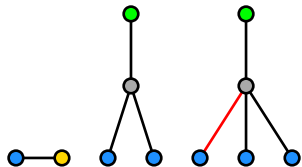
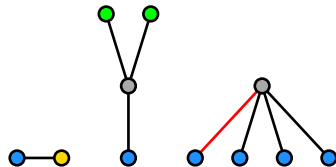


----- edges: 12-n      graphs: 165  
 --- A3 case      graphs: 66 ---

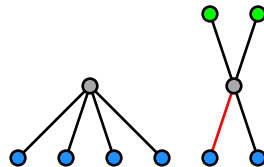
ID: 207  $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



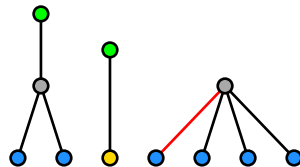
ID: 208  $V_{1^{n-2}} \boxtimes V_2$   
 n: 7 4



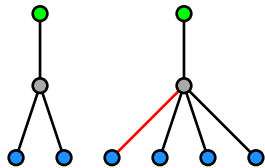
ID: 209  $V_{1^{n-2}} \boxtimes V_2$   
 n: 7 4



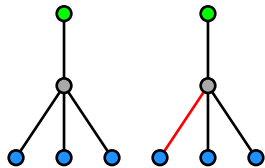
ID: 210  $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



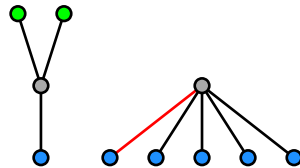
ID: 211  $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



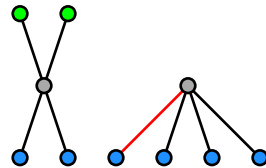
ID: 212  $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



ID: 213  $V_{1^{n-2}} \boxtimes V_2$   
 n: 7 4

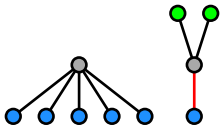


ID: 214  $V_{1^{n-2}} \boxtimes V_2$   
 n: 7 4

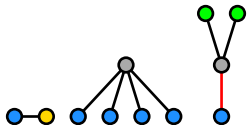


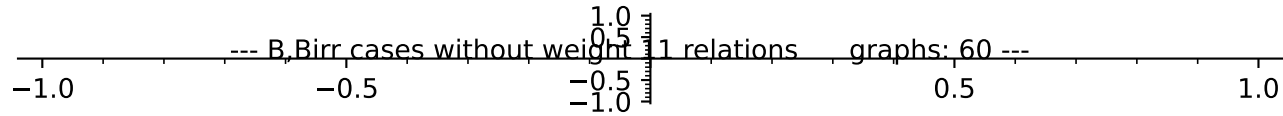
--- A2 case with weight 13 relations      relation groups: 4 ---

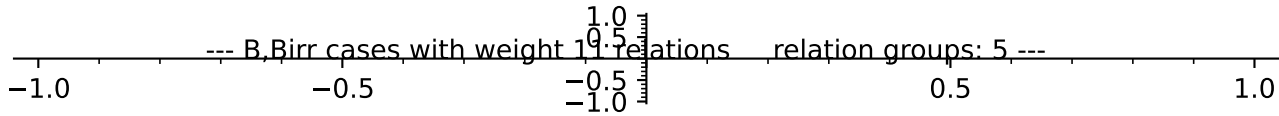
ID: 272     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



ID: 271     $V_1^{n-2} \boxtimes V_2$   
n: 7 4

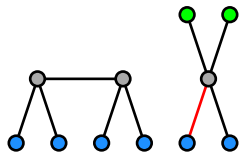




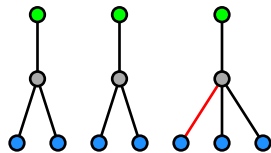


----- edges: 13-n      graphs: 178      -----  
 --- A3 case      graphs: 34      ---

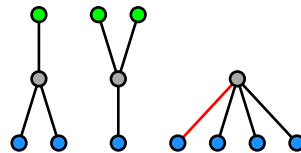
ID: 374  $V_1^{n-2} \boxtimes V_2$   
 n: 7 4



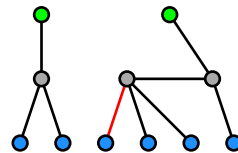
ID: 375  $V_1^{n-3} \boxtimes V_2 \boxtimes V_1$   
 n: 7 4



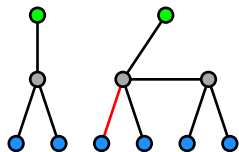
ID: 376  $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$   
 n: 7 4



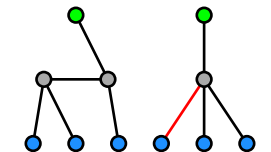
ID: 377  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



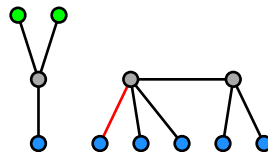
ID: 378  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



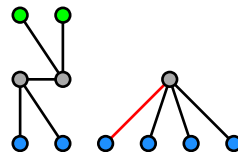
ID: 379  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



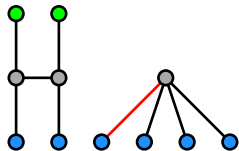
ID: 380  $V_1^{n-2} \boxtimes V_2$   
 n: 7 4



ID: 381  $V_1^{n-2} \boxtimes V_2$   
 n: 7 4



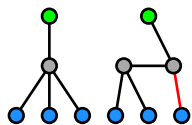
ID: 382  $V_1^{n-2} \boxtimes V_2$   
 n: 7 4





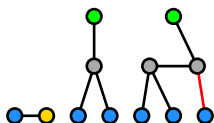
ID: 418  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$

n: 7 4



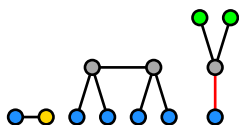
ID: 413  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$

n: 7 4



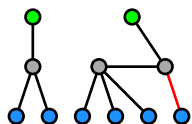
ID: 412  $V_1^{n-2} \boxtimes V_2$

n: 7 4



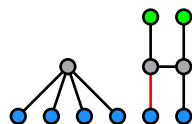
ID: 417  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$

n: 7 4



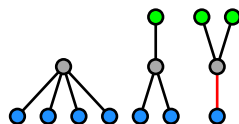
ID: 415  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$

n: 7 4



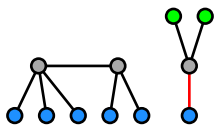
ID: 414  $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$

n: 7 4



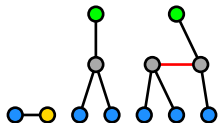
ID: 416  $V_1^{n-2} \boxtimes V_2$

n: 7 4

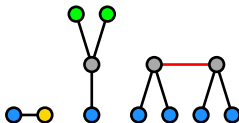


--- B,Birr cases without weight 11 relations      graphs: 76 ---

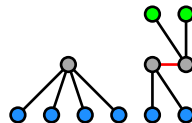
ID: 456     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



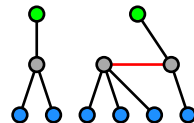
ID: 452     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



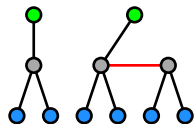
ID: 460     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



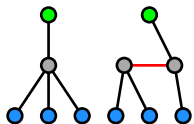
ID: 458     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



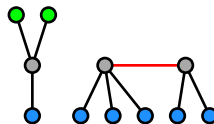
ID: 459     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



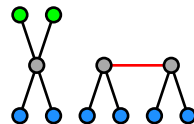
ID: 457     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



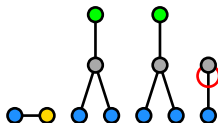
ID: 455     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



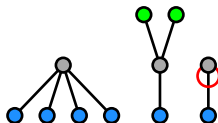
ID: 454     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



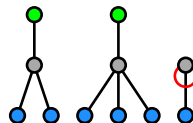
ID: 527     $V_1^{n-2} \boxtimes V_2$   
n: 7 4



ID: 528     $V_1^{n-2} \boxtimes V_2$   
n: 7 4

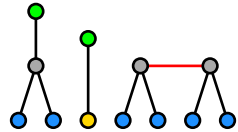


ID: 529     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



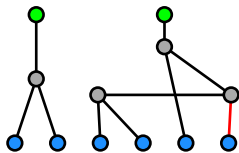
--- B,Birr cases with weight 11 relations      relation groups: 6 ---

ID: 453     $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4

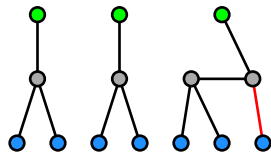


----- edges: 14-n    graphs: 73    -----  
 --- A2 case with weight 13 relations    relation groups: 6 ---

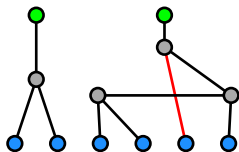
ID: 561  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



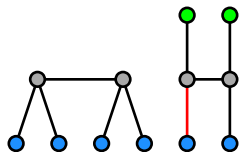
ID: 559  $V_1^{n-3} \boxtimes V_2 \boxtimes V_1$   
 n: 7 4



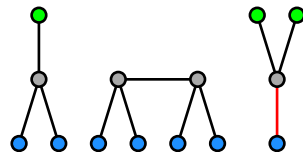
ID: 560  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



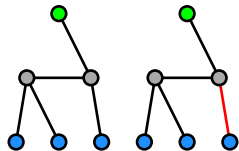
ID: 558  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4



ID: 557  $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$   
 n: 7 4

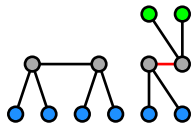


ID: 562  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
 n: 7 4

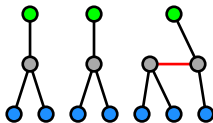


--- B,Birr cases without weight 11 relations      graphs: 43 ---

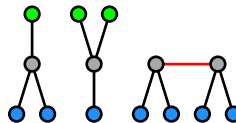
ID: 590  $V_1^{n-2} \boxtimes V_2$   
n: 7 4



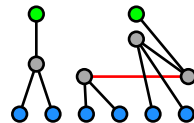
ID: 586  $V_1^{n-3} \boxtimes V_2 \boxtimes V_1$   
n: 7 4



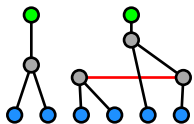
ID: 582  $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$   
n: 7 4



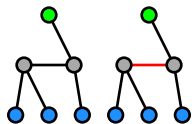
ID: 588  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



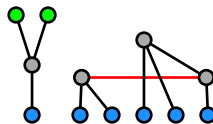
ID: 589  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



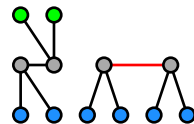
ID: 587  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4



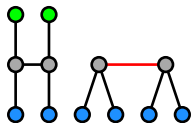
ID: 585  $V_1^{n-2} \boxtimes V_2$   
n: 7 4



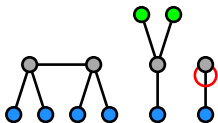
ID: 583  $V_1^{n-2} \boxtimes V_2$   
n: 7 4



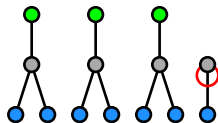
ID: 584  $V_1^{n-2} \boxtimes V_2$   
n: 7 4



ID: 613  $V_1^{n-2} \boxtimes V_2$   
n: 7 4



ID: 614  $V_1^{n-3} \boxtimes V_3$   
n: 7 4



ID: 615  $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$   
n: 7 4

