

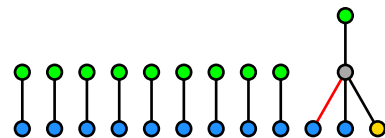
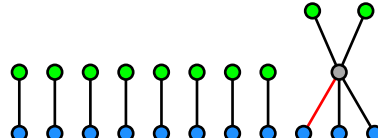
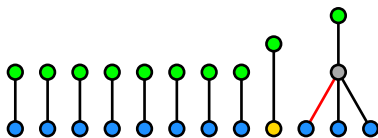
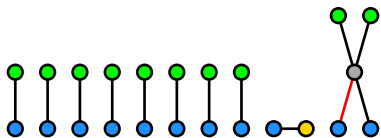
----- g,n: 3,10    graphs: 55    eliminated: 47    ----- Euler Characteristic (without resolving relations):  
 -----  $-2V_1^{10}+1V_1^9\boxtimes V_1-1V_1^8\boxtimes V_1^2+3V_1^8\boxtimes V_1\boxtimes V_1+1V_1^7\boxtimes V_3-2V_1^7\boxtimes V_1\boxtimes V_2-1V_1^7\boxtimes V_1\boxtimes V_1\boxtimes V_1$  -----  
                                  edges: 2    graphs: 9    -----  
                                  A3 case    graphs: 4    -----

ID: 203     $V_1^8\boxtimes V_2$   
 $\mapsto$  ID 448

ID: 204     $V_1^8\boxtimes V_1\boxtimes V_1$   
 $\mapsto$  ID 372

ID: 205     $V_1^8\boxtimes V_2$   
 $\mapsto$  ID 373

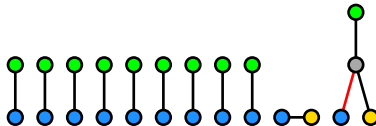
ID: 206     $V_1^9\boxtimes V_1$   
 $\mapsto$  ID 410



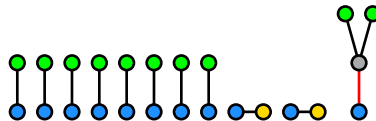
----- A2 case with weight 13 relations

relation groups: 1 -----

ID: 270  $V_{1^9} \boxtimes V_1$   
 $\mapsto$  ID 525

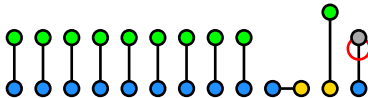


ID: 269  $V_{1^8} \boxtimes V_2$   
 $\mapsto$  ID 408 RED

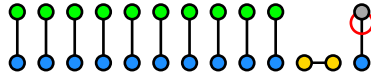


----- B,Birr cases with weight 11 relations      relation groups: 1 -----

ID: 348     $V_1^9 \boxtimes V_1$

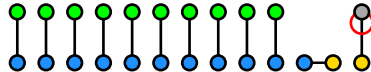


ID: 346     $V_1^{10}$



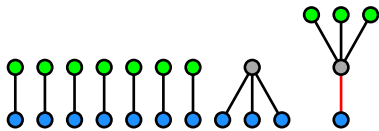
ID: 347     $V_1^{10}$

Redundant

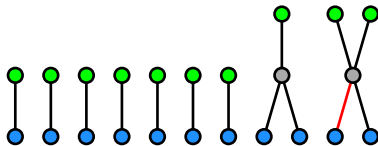


----- edges: 3      graphs: 26      -----  
 ----- A3 case      graphs: 6      -----

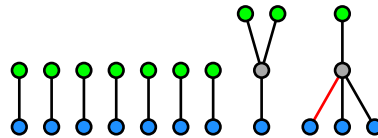
ID: 368  $V_1^7 \boxtimes V_3$   
 $\mapsto$  ID 576



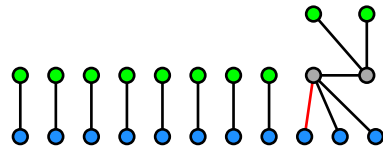
ID: 369  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 $\mapsto$  ID 578



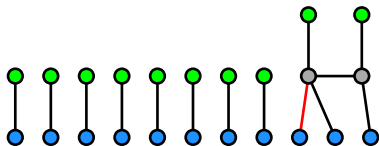
ID: 370  $V_1^7 \boxtimes V_2 \boxtimes V_1$   
 $\mapsto$  ID 577



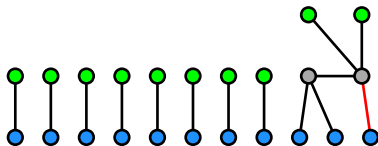
ID: 371  $V_1^8 \boxtimes V_2$   
 $\mapsto$  ID 553



ID: 372  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\leftarrow$  ID 204



ID: 373  $V_1^8 \boxtimes V_2$   
 $\leftarrow$  ID 205

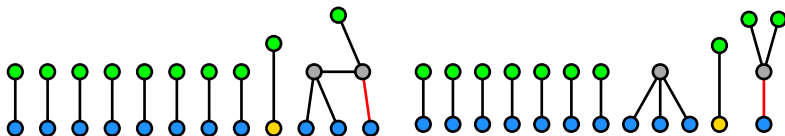


----- A2 case with weight 13 relations

relation groups: 4 -----

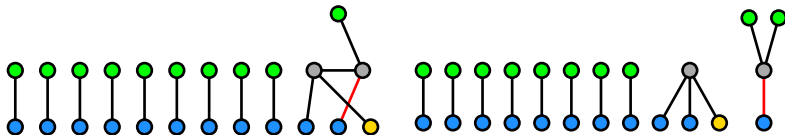
ID: 407  $V_1^8 \boxtimes V_1 \boxtimes V_1$

ID: 402  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 $\mapsto$  ID 547



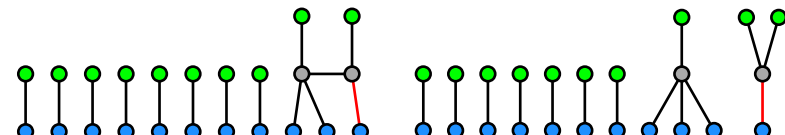
ID: 411  $V_1^9 \boxtimes V_1$   
 $\mapsto$  ID 556

ID: 408  $V_1^8 \boxtimes V_2$   
 $\leftarrow$  ID 269 RED



ID: 409  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\mapsto$  ID 552

ID: 406  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 Redundant

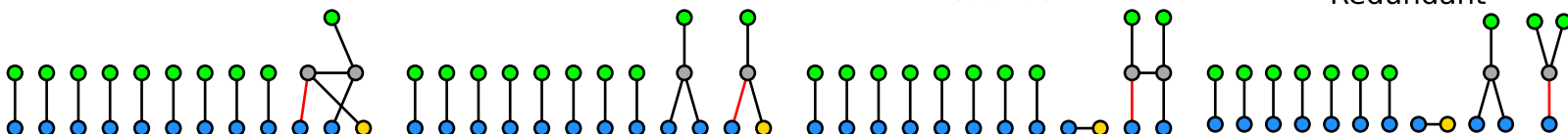


ID: 410  $V_1^9 \boxtimes V_1$   
 $\leftarrow$  ID 206

ID: 405  $V_1^8 \boxtimes V_1 \boxtimes V_1$

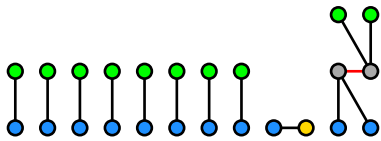
ID: 404  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 Redundant

ID: 403  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 Redundant

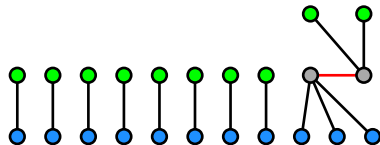


----- B,Birr cases without weight 11 relations      graphs: 5 -----

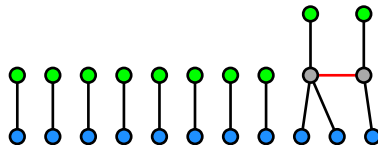
ID: 448  $V_1^8 \boxtimes V_2$   
 $\leftarrow$  ID 203



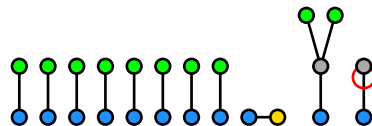
ID: 449  $V_1^8 \boxtimes V_2$   
 $\mapsto$  ID 581



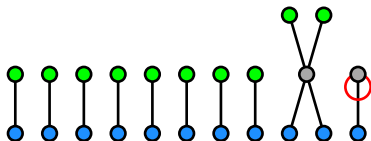
ID: 450  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\mapsto$  ID 580



ID: 522  $V_1^8 \boxtimes V_2$   
 $\mapsto$  ID 611



ID: 524  $V_1^8 \boxtimes V_2$   
 $\mapsto$  ID 612

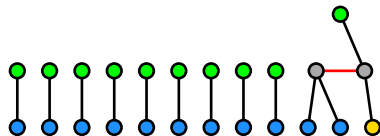
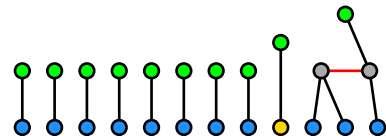


----- B,Birr cases with weight 11 relations

relation groups: 2 -----

ID: 447  $V_{1^8} \boxtimes V_1 \boxtimes V_1$   
 $\mapsto$  ID 579

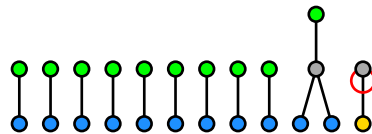
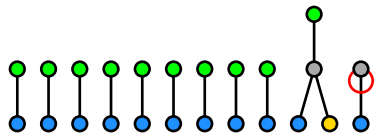
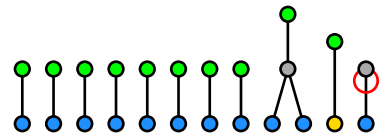
ID: 451  $V_{1^9} \boxtimes V_1$   
Redundant



ID: 523  $V_{1^8} \boxtimes V_1 \boxtimes V_1$

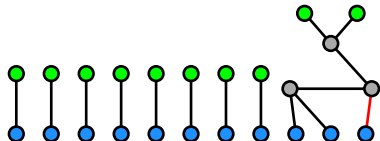
ID: 525  $V_{1^9} \boxtimes V_1$   
 $\leftarrow$  ID 270

ID: 526  $V_{1^9} \boxtimes V_1$   
Redundant

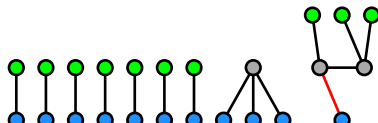


----- edges: 4    graphs: 20    -----  
 ----- A2 case with weight 13 relations    relation groups: 3 -----

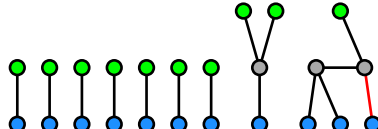
ID: 553  $V_1^8 \boxtimes V_2$   
 $\leftrightarrow$ ID 371



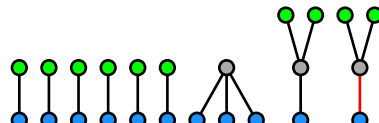
ID: 547  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 $\leftrightarrow$ ID 402



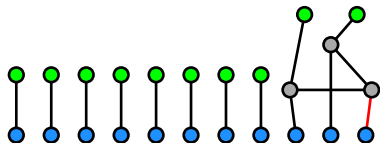
ID: 551  $V_1^7 \boxtimes V_2 \boxtimes V_1$   
 Redundant



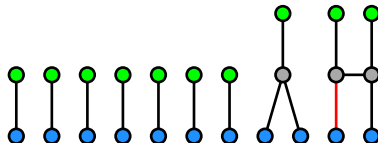
ID: 546  $V_1^6 \boxtimes V_2 \boxtimes V_2$   
 Redundant



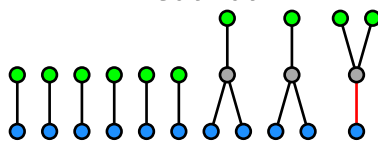
ID: 555  $V_1^8 \boxtimes V_1^2$



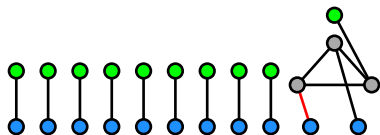
ID: 549  $V_1^7 \boxtimes V_1 \boxtimes V_1 \boxtimes V_1$



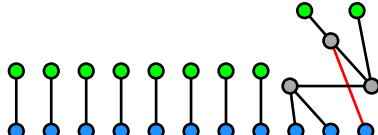
ID: 548  $V_1^6 \boxtimes V_2 \boxtimes V_2$   
 Redundant



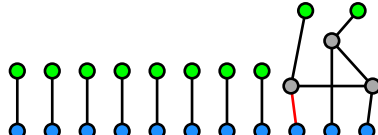
ID: 556  $V_1^9 \boxtimes V_1$   
 $\leftrightarrow$ ID 411



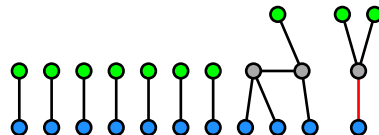
ID: 552  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\leftrightarrow$ ID 409



ID: 554  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 Redundant

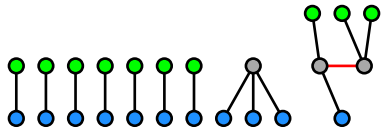


ID: 550  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 Redundant

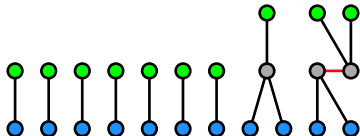




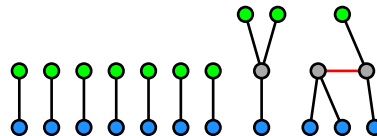
ID: 576  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 $\leftrightarrow$ ID 368



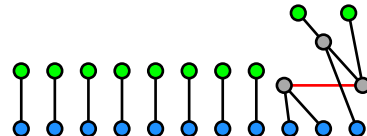
ID: 578  $V_1^7 \boxtimes V_1 \boxtimes V_2$   
 $\leftrightarrow$ ID 369



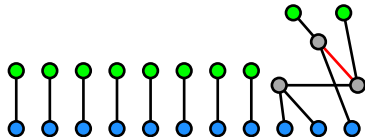
ID: 577  $V_1^7 \boxtimes V_2 \boxtimes V_1$   
 $\leftrightarrow$ ID 370



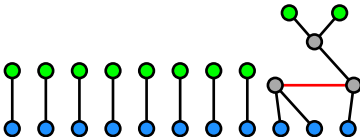
ID: 579  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\leftrightarrow$ ID 447



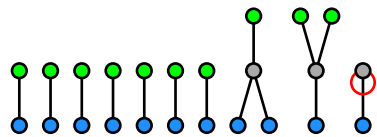
ID: 580  $V_1^8 \boxtimes V_1 \boxtimes V_1$   
 $\leftrightarrow$ ID 450



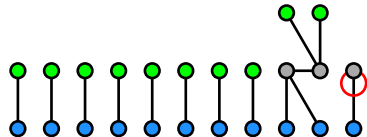
ID: 581  $V_1^8 \boxtimes V_2$   
 $\leftrightarrow$ ID 449



ID: 610  $V_1^7 \boxtimes V_1 \boxtimes V_2$



ID: 611  $V_1^8 \boxtimes V_2$   
 $\leftrightarrow$ ID 522



ID: 612  $V_1^8 \boxtimes V_2$   
 $\leftrightarrow$ ID 524

