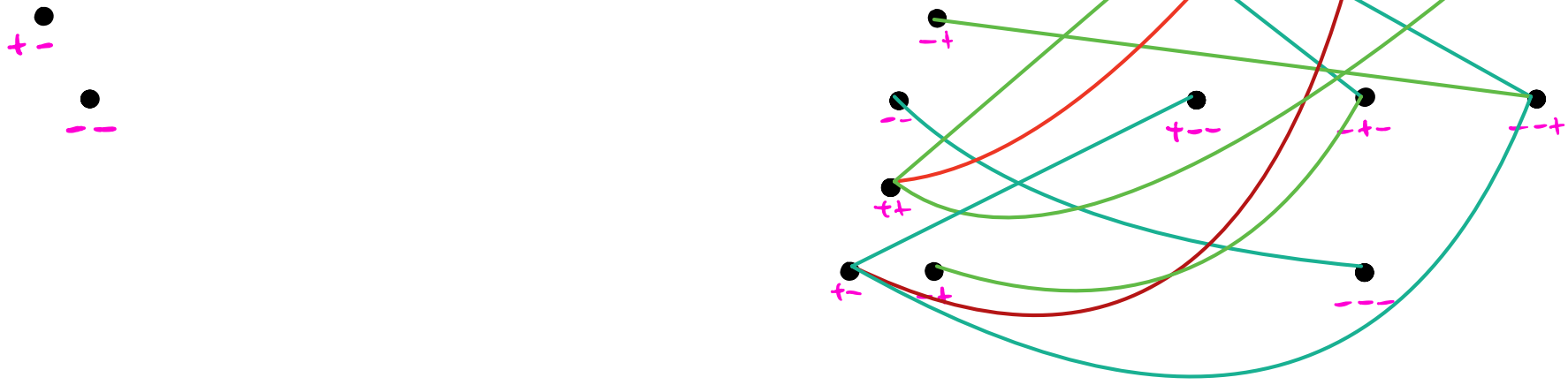


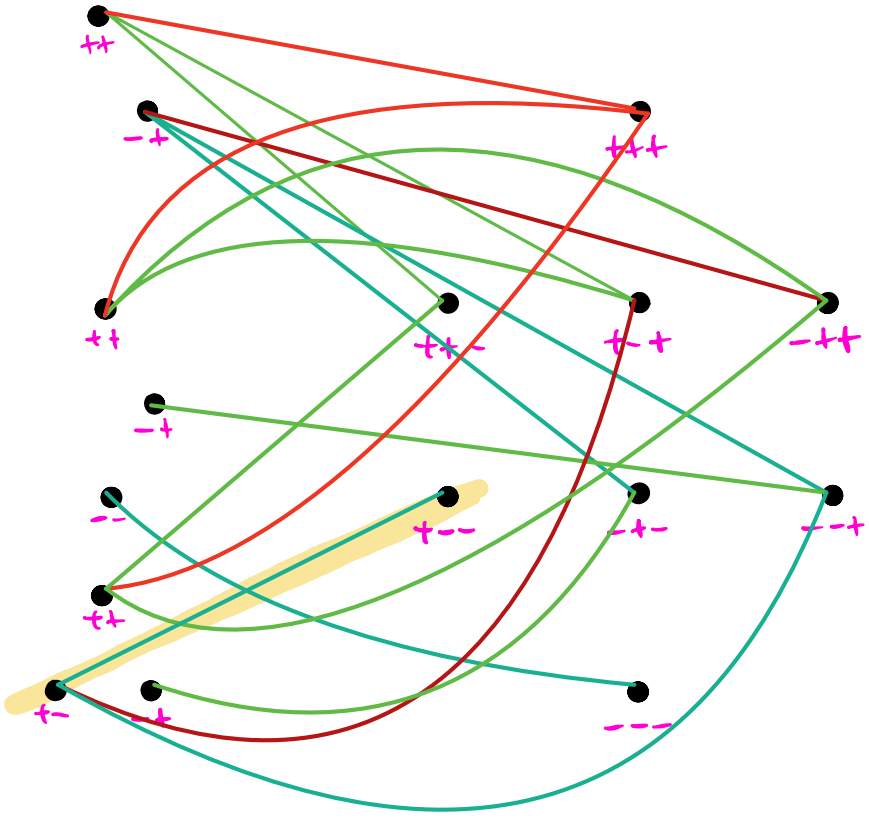


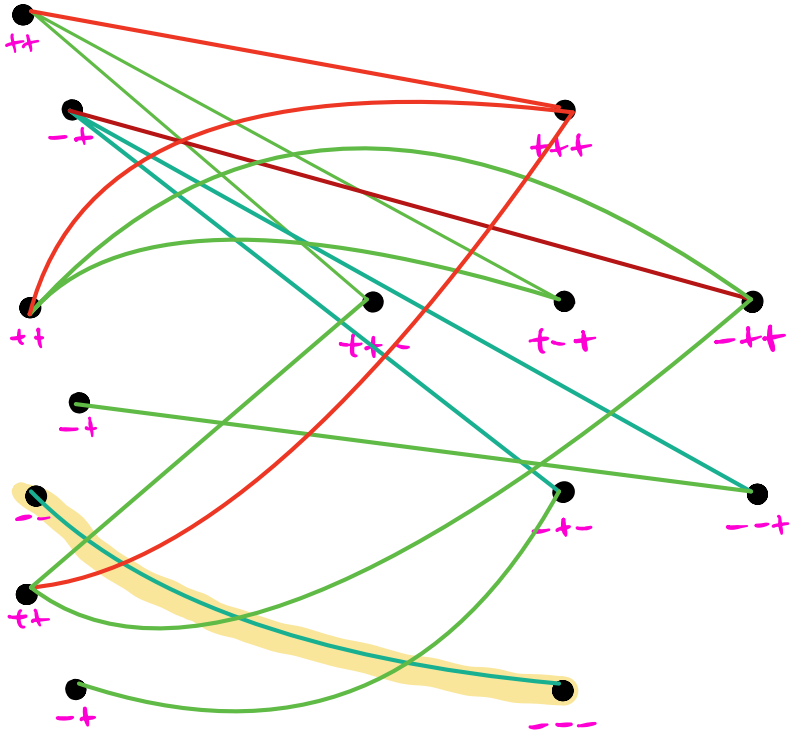


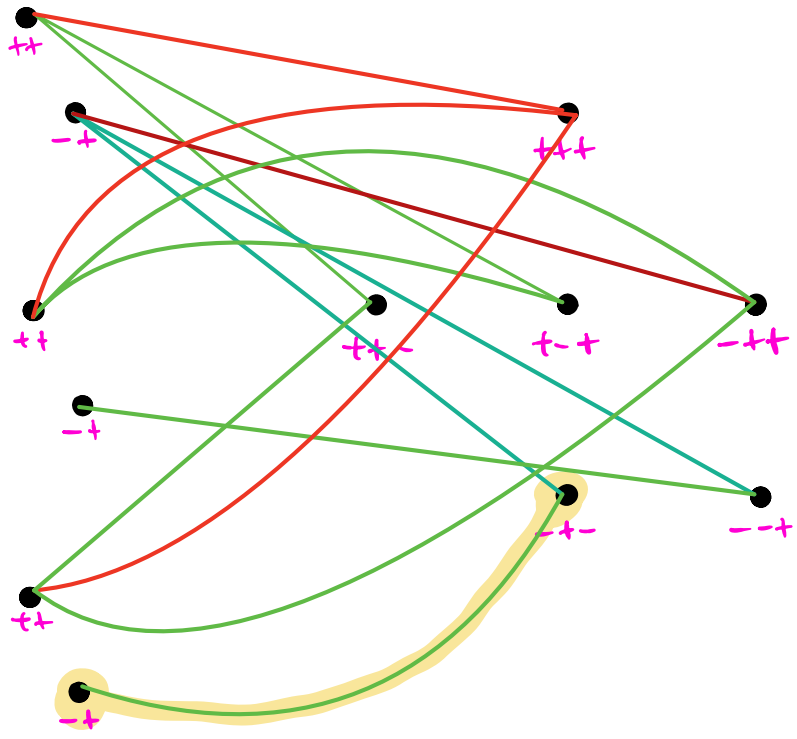


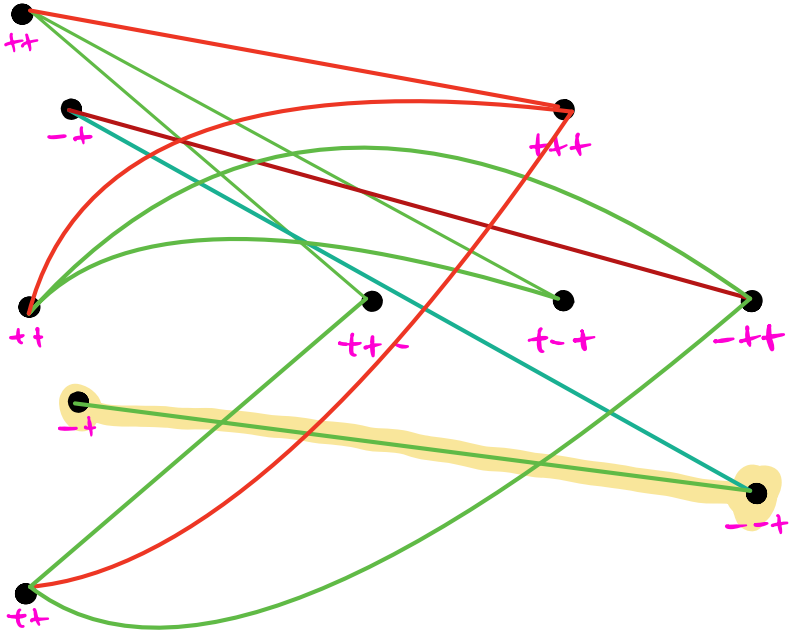


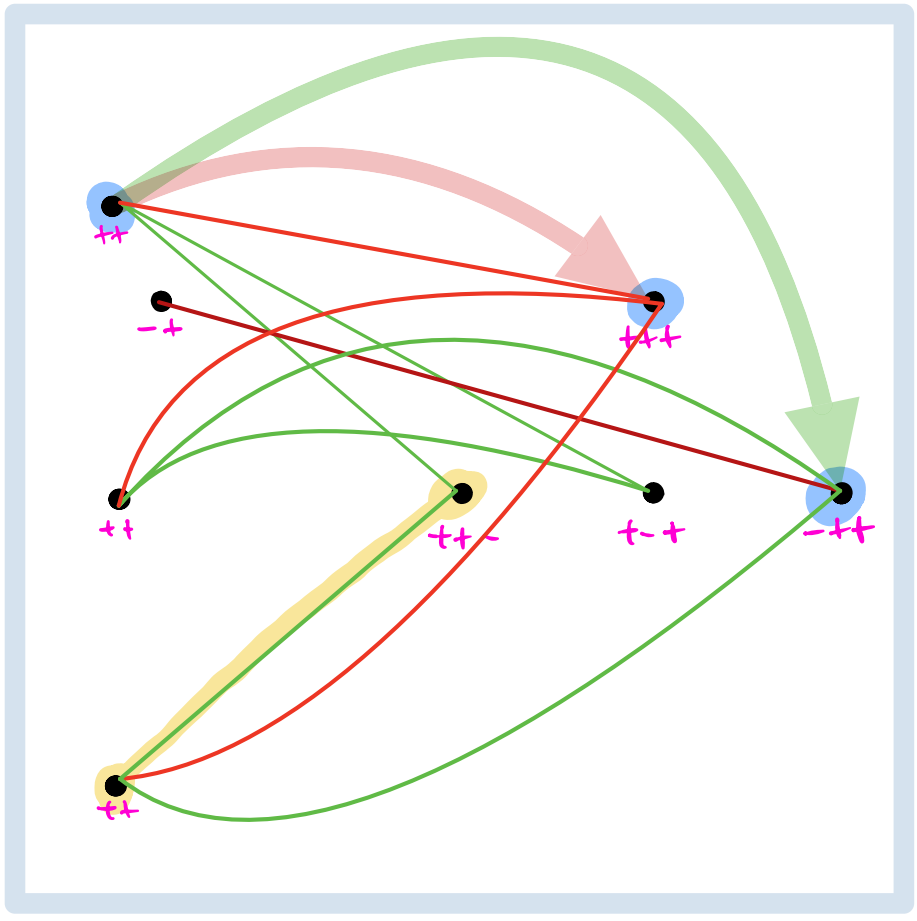


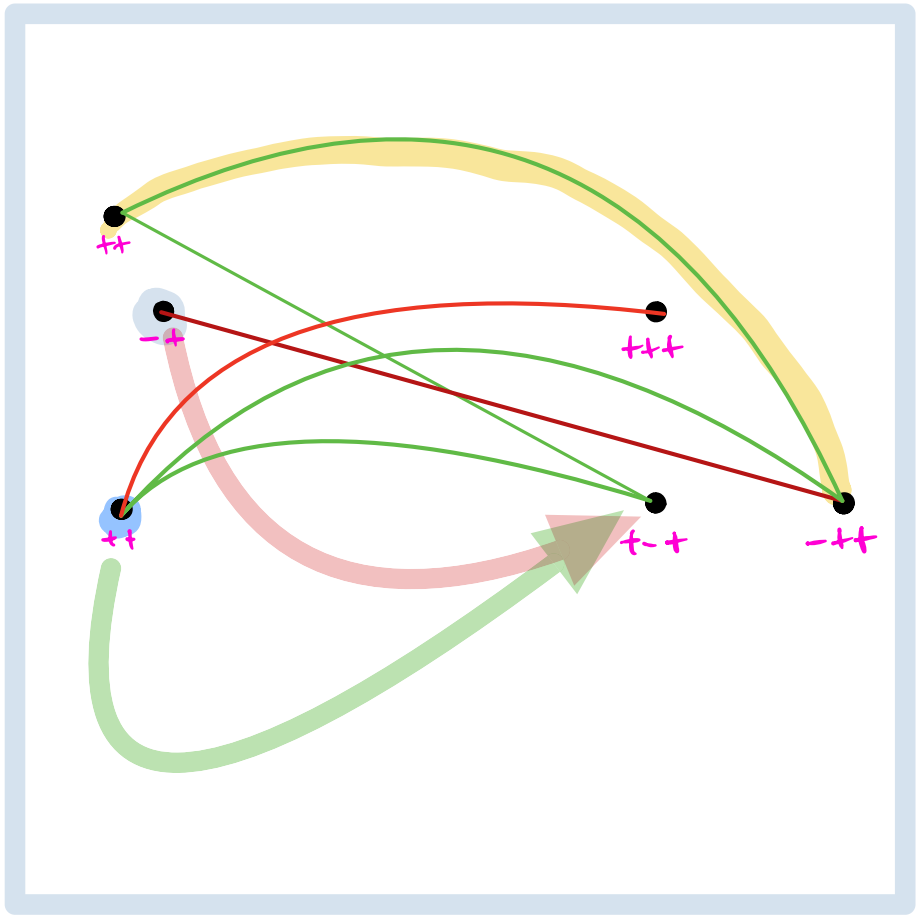


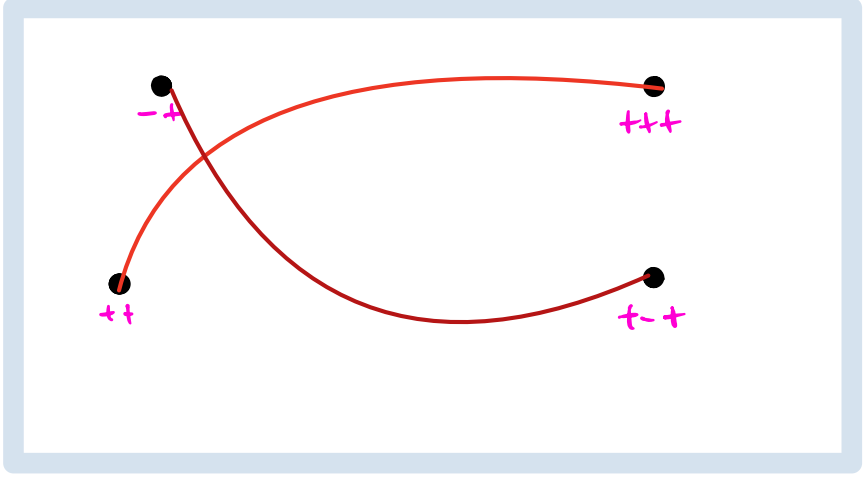





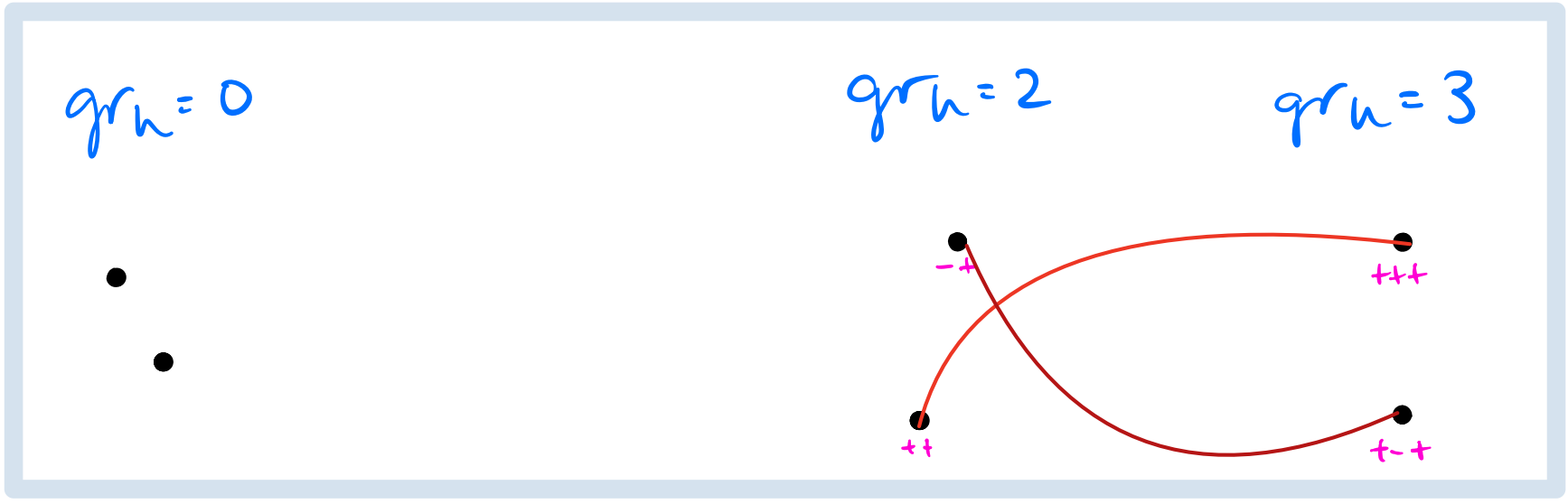





$(E^2, d^2)$: (Ignoring the red $d^2$ arrows, we have $Kh(\text{trefoil})$.)




$E^\infty$: