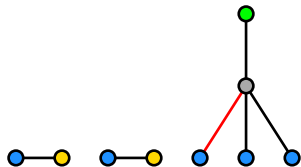
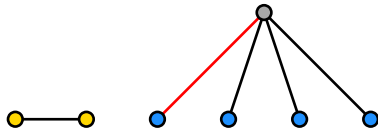


----- edges: 11-n      graphs: 64      -----  
 --- A3 case      graphs: 45      ---

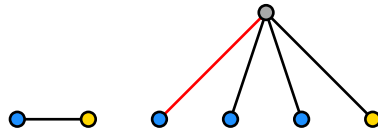
ID: 139  $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



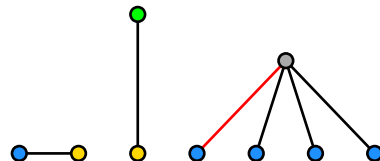
ID: 140  $V_{1^n}$   
 n: 7 4 1



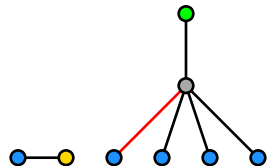
ID: 141  $V_{1^n}$   
 n: 7 4 1



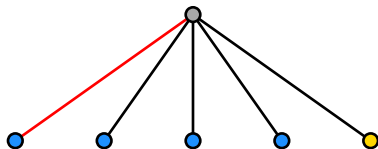
ID: 142  $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



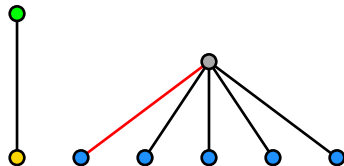
ID: 143  $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



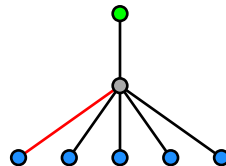
ID: 144  $V_{1^n}$   
 n: 7 4 1



ID: 145  $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1

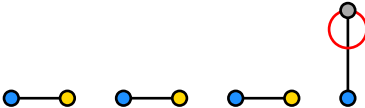


ID: 146  $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



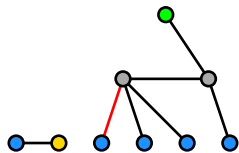
--- B,Birr cases without weight 11 relations      graphs: 19 ---

ID: 197     $V_1^n$   
n: 7 4 1

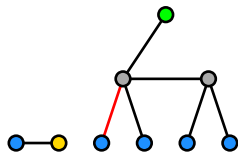


----- edges: 12-n      graphs: 165      -----  
 --- A3 case      graphs: 66      ---

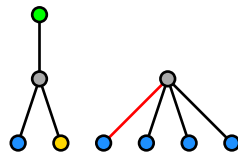
ID: 215  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



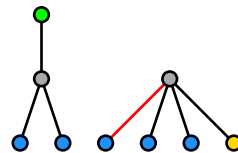
ID: 216  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



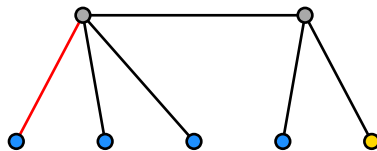
ID: 217  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



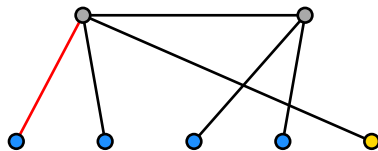
ID: 218  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



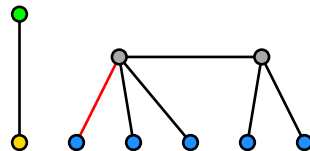
ID: 219  $V_1^n$   
 n: 7 4 1



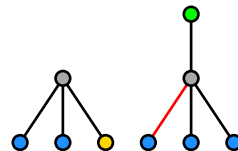
ID: 220  $V_1^n$   
 n: 7 4 1



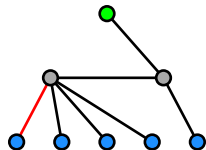
ID: 221  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



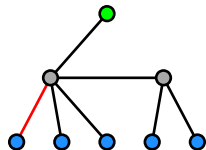
ID: 222  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



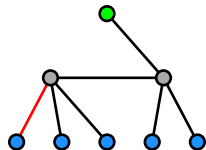
ID: 223  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



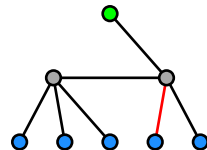
ID: 224  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



ID: 225  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1

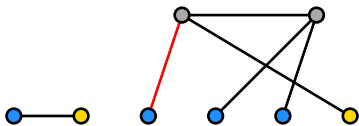


ID: 226  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1

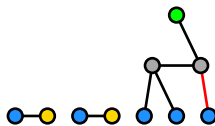


--- A2 case with weight 13 relations      relation groups: 4 ---

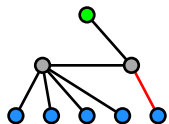
ID: 274  $V_1^n$   
n: 7 4 1



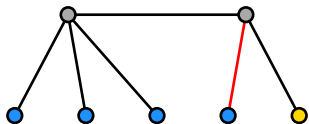
ID: 273  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



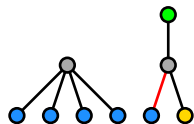
ID: 278  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



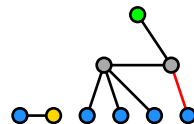
ID: 277  $V_1^n$   
n: 7 4 1



ID: 276  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1

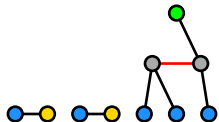


ID: 275  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1

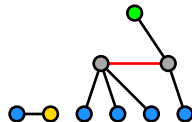


--- B,Birr cases without weight 11 relations      graphs: 60 ---

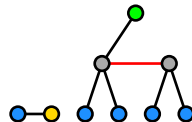
ID: 291  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



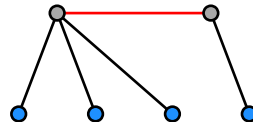
ID: 293  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



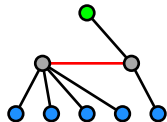
ID: 294  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



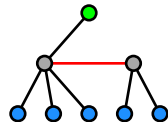
ID: 295  $V_1^n$   
n: 7 4 1



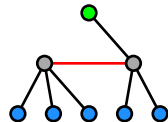
ID: 298  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



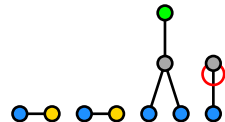
ID: 299  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



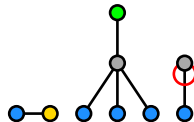
ID: 300  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



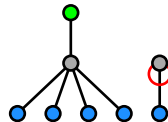
ID: 349  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



ID: 350  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1

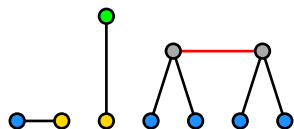


ID: 355  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1

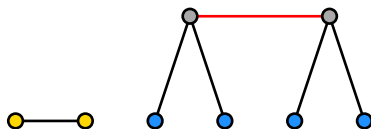


--- B,Birr cases with weight 11 relations      relation groups: 5 ---

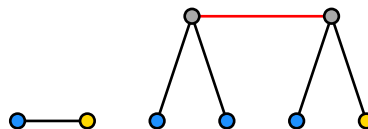
ID: 289  $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



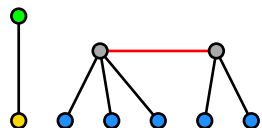
ID: 288  $V_{1^n}$   
n: 7 4 1



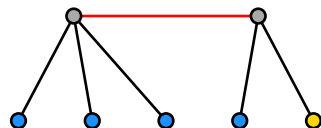
ID: 292  $V_{1^n}$   
n: 7 4 1



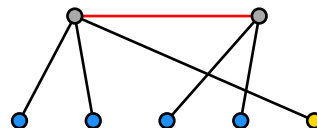
ID: 290  $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



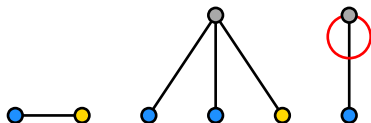
ID: 296  $V_{1^n}$   
n: 7 4 1



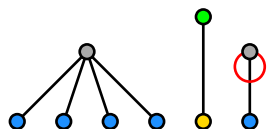
ID: 297  $V_{1^n}$   
n: 7 4 1



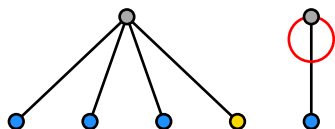
ID: 351  $V_{1^n}$   
n: 7 4 1



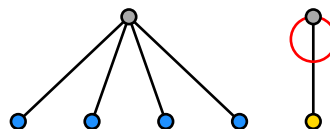
ID: 354  $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



ID: 352  $V_{1^n}$   
n: 7 4 1

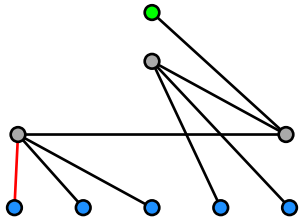


ID: 353  $V_{1^n}$   
n: 7 4 1

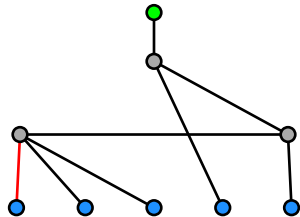


----- edges: 13-n      graphs: 178  
 --- A3 case      graphs: 34 ---

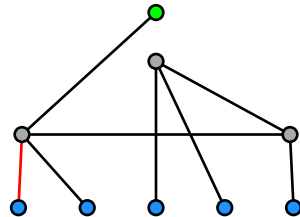
ID: 383     $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



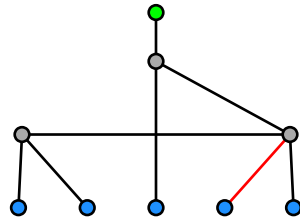
ID: 384     $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1



ID: 385     $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1

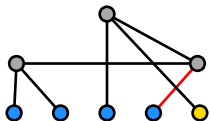


ID: 386     $V_{1^{n-1}} \boxtimes V_1$   
 n: 7 4 1

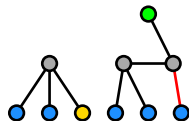




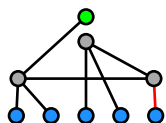
ID: 425  $V_1^n$   
n: 7 4 1



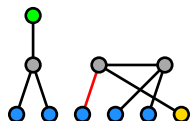
ID: 426  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



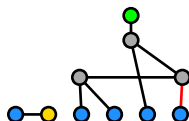
ID: 429  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



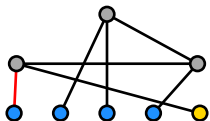
ID: 422  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



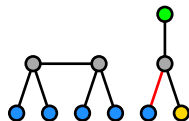
ID: 420  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



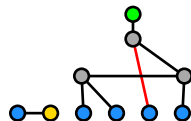
ID: 424  $V_1^n$   
n: 7 4 1



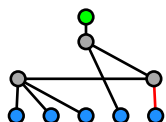
ID: 421  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



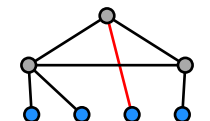
ID: 419  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



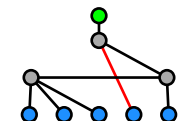
ID: 428  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



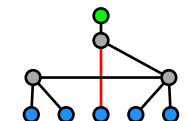
ID: 423  $V_1^n$   
n: 7 4 1



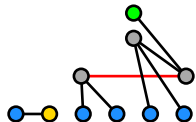
ID: 427  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



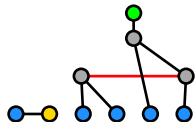
ID: 430  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



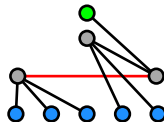
ID: 465  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



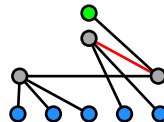
ID: 466  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



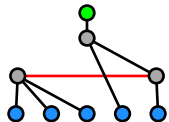
ID: 469  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



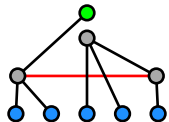
ID: 472  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



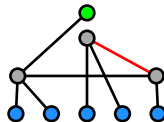
ID: 473  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



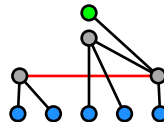
ID: 470  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



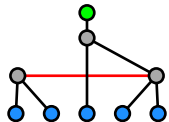
ID: 475  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



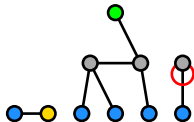
ID: 471  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



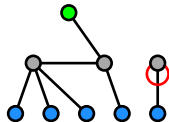
ID: 474  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



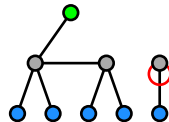
ID: 530  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



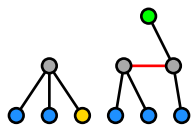
ID: 535  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



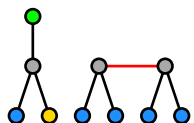
ID: 536  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



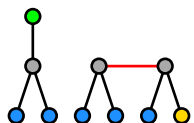
ID: 463  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



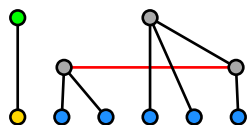
ID: 461  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



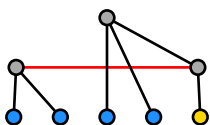
ID: 464  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



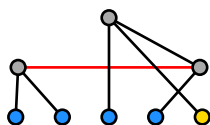
ID: 462  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



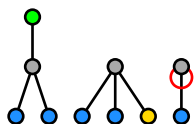
ID: 467  $V_1^n$   
n: 7 4 1



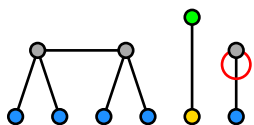
ID: 468  $V_1^n$   
n: 7 4 1



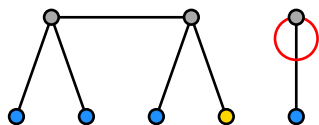
ID: 534  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



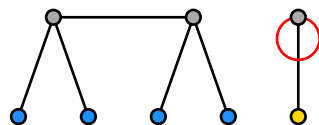
ID: 533  $V_1^{n-1} \boxtimes V_1$   
n: 7 4 1



ID: 531  $V_1^n$   
n: 7 4 1

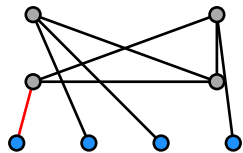


ID: 532  $V_1^n$   
n: 7 4 1

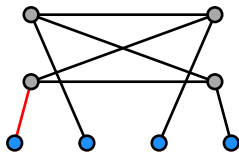


----- edges: 14-n    graphs: 73    -----  
 --- A2 case with weight 13 relations    relation groups: 6 ---

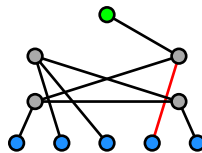
ID: 563  $V_1^n$   
 n: 7 4 1



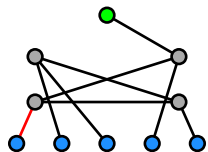
ID: 564  $V_1^n$   
 n: 7 4 1



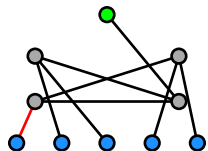
ID: 567  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



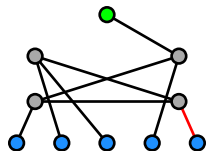
ID: 566  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1



ID: 565  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1

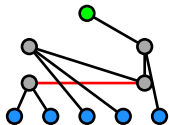


ID: 568  $V_1^{n-1} \boxtimes V_1$   
 n: 7 4 1

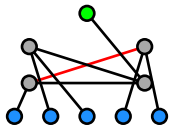


--- B,Birr cases without weight 11 relations      graphs: 43 ---

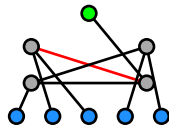
ID: 591     $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



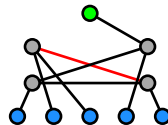
ID: 592     $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



ID: 593     $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



ID: 594     $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1



ID: 616     $V_{1^{n-1}} \boxtimes V_1$   
n: 7 4 1

