# Eine Woche, ein Beispiel
## 6.30 starting functions.

This is a follow-up of [2021.08.15], [2022.02.20] and [2021.05.07]. The combinatorics of starting functions is more intricate than I thought. Therefore, I collect these findings here, and wish somebody can give a rigorous proof for these phenomenons (e.p. the numbers of 1's).

## 1. folding & starting fcts

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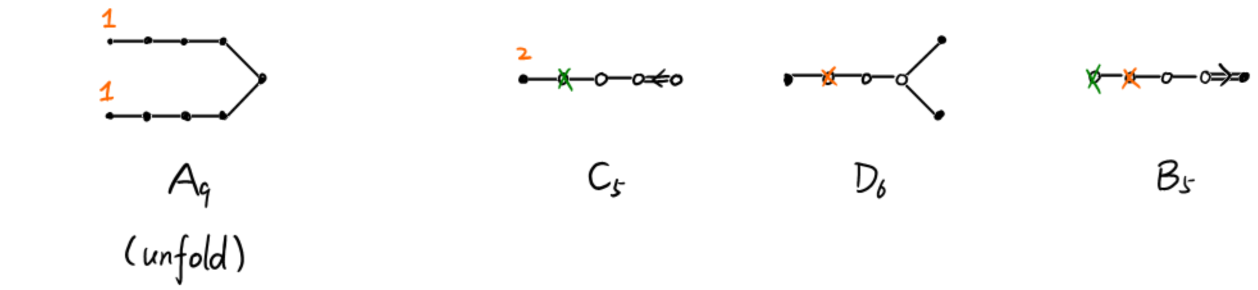
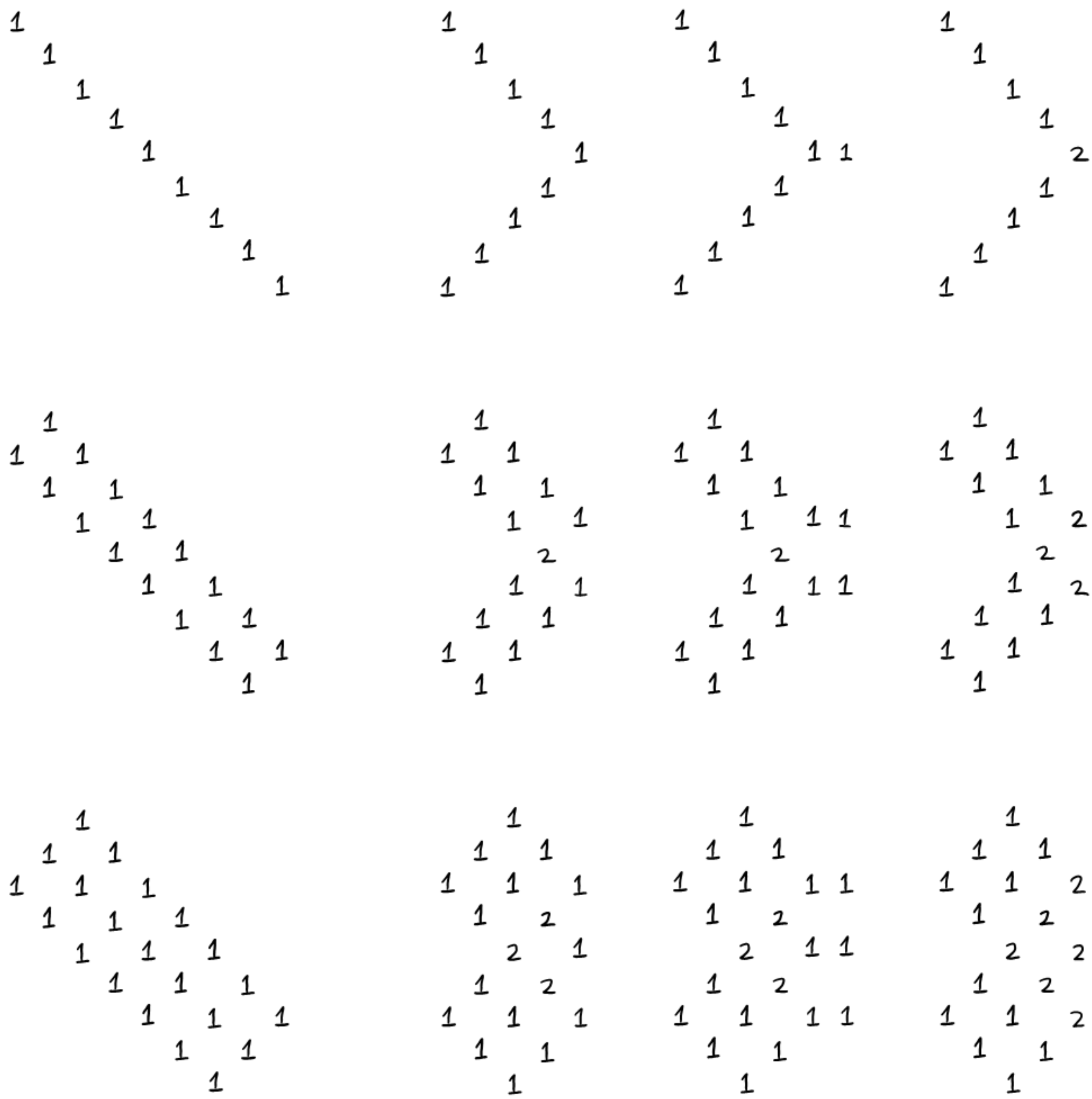
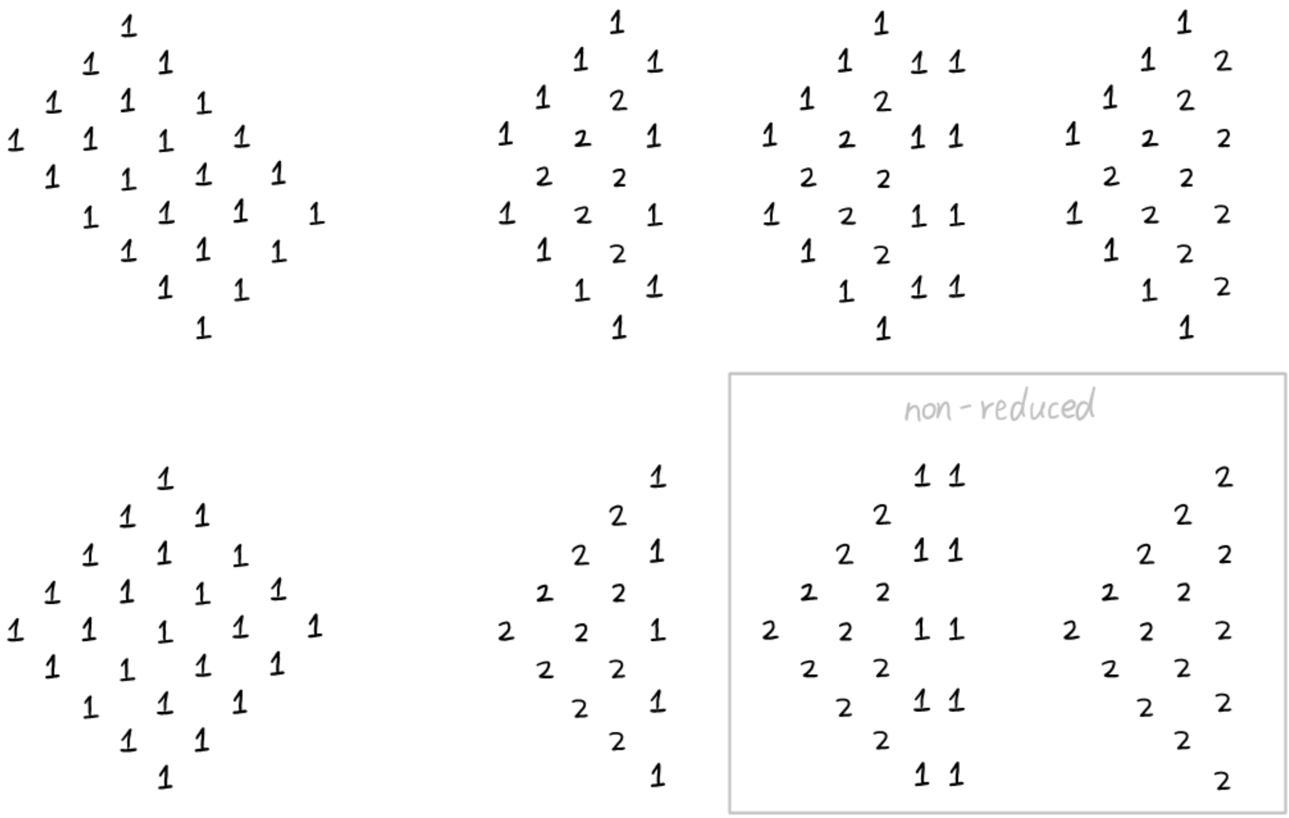
•: minuscule rep
×: quasi-minuscule rep
×: adjoint rep

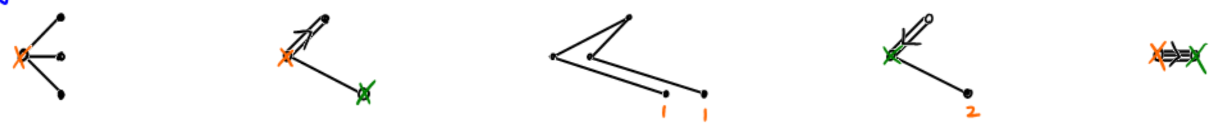
E.g. $C_5$



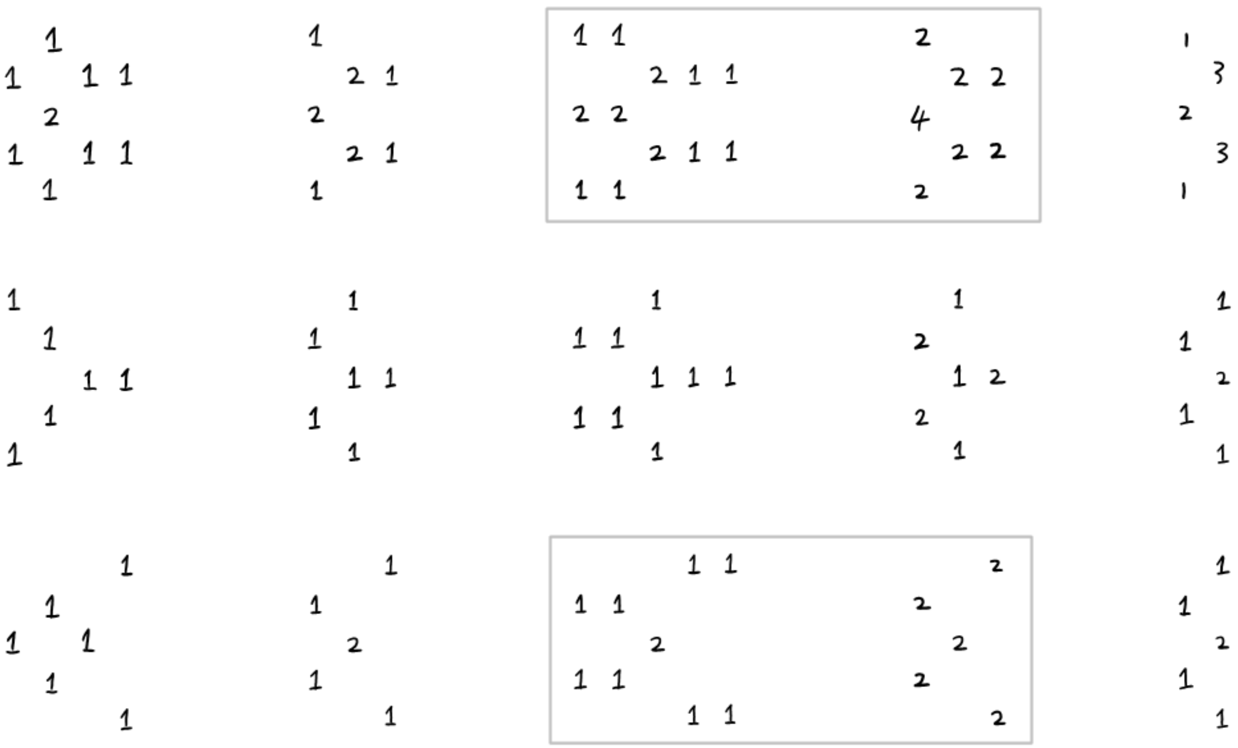



E.g. $B_3$

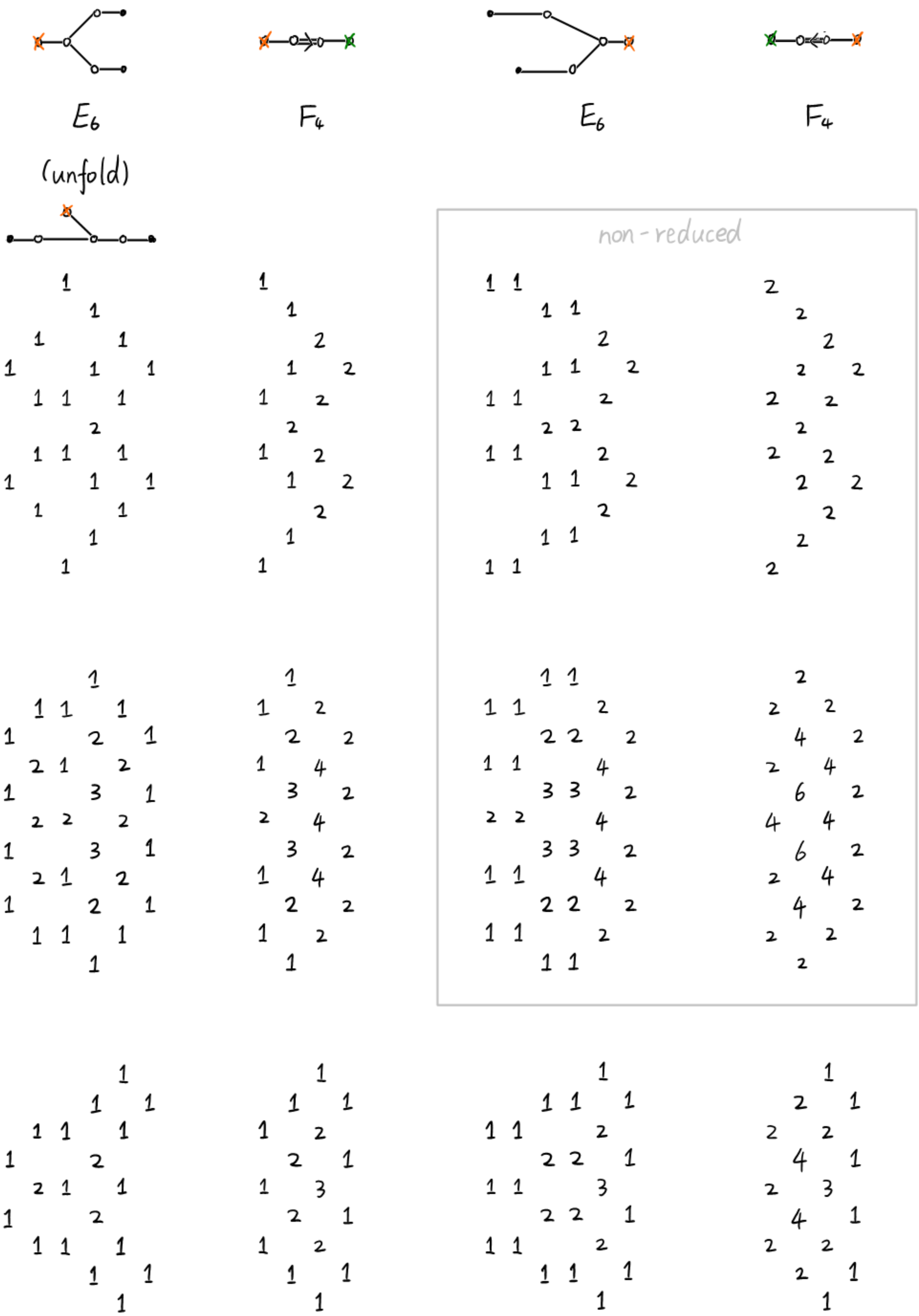


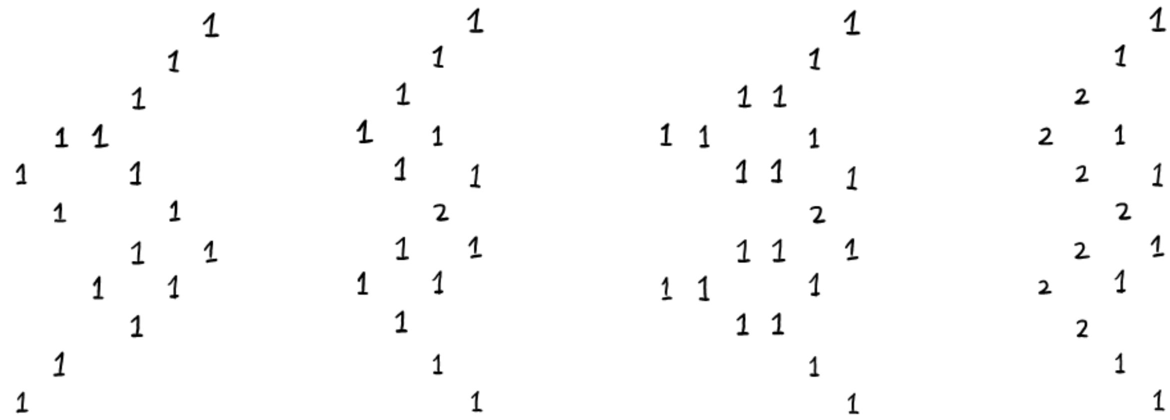
$D_4$ $B_3$ $A_5$ $C_3$ $G_2$

(unfold)



E.g. $F_4$





Rmk. Adjoint rep is compatible with normal folding. while
quasi-minuscule rep } are compatible with reversed folding
minuscule rep }

E.p. simply-laced $\Leftrightarrow$ (quasi-minuscule = adjoint)

For minuscule rep, 


long roots -> short roots
short weights -> long weights

https://mathoverflow.net/questions/111469/dual-versions-of-folding-symmetric-ade-dynkin-diagrams