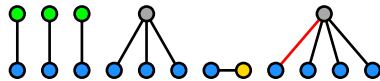
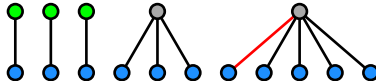


----- g,n: 7,3 graphs: 20 -----
 ----- Euler Characteristic (without resolving relations): $-1V_1^3+2V_1^2\boxtimes V_1+1V_1\boxtimes V_2$ -----
 ----- edges: 7 graphs: 3 -----
 ----- A3 case graphs: 3 -----

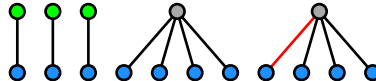
ID: 3 V_1^3
 \mapsto ID 10



ID: 4 V_1^3
 \mapsto ID 8



ID: 5 V_1^3
 \mapsto ID 9



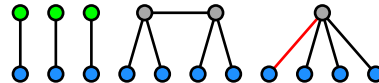
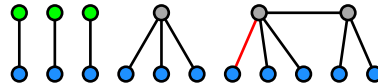
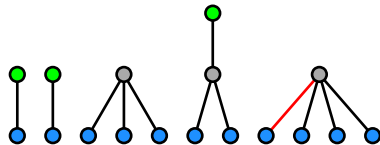
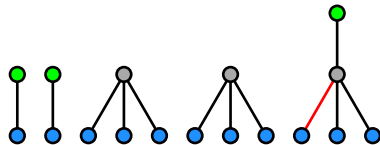
----- edges: 8 graphs: 9 -----
 ----- A3 case graphs: 4 -----

ID: 6 $V_1^2 \boxtimes V_1$
 \mapsto ID 17

ID: 7 $V_1^2 \boxtimes V_1$
 \mapsto ID 18

ID: 8 V_1^3
 \leftarrow ID 4

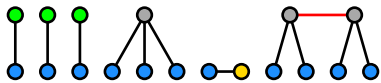
ID: 9 V_1^3
 \leftarrow ID 5



----- B,Birr cases without weight 11 relations graphs: 5 -----

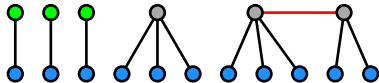
ID: 10 V_1^3

\leftrightarrow ID 3



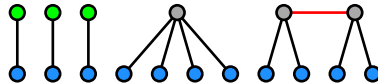
ID: 11 V_1^3

\mapsto ID 19

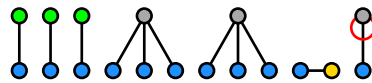


ID: 12 V_1^3

\mapsto ID 20

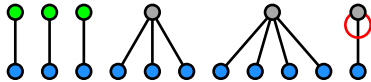


ID: 13 V_1^3



ID: 14 V_1^3

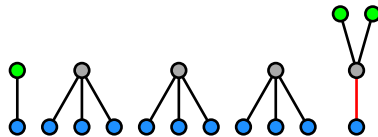
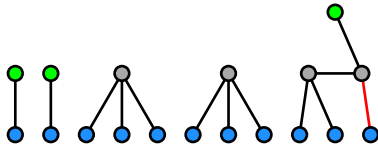
\mapsto ID 22



----- edges: 9 graphs: 8 -----
 ----- A2 case with weight 13 relations relation groups: 1 -----

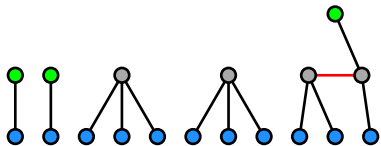
ID: 16 $V_1^2 \boxtimes V_1$

ID: 15 $V_1 \boxtimes V_2$

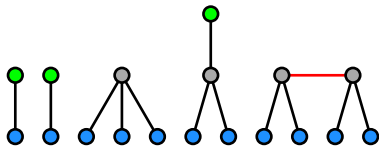


----- B,Birr cases without weight 11 relations graphs: 6 -----

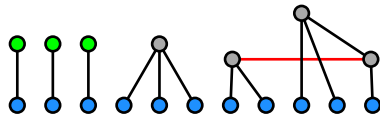
ID: 17 $V_1^2 \boxtimes V_1$
 \leftarrow ID 6



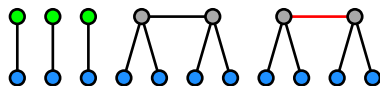
ID: 18 $V_1^2 \boxtimes V_1$
 \leftarrow ID 7



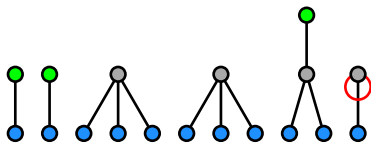
ID: 19 V_1^3
 \leftarrow ID 11



ID: 20 V_1^3
 \leftarrow ID 12



ID: 21 $V_1^2 \boxtimes V_1$



ID: 22 V_1^3
 \leftarrow ID 14

