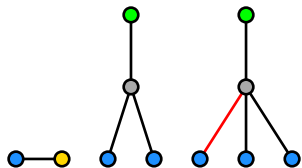
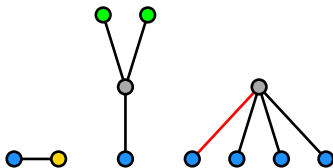


----- edges: 12-n graphs: 165
 --- A3 case graphs: 66 ---

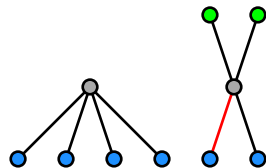
ID: 207 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4



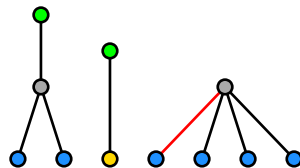
ID: 208 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4
 \mapsto ID 452



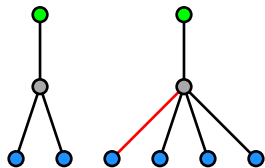
ID: 209 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4
 \mapsto ID 374



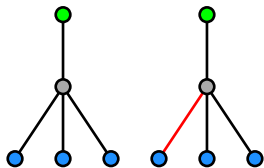
ID: 210 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4
 \mapsto ID 453



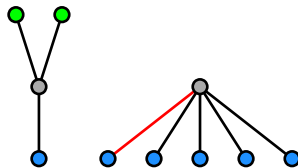
ID: 211 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4
 \mapsto ID 378



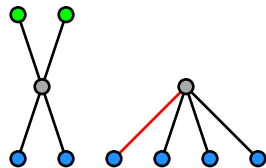
ID: 212 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4
 \mapsto ID 379



ID: 213 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4
 \mapsto ID 380

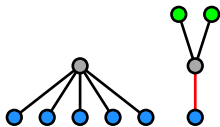


ID: 214 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4
 \mapsto ID 381

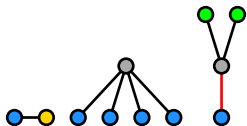


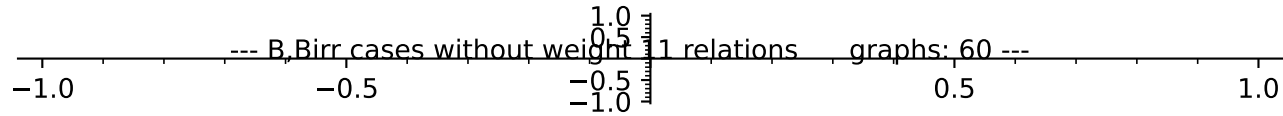
--- A2 case with weight 13 relations relation groups: 4 ---

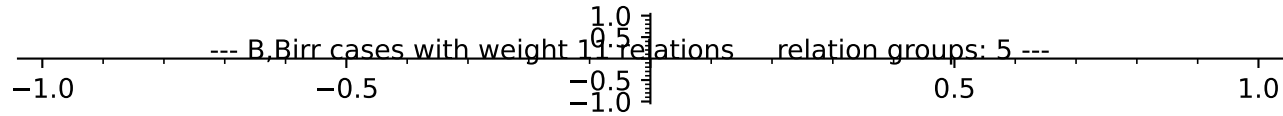
ID: 272 $V_1^{n-2} \boxtimes V_2$
 n: 7 4 \mapsto ID 416 RED



ID: 271 $V_1^{n-2} \boxtimes V_2$
 n: 7 4 \mapsto ID 412 RED

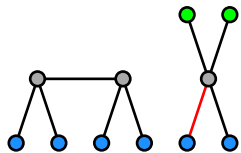




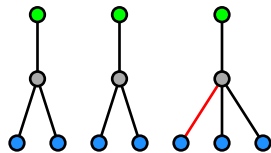


----- edges: 13-n graphs: 178
 --- A3 case graphs: 34 ---

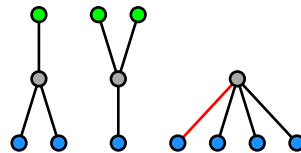
ID: 374 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4 \leftarrow ID 209



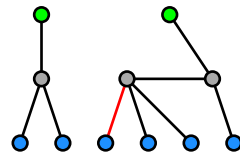
ID: 375 $V_{1^{n-3}} \boxtimes V_2 \boxtimes V_1$
 n: 7 4



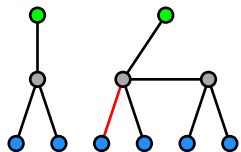
ID: 376 $V_{1^{n-3}} \boxtimes V_1 \boxtimes V_2$
 n: 7 4 \mapsto ID 582



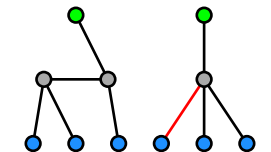
ID: 377 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \mapsto ID 561



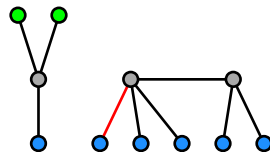
ID: 378 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftarrow ID 211



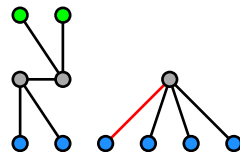
ID: 379 $V_{1^{n-2}} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftarrow ID 212



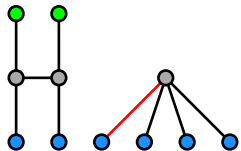
ID: 380 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4 \leftarrow ID 213



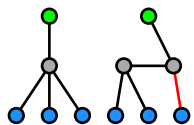
ID: 381 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4 \leftarrow ID 214



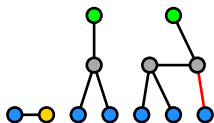
ID: 382 $V_{1^{n-2}} \boxtimes V_2$
 n: 7 4 \mapsto ID 584



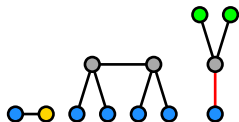
ID: 418 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 562 RED



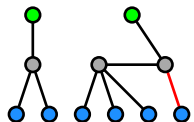
ID: 413 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 Redundant



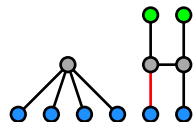
ID: 412 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 271 RED



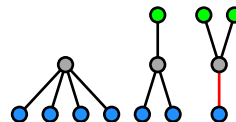
ID: 417 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 560



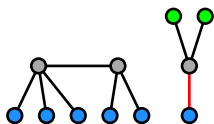
ID: 415 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 558 RED



ID: 414 $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$
n: 7 4 \mapsto ID 557 RED

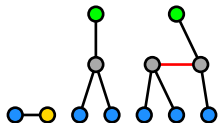


ID: 416 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 272 RED

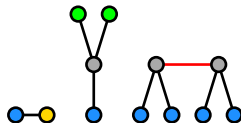


--- B,Birr cases without weight 11 relations graphs: 76 ---

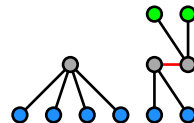
ID: 456 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4



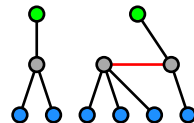
ID: 452 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 208



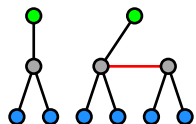
ID: 460 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \mapsto ID 590



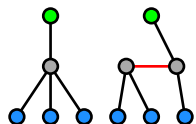
ID: 458 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 588



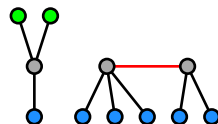
ID: 459 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 589



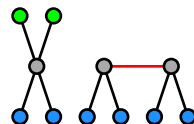
ID: 457 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 587



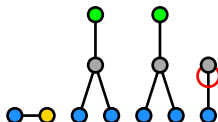
ID: 455 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \mapsto ID 585



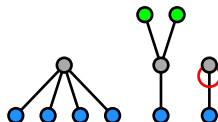
ID: 454 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \mapsto ID 583



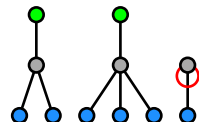
ID: 527 $V_1^{n-2} \boxtimes V_2$
n: 7 4



ID: 528 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \mapsto ID 613

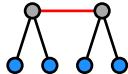
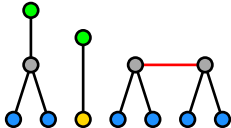


ID: 529 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \mapsto ID 615



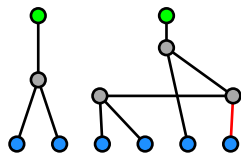
--- B,Birr cases with weight 11 relations relation groups: 6 ---

ID: 453 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftarrow ID 210

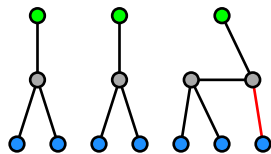


----- edges: 14-n graphs: 73 -----
 --- A2 case with weight 13 relations relation groups: 6 ---

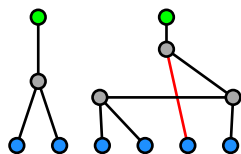
ID: 561 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftrightarrow ID 377



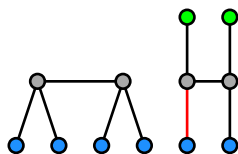
ID: 559 $V_1^{n-3} \boxtimes V_2 \boxtimes V_1$
 n: 7 4 Redundant



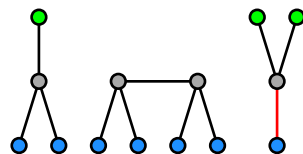
ID: 560 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftrightarrow ID 417



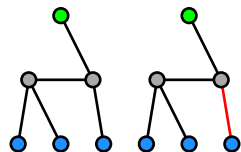
ID: 558 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftrightarrow ID 415 RED



ID: 557 $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$
 n: 7 4 \leftrightarrow ID 414 RED

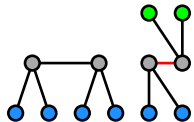


ID: 562 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
 n: 7 4 \leftrightarrow ID 418 RED

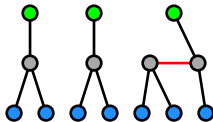


--- B,Birr cases without weight 11 relations graphs: 43 ---

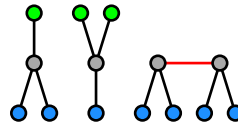
ID: 590 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 460



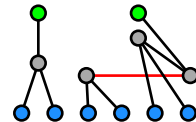
ID: 586 $V_1^{n-3} \boxtimes V_2 \boxtimes V_1$
n: 7 4



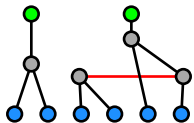
ID: 582 $V_1^{n-3} \boxtimes V_1 \boxtimes V_2$
n: 7 4 \leftrightarrow ID 376



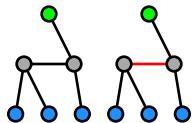
ID: 588 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \leftrightarrow ID 458



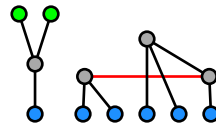
ID: 589 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \leftrightarrow ID 459



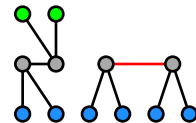
ID: 587 $V_1^{n-2} \boxtimes V_1 \boxtimes V_1$
n: 7 4 \leftrightarrow ID 457



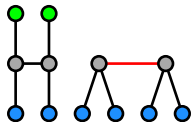
ID: 585 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 455



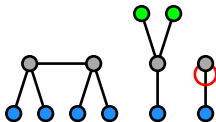
ID: 583 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 454



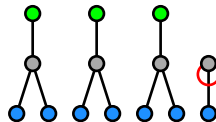
ID: 584 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 382



ID: 613 $V_1^{n-2} \boxtimes V_2$
n: 7 4 \leftrightarrow ID 528



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 \leftrightarrow ID 529

