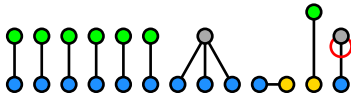------- g,n: 5,7 graphs: 207 eliminated+redundant: 194 -------

Euler Characteristic (without relations): $5V_{1^7} - 2V_{1^6} \boxtimes V_1 - 1V_{1^5} \boxtimes V_2 + 1V_{1^5} \boxtimes V_{1^2} - 4V_{1^5} \boxtimes V_1 \boxtimes V_1 + 3V_{1^4} \boxtimes V_1 \boxtimes V_2 + 1V_{1^4} \boxtimes V_1 \boxtimes V_1 \boxtimes V_1$
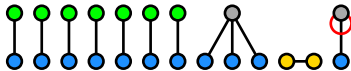
--------- edges: 4 graphs: 9 ---------

--------- edges: 5   graphs: 57   ---------

------- B,Birr cases with weight 11 relations   relation groups: 4 -------
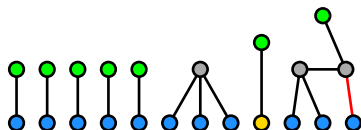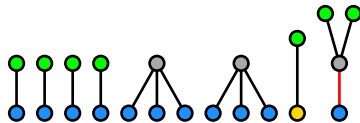
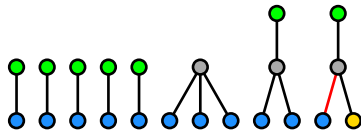ID: 348 $V_{1^6} \boxtimes V_1$

ID: 346 V_{1^7}

ID: 407 $V_{1^5} \boxtimes V_1 \boxtimes V_1$

ID: 402 $V_{1^4} \boxtimes V_1 \boxtimes V_2$

ID: 405 $V_{1^5} \boxtimes V_1 \boxtimes V_1$

ID: 527 $V_{1^5} \boxtimes V_2$

ID: 523 $V_{1^5} \boxtimes V_1 \boxtimes V_1$

ID: 547 $V_{1^4} \boxtimes V_1 \boxtimes V_2$
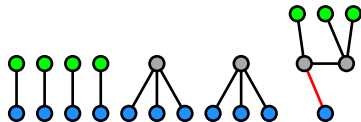
ID: 563 V_{1^7}
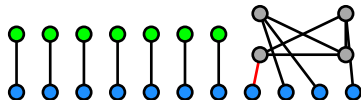
ID: 555 $V_{1^5} \boxtimes V_{1^2}$

ID: 549 $V_{1^4} \boxtimes V_1 \boxtimes V_1 \boxtimes V_1$

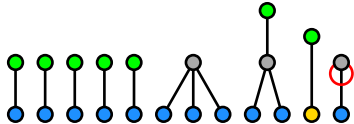------- B,Birr cases without weight 11 relations   graphs: 26 -------
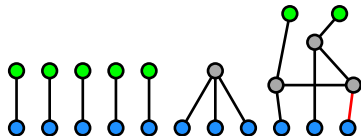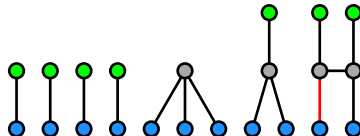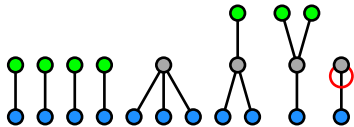
ID: 610 $V_{1^4} \boxtimes V_1 \boxtimes V_2$

ID: 614 $V_{1^4} \boxtimes V_3$