

----- g,n: 7,4 graphs: 392 ----- Euler Characteristic (without resolving relations):
 ----- $-6V_1^4 + 2V_1^3 \boxtimes V_1 + 1V_1^2 \boxtimes V_2 - 1V_1^2 \boxtimes V_1^2 + 4V_1^2 \boxtimes V_1 \boxtimes V_1 - 3V_1 \boxtimes V_1 \boxtimes V_2 - 1V_1 \boxtimes V_1 \boxtimes V_1 \boxtimes V_1$ -----
 edges: 6 graphs: 4 -----
 A3 case graphs: 4 -----

ID: 129 V_1^4



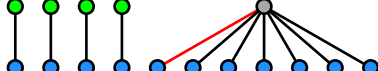
ID: 130 V_1^4



ID: 131 V_1^4

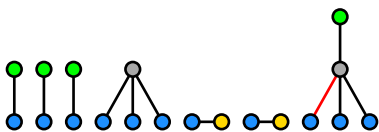


ID: 132 V_1^4

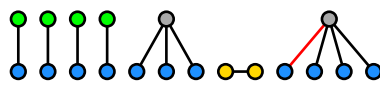


----- edges: 7 graphs: 38 -----
 ----- A3 case graphs: 28 -----

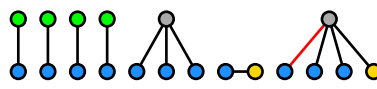
ID: 139 $V_1^3 \boxtimes V_1$



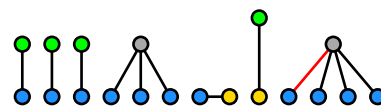
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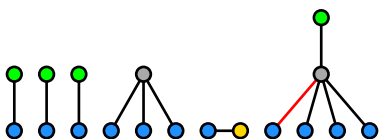
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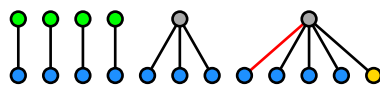
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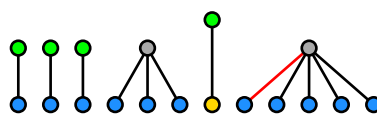
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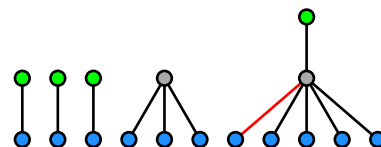
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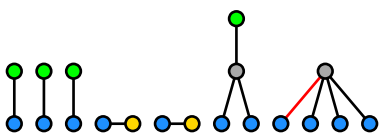
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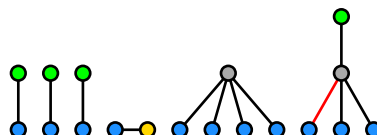
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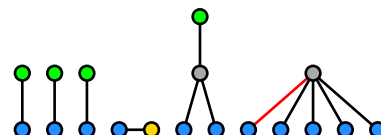
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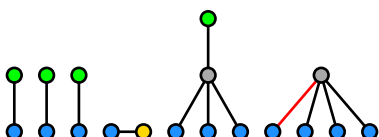
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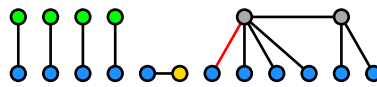
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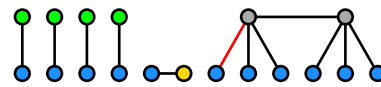
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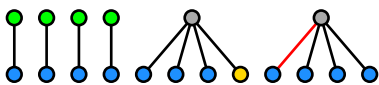
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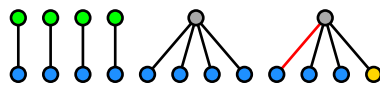
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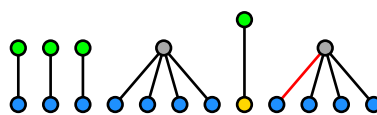
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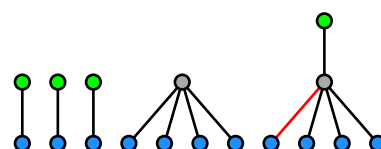
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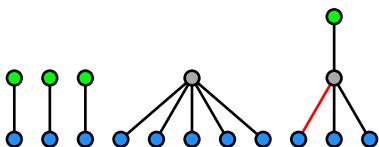
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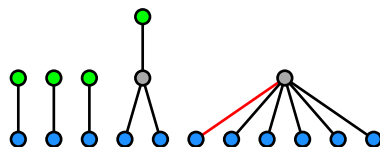
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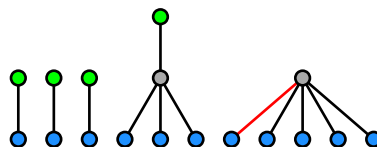
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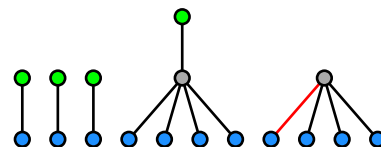
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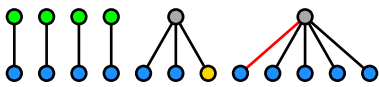
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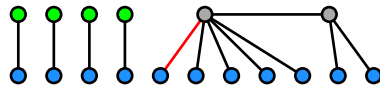
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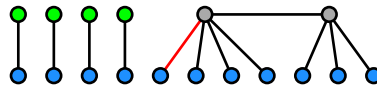
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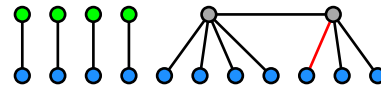
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ID: 165 V_1^4



ID: 166 V_1^4



----- B,Birr cases without weight 11 relations graphs: 10 -----

ID: 184 V_1^4



ID: 185 V_1^4



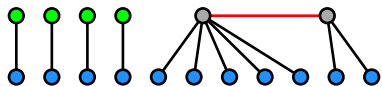
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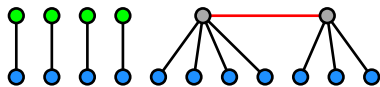
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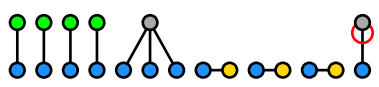
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ID: 189 V_1^4



ID: 197 V_1^4



ID: 198 V_1^4



ID: 199 V_1^4

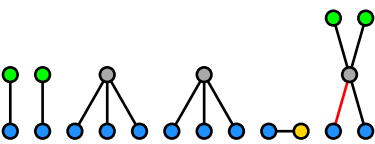


ID: 200 V_1^4

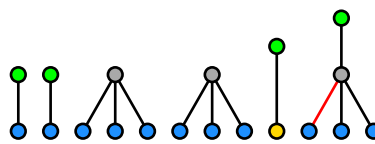


----- edges: 8 graphs: 126 -----
 ----- A3 case graphs: 52 -----

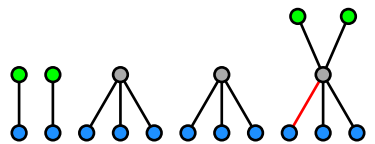
ID: 203 $V_1^2 \boxtimes V_2$



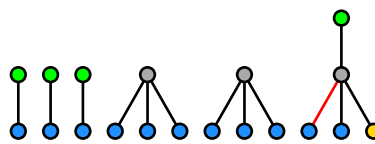
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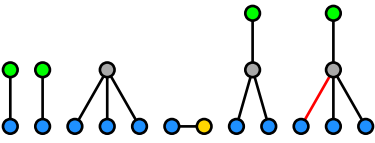
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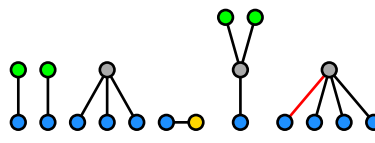
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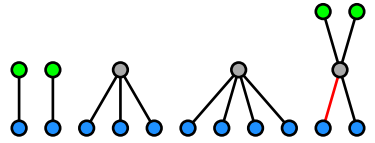
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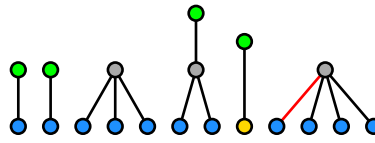
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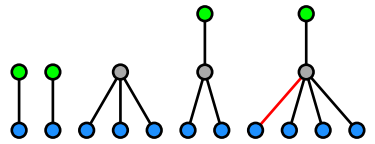
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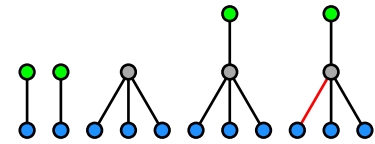
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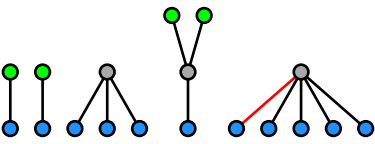
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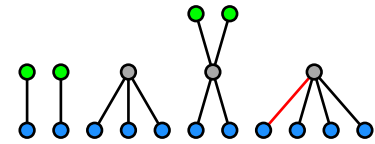
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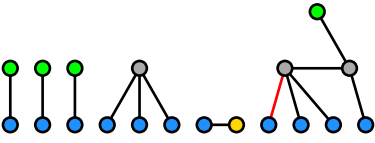
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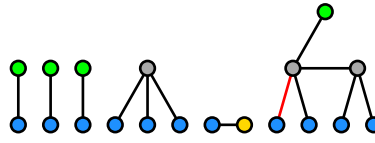
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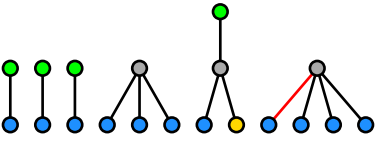
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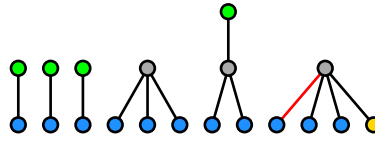
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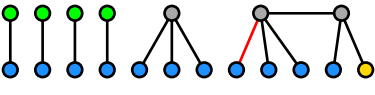
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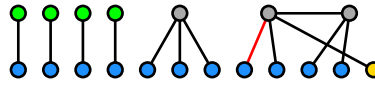
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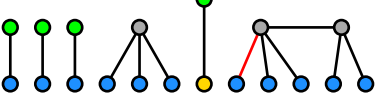
ID: 219 V_1^4



ID: 220 V_1^4



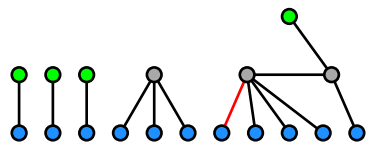
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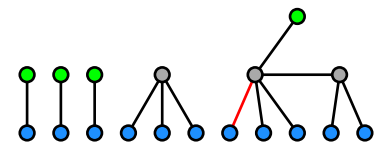
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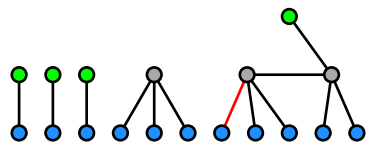
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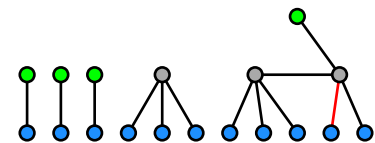
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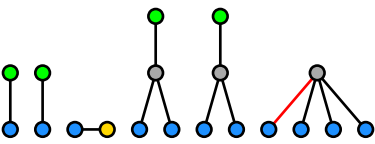
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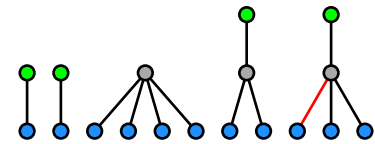
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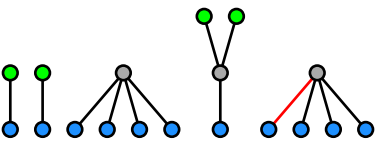
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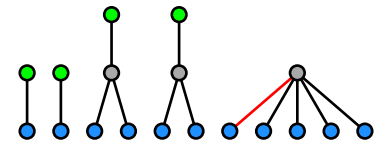
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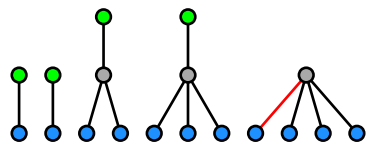
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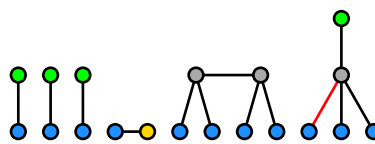
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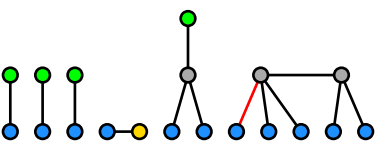
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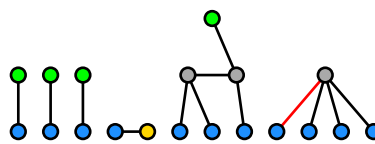
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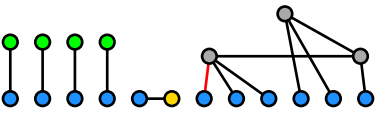
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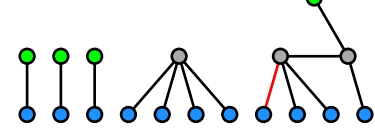
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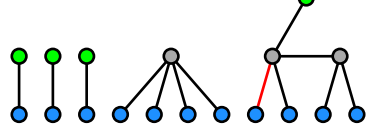
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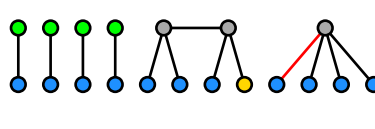
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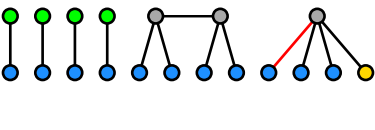
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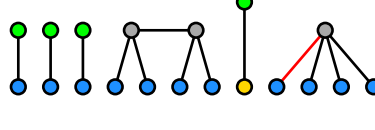
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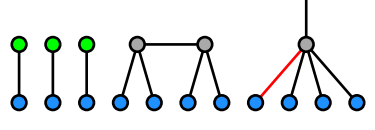
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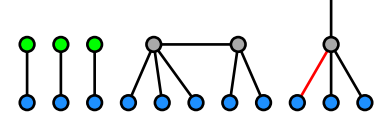
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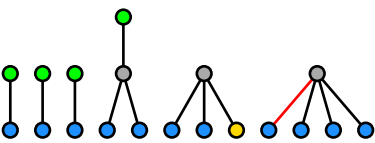
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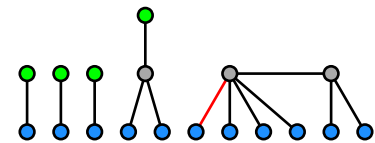
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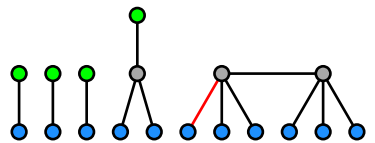
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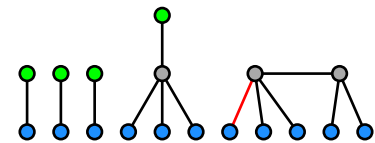
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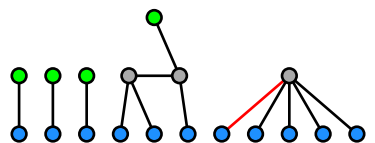
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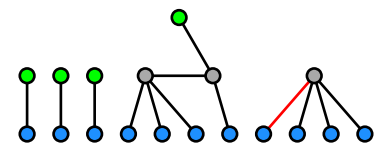
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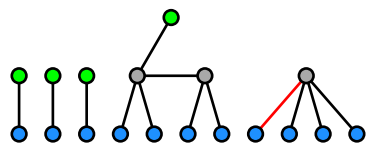
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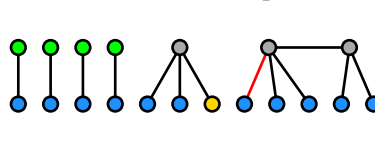
ID: 248 $V_1^3 \boxtimes V_1$



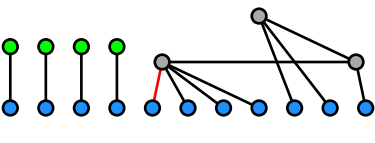
ID: 249 $V_1^3 \boxtimes V_1$



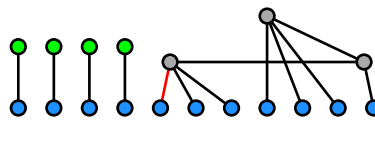
ID: 250 V_1^4



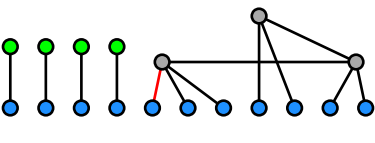
ID: 251 V_1^4



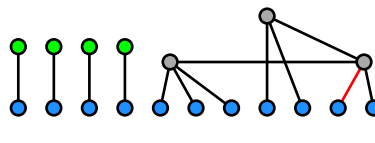
ID: 252 V_1^4



ID: 253 V_1^4



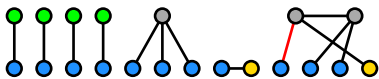
ID: 254 V_1^4



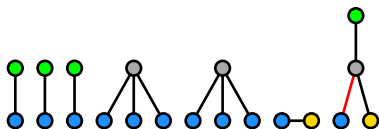
----- A2 case with weight 13 relations

relation groups: 4 -----

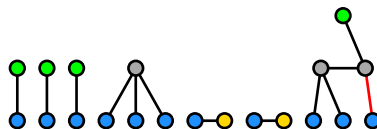
ID: 274 V_1^4



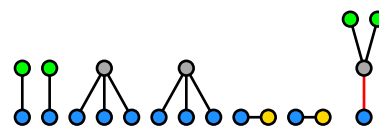
ID: 270 $V_1^3 \boxtimes V_1$



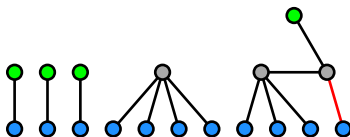
ID: 273 $V_1^3 \boxtimes V_1$



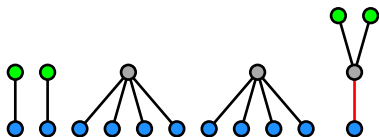
ID: 269 $V_1^2 \boxtimes V_2$



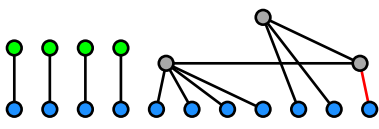
ID: 283 $V_1^3 \boxtimes V_1$



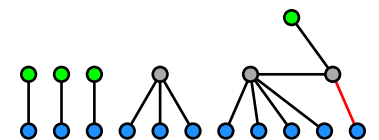
ID: 279 $V_1^2 \boxtimes V_2$



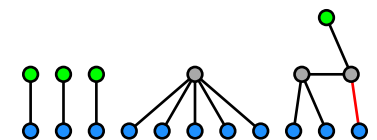
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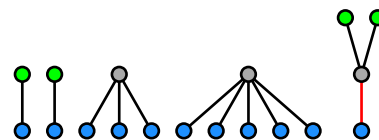
ID: 278 $V_1^3 \boxtimes V_1$



ID: 284 $V_1^3 \boxtimes V_1$



ID: 272 $V_1^2 \boxtimes V_2$



ID: 277 V_1^4



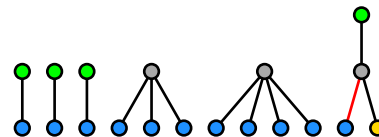
ID: 281 V_1^4



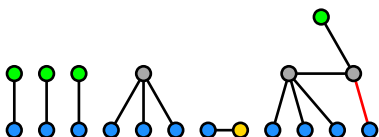
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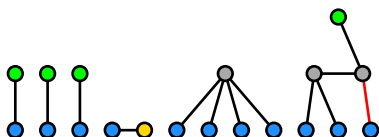
ID: 276 $V_1^3 \boxtimes V_1$



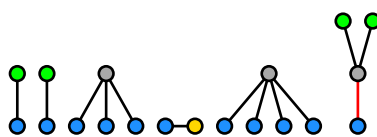
ID: 275 $V_1^3 \boxtimes V_1$



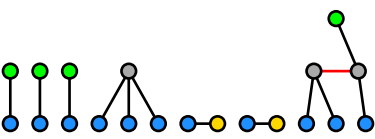
ID: 280 $V_1^3 \boxtimes V_1$



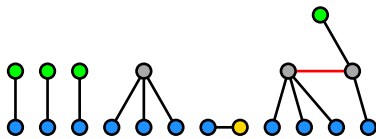
ID: 271 $V_1^2 \boxtimes V_2$



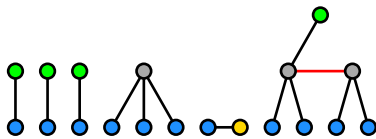
ID: 291 $V_1^3 \boxtimes V_1$



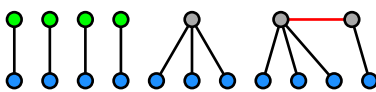
ID: 293 $V_1^3 \boxtimes V_1$



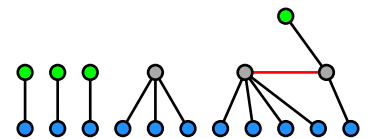
ID: 294 $V_1^3 \boxtimes V_1$



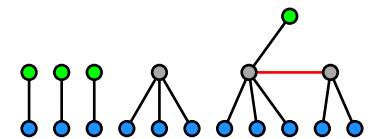
ID: 295 V_1^4



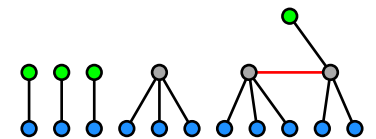
ID: 298 $V_1^3 \boxtimes V_1$



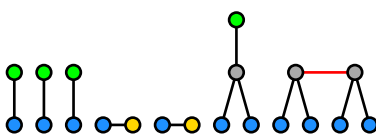
ID: 299 $V_1^3 \boxtimes V_1$



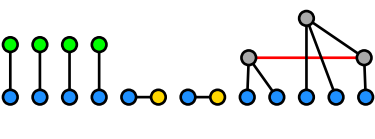
ID: 300 $V_1^3 \boxtimes V_1$



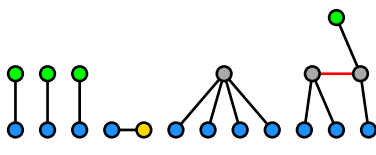
ID: 301 $V_1^3 \boxtimes V_1$



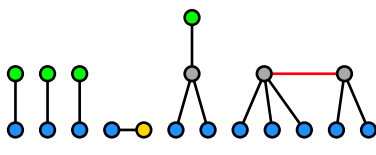
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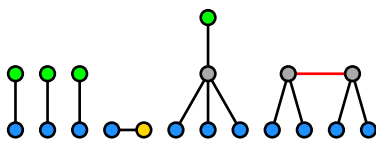
ID: 311 $V_1^3 \boxtimes V_1$



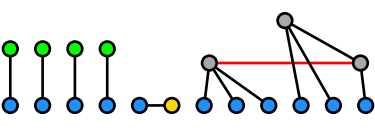
ID: 307 $V_1^3 \boxtimes V_1$



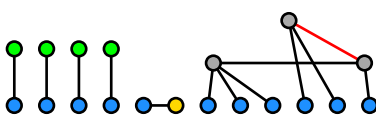
ID: 302 $V_1^3 \boxtimes V_1$



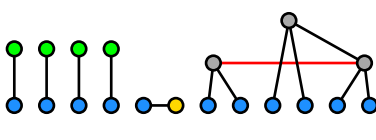
ID: 315 V_1^4



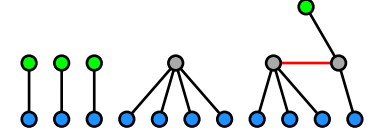
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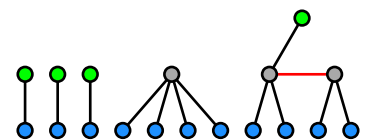
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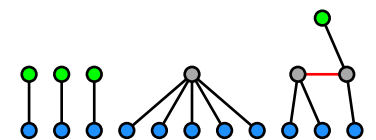
ID: 319 $V_1^3 \boxtimes V_1$



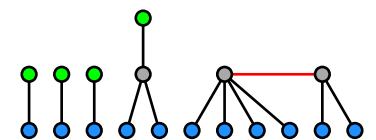
ID: 320 $V_1^3 \boxtimes V_1$



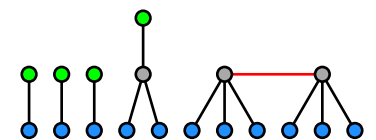
ID: 312 $V_1^3 \boxtimes V_1$



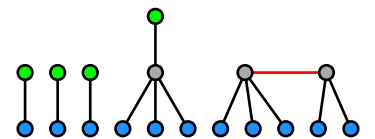
ID: 313 $V_1^3 \boxtimes V_1$



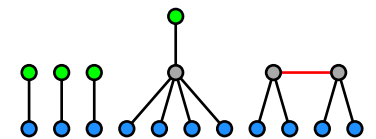
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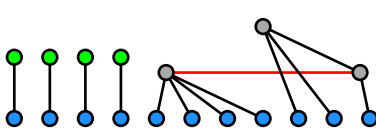
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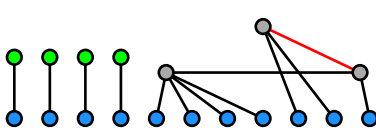
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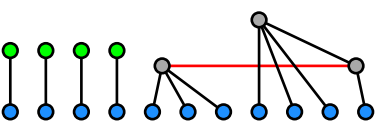
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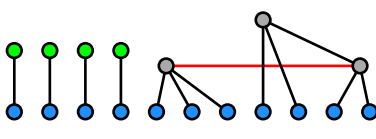
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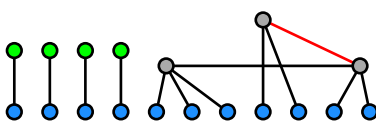
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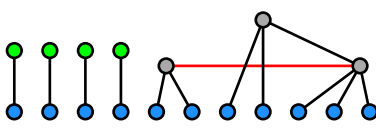
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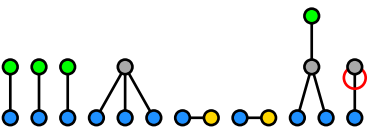
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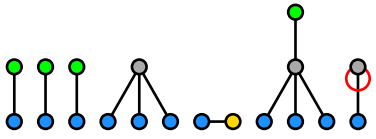
ID: 323 V_1^4



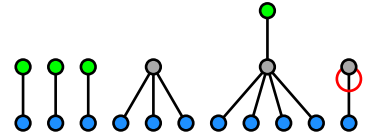
ID: 349 $V_1^3 \boxtimes V_1$



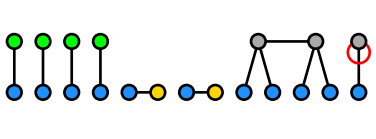
ID: 350 $V_1^3 \boxtimes V_1$



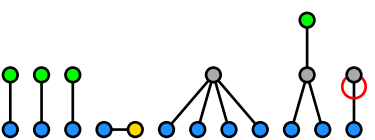
ID: 355 $V_1^3 \boxtimes V_1$



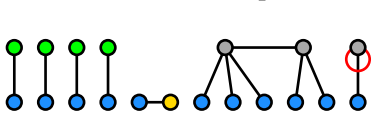
ID: 356 V_1^4



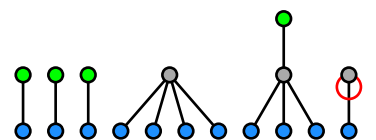
ID: 357 $V_1^3 \boxtimes V_1$



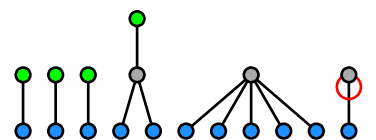
ID: 358 V_1^4



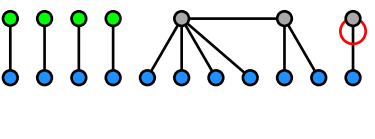
ID: 359 $V_1^3 \boxtimes V_1$



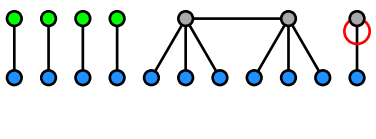
ID: 361 $V_1^3 \boxtimes V_1$



ID: 362 V_1^4



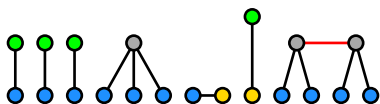
ID: 363 V_1^4



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

relation groups: 5 -----

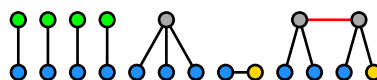
ID: 289 $V_1^3 \boxtimes V_1$



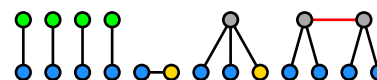
ID: 288 V_1^4



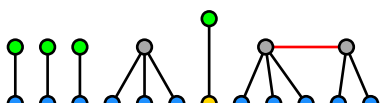
ID: 292 V_1^4



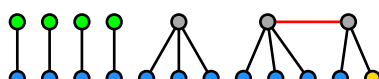
ID: 303 V_1^4



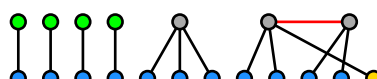
ID: 290 $V_1^3 \boxtimes V_1$



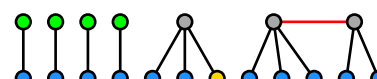
ID: 296 V_1^4



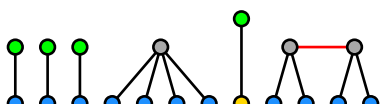
ID: 297 V_1^4



ID: 309 V_1^4



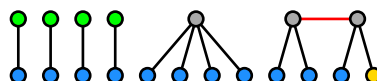
ID: 305 $V_1^3 \boxtimes V_1$



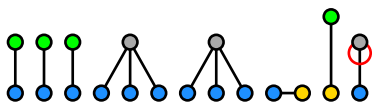
ID: 304 V_1^4



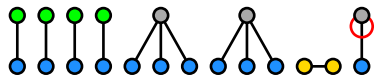
ID: 318 V_1^4



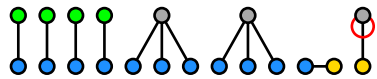
ID: 348 $V_1^3 \boxtimes V_1$



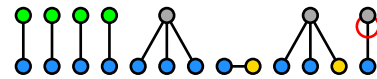
ID: 346 V_1^4



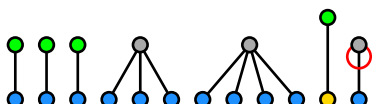
ID: 347 V_1^4



ID: 351 V_1^4



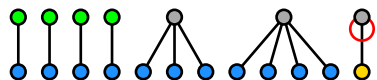
ID: 354 $V_1^3 \boxtimes V_1$



ID: 352 V_1^4



ID: 353 V_1^4

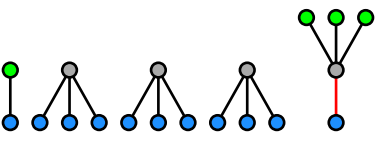


ID: 360 V_1^4

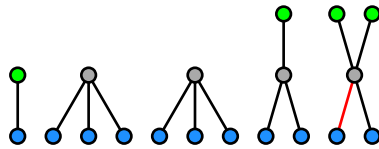


----- edges: 9 graphs: 155 -----
 ----- A3 case graphs: 31 -----

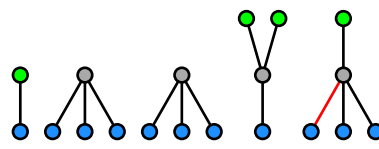
ID: 368 $V_1 \boxtimes V_3$



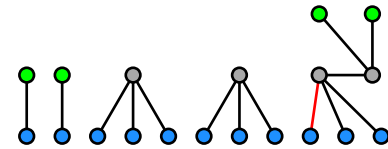
ID: 369 $V_1 \boxtimes V_1 \boxtimes V_2$



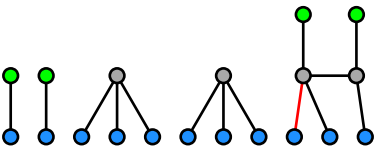
ID: 370 $V_1 \boxtimes V_2 \boxtimes V_1$



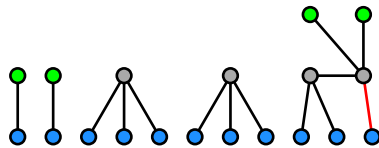
ID: 371 $V_1^2 \boxtimes V_2$



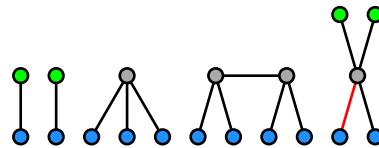
ID: 372 $V_1^2 \boxtimes V_1 \boxtimes V_1$



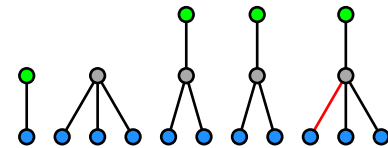
ID: 373 $V_1^2 \boxtimes V_2$



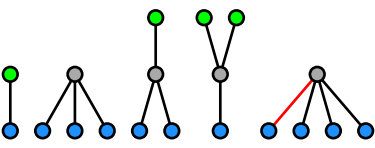
ID: 374 $V_1^2 \boxtimes V_2$



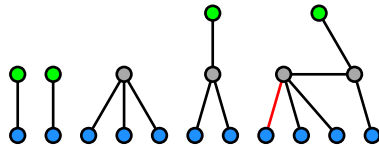
ID: 375 $V_1 \boxtimes V_2 \boxtimes V_1$



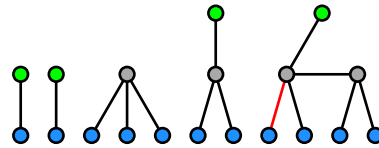
ID: 376 $V_1 \boxtimes V_1 \boxtimes V_2$



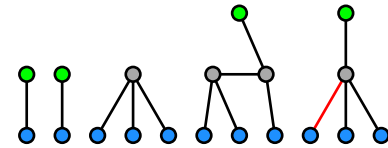
ID: 377 $V_1^2 \boxtimes V_1 \boxtimes V_1$



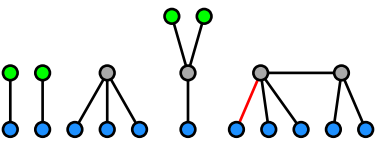
ID: 378 $V_1^2 \boxtimes V_1 \boxtimes V_1$



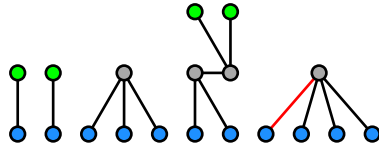
ID: 379 $V_1^2 \boxtimes V_1 \boxtimes V_1$



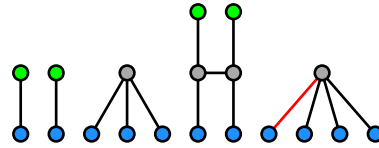
ID: 380 $V_1^2 \boxtimes V_2$



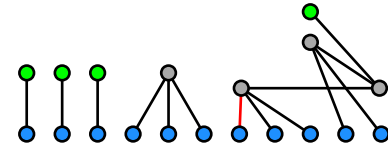
ID: 381 $V_1^2 \boxtimes V_2$



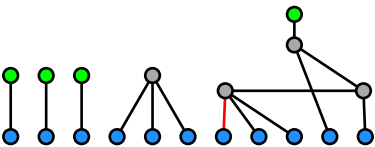
ID: 382 $V_1^2 \boxtimes V_2$



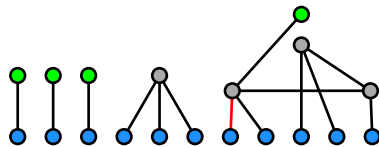
ID: 383 $V_1^3 \boxtimes V_1$



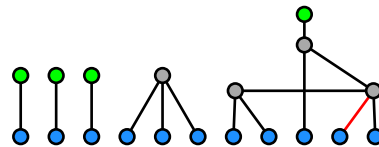
ID: 384 $V_1^3 \boxtimes V_1$



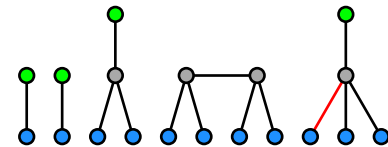
ID: 385 $V_1^3 \boxtimes V_1$



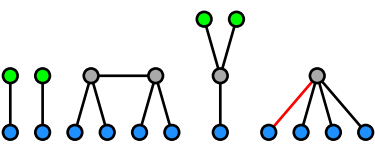
ID: 386 $V_1^3 \boxtimes V_1$



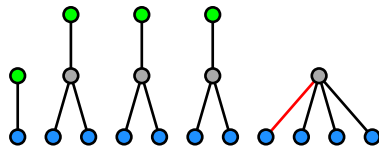
ID: 387 $V_1^2 \boxtimes V_1 \boxtimes V_1$



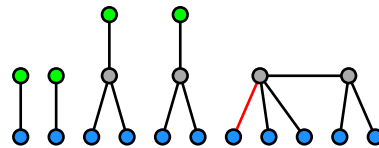
ID: 388 $V_1^2 \boxtimes V_2$



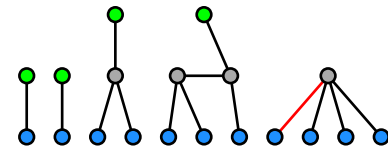
ID: 389 $V_1 \boxtimes V_3$



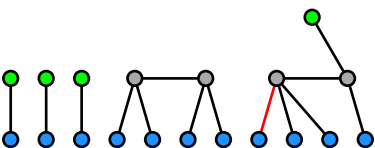
ID: 390 $V_1^2 \boxtimes V_2$



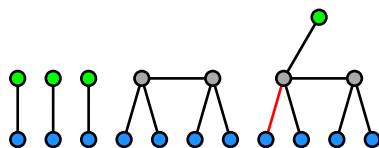
ID: 391 $V_1^2 \boxtimes V_1 \boxtimes V_1$



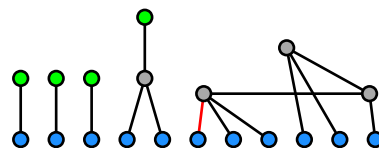
ID: 392 $V_1^3 \boxtimes V_1$



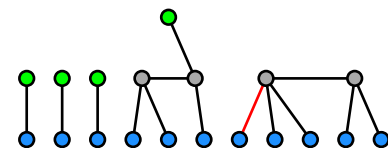
ID: 393 $V_1^3 \boxtimes V_1$



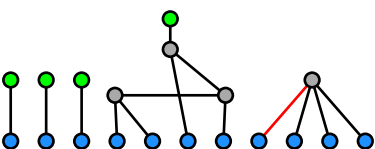
ID: 394 $V_1^3 \boxtimes V_1$



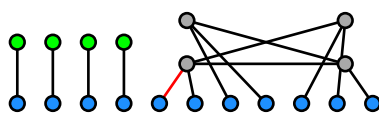
ID: 395 $V_1^3 \boxtimes V_1$



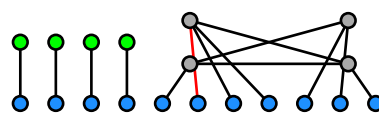
ID: 396 $V_1^3 \boxtimes V_1$



ID: 397 V_1^4



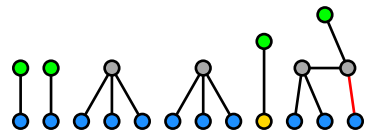
ID: 398 V_1^4



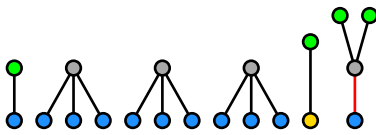
----- A2 case with weight 13 relations

relation groups: 8 -----

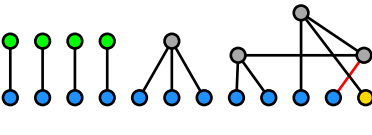
ID: 407 $V_1^2 \boxtimes V_1 \boxtimes V_1$



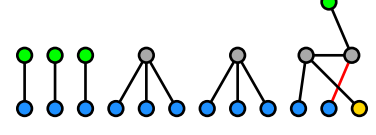
ID: 402 $V_1 \boxtimes V_1 \boxtimes V_2$



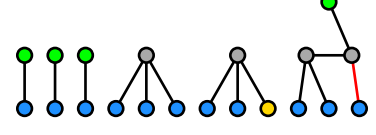
ID: 425 V_1^4



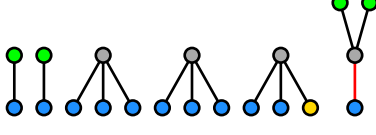
ID: 411 $V_1^3 \boxtimes V_1$



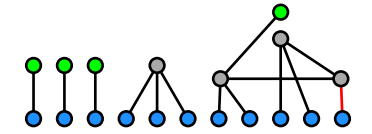
ID: 426 $V_1^3 \boxtimes V_1$



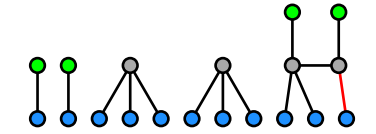
ID: 408 $V_1^2 \boxtimes V_2$



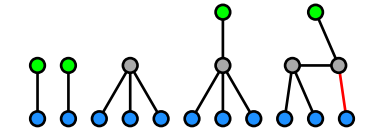
ID: 429 $V_1^3 \boxtimes V_1$



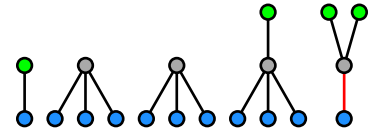
ID: 409 $V_1^2 \boxtimes V_1 \boxtimes V_1$



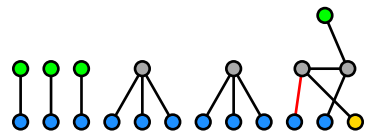
ID: 418 $V_1^2 \boxtimes V_1 \boxtimes V_1$



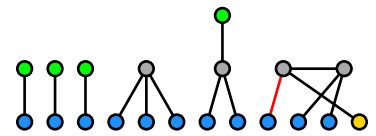
ID: 406 $V_1 \boxtimes V_1 \boxtimes V_2$



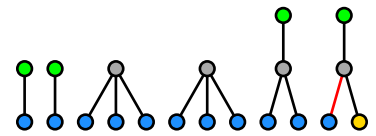
ID: 410 $V_1^3 \boxtimes V_1$



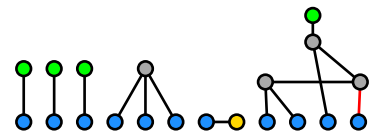
ID: 422 $V_1^3 \boxtimes V_1$



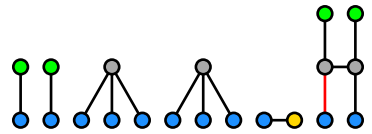
ID: 405 $V_1^2 \boxtimes V_1 \boxtimes V_1$



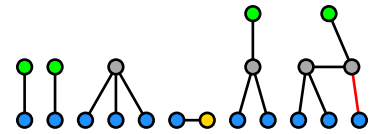
ID: 420 $V_1^3 \boxtimes V_1$



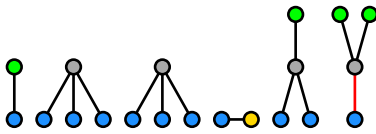
ID: 404 $V_1^2 \boxtimes V_1 \boxtimes V_1$



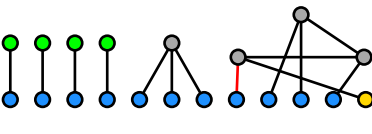
ID: 413 $V_1^2 \boxtimes V_1 \boxtimes V_1$



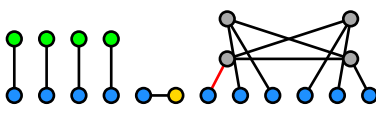
ID: 403 $V_1 \boxtimes V_1 \boxtimes V_2$



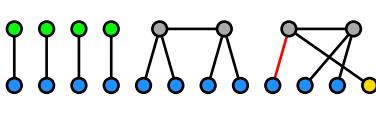
ID: 424 V_1^4



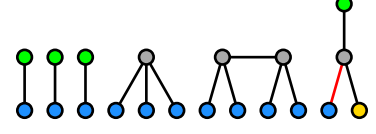
ID: 434 V_1^4



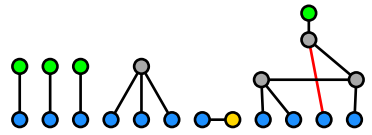
ID: 437 V_1^4



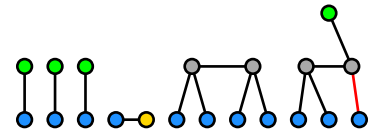
ID: 421 $V_1^3 \boxtimes V_1$



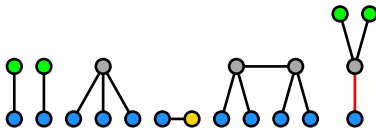
ID: 419 $V_1^3 \boxtimes V_1$



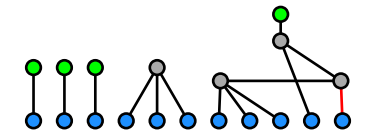
ID: 433 $V_1^3 \boxtimes V_1$



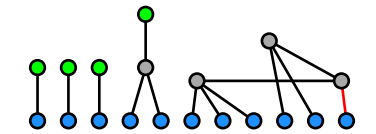
ID: 412 $V_1^2 \boxtimes V_2$



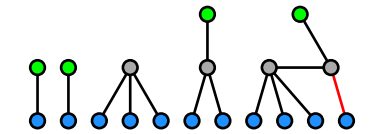
ID: 428 $V_1^3 \boxtimes V_1$



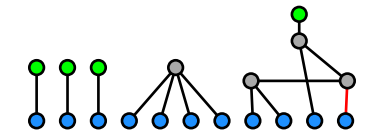
ID: 440 $V_1^3 \boxtimes V_1$



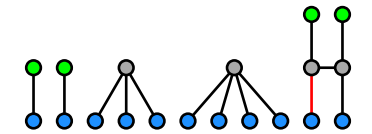
ID: 417 $V_1^2 \boxtimes V_1 \boxtimes V_1$



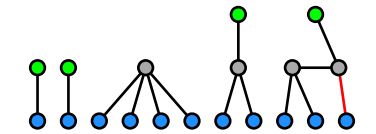
ID: 436 $V_1^3 \boxtimes V_1$



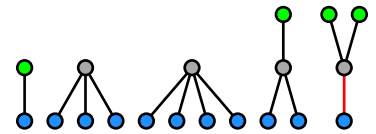
ID: 415 $V_1^2 \boxtimes V_1 \boxtimes V_1$



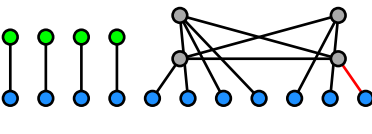
ID: 432 $V_1^2 \boxtimes V_1 \boxtimes V_1$



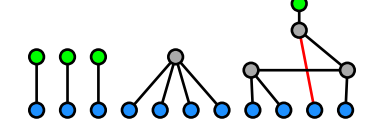
ID: 414 $V_1 \boxtimes V_1 \boxtimes V_2$



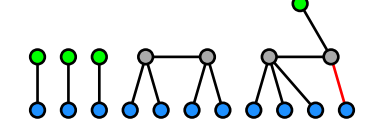
ID: 443 V_1^4



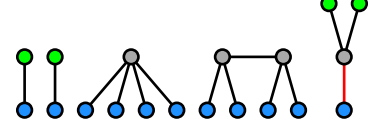
ID: 435 $V_1^3 \boxtimes V_1$



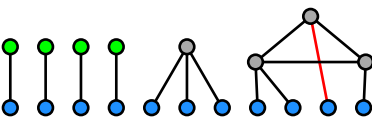
ID: 438 $V_1^3 \boxtimes V_1$



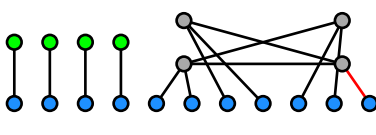
ID: 431 $V_1^2 \boxtimes V_2$



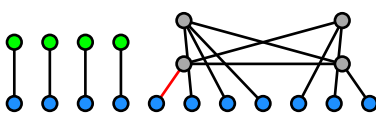
ID: 423 V_1^4



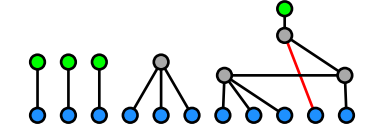
ID: 441 V_1^4



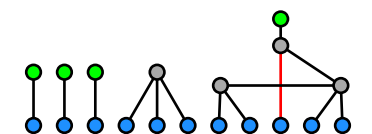
ID: 442 V_1^4



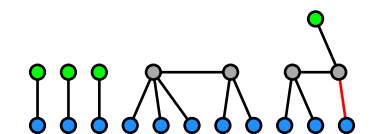
ID: 427 $V_1^3 \boxtimes V_1$



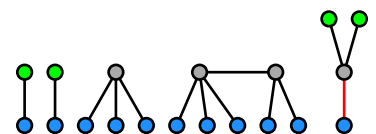
ID: 430 $V_1^3 \boxtimes V_1$



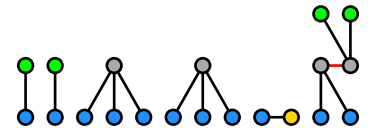
ID: 439 $V_1^3 \boxtimes V_1$



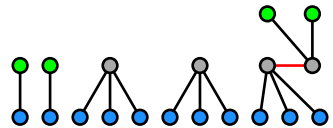
ID: 416 $V_1^2 \boxtimes V_2$



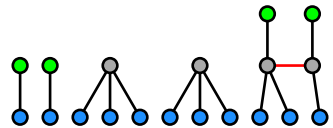
ID: 448 $V_1^2 \boxtimes V_2$



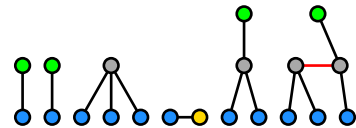
ID: 449 $V_1^2 \boxtimes V_2$



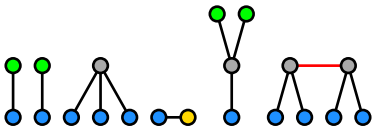
ID: 450 $V_1^2 \boxtimes V_1 \boxtimes V_1$



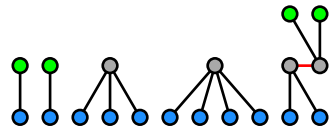
ID: 456 $V_1^2 \boxtimes V_1 \boxtimes V_1$



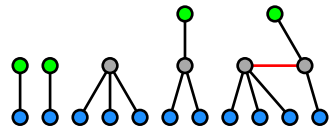
ID: 452 $V_1^2 \boxtimes V_2$



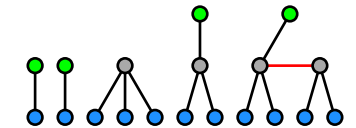
ID: 460 $V_1^2 \boxtimes V_2$



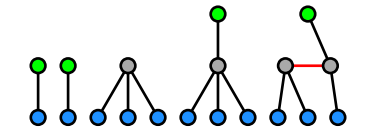
ID: 458 $V_1^2 \boxtimes V_1 \boxtimes V_1$



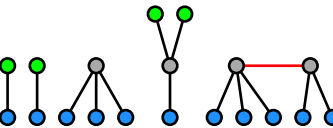
ID: 459 $V_1^2 \boxtimes V_1 \boxtimes V_1$



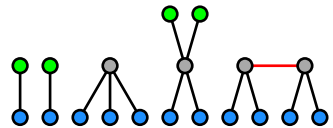
ID: 457 $V_1^2 \boxtimes V_1 \boxtimes V_1$



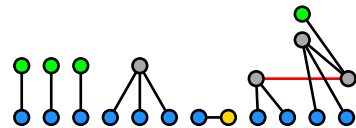
ID: 455 $V_1^2 \boxtimes V_2$



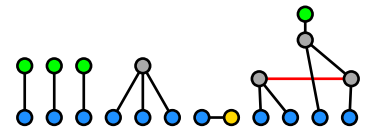
ID: 454 $V_1^2 \boxtimes V_2$



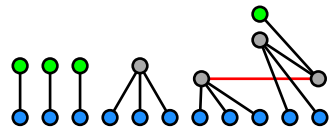
ID: 465 $V_1^3 \boxtimes V_1$



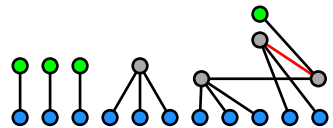
ID: 466 $V_1^3 \boxtimes V_1$



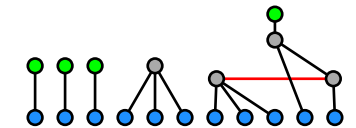
ID: 469 $V_1^3 \boxtimes V_1$



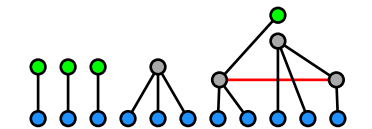
ID: 472 $V_1^3 \boxtimes V_1$



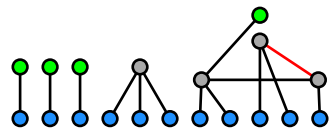
ID: 473 $V_1^3 \boxtimes V_1$



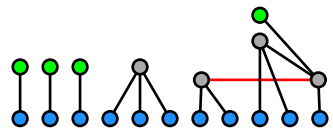
ID: 470 $V_1^3 \boxtimes V_1$



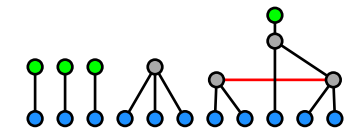
ID: 475 $V_1^3 \boxtimes V_1$



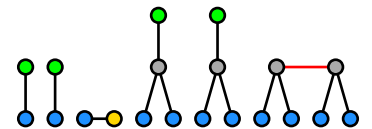
ID: 471 $V_1^3 \boxtimes V_1$



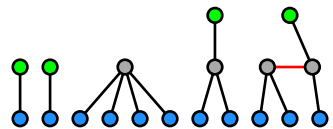
ID: 474 $V_1^3 \boxtimes V_1$



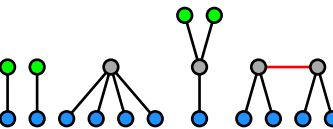
ID: 476 $V_1^2 \boxtimes V_2$



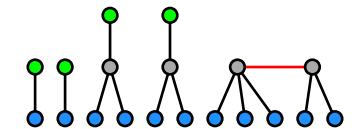
ID: 480 $V_1^2 \boxtimes V_1 \boxtimes V_1$



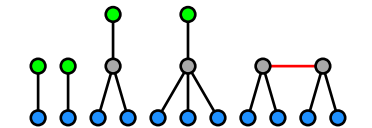
ID: 477 $V_1^2 \boxtimes V_2$



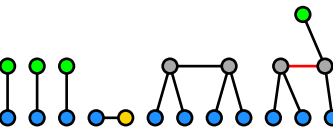
ID: 479 $V_1^2 \boxtimes V_2$



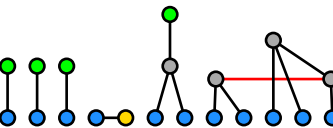
ID: 478 $V_1^2 \boxtimes V_1 \boxtimes V_1$



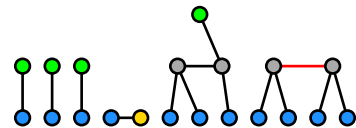
ID: 491 $V_1^3 \boxtimes V_1$



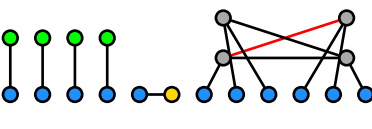
ID: 488 $V_1^3 \boxtimes V_1$



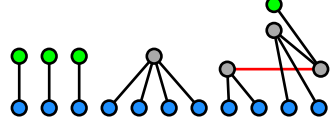
ID: 481 $V_1^3 \boxtimes V_1$



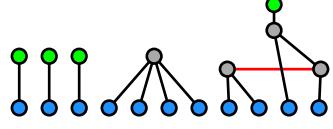
ID: 496 V_1^4



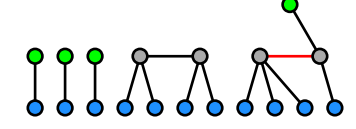
ID: 500 $V_1^3 \boxtimes V_1$



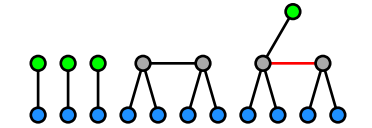
ID: 501 $V_1^3 \boxtimes V_1$



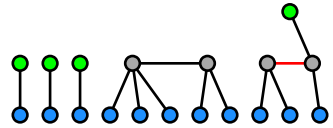
ID: 498 $V_1^3 \boxtimes V_1$



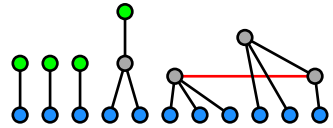
ID: 499 $V_1^3 \boxtimes V_1$



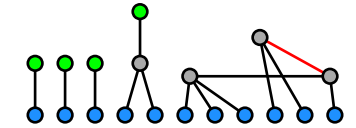
ID: 492 $V_1^3 \boxtimes V_1$



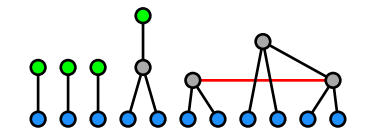
ID: 493 $V_1^3 \boxtimes V_1$



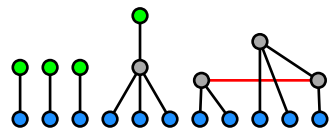
ID: 495 $V_1^3 \boxtimes V_1$



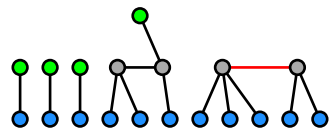
ID: 494 $V_1^3 \boxtimes V_1$



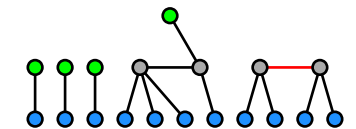
ID: 489 $V_1^3 \boxtimes V_1$



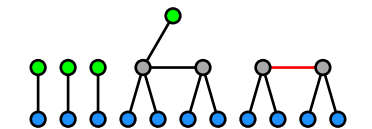
ID: 487 $V_1^3 \boxtimes V_1$



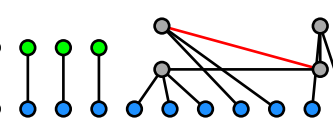
ID: 485 $V_1^3 \boxtimes V_1$



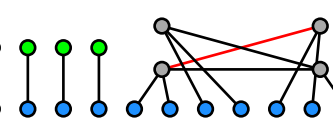
ID: 486 $V_1^3 \boxtimes V_1$



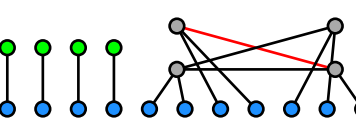
ID: 502 V_1^4



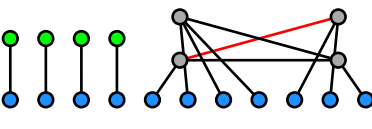
ID: 503 V_1^4



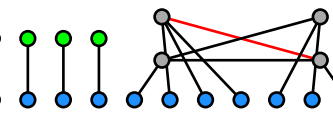
ID: 505 V_1^4



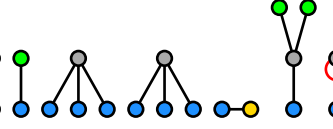
ID: 506 V_1^4



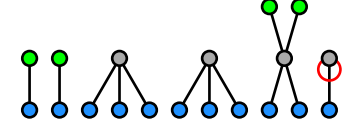
ID: 504 V_1^4



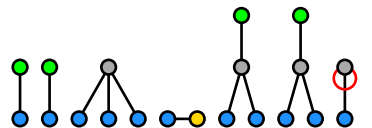
ID: 522 $V_1^2 \boxtimes V_2$



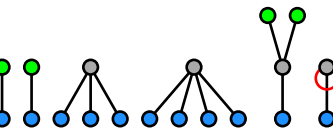
ID: 524 $V_1^2 \boxtimes V_2$



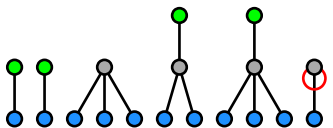
ID: 527 $V_1^2 \boxtimes V_2$



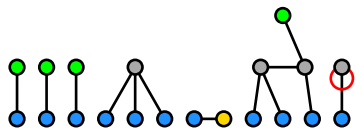
ID: 528 $V_1^2 \boxtimes V_2$



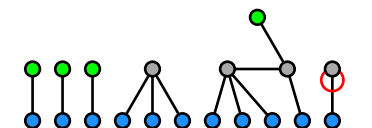
ID: 529 $V_1^2 \boxtimes V_1 \boxtimes V_1$



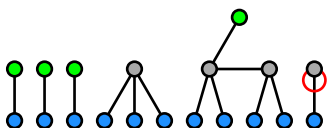
ID: 530 $V_1^3 \boxtimes V_1$



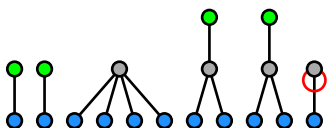
ID: 535 $V_1^3 \boxtimes V_1$



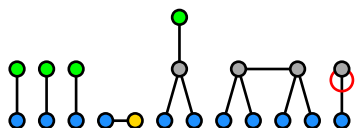
ID: 536 $V_1^3 \boxtimes V_1$



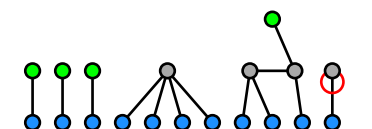
ID: 537 $V_1^2 \boxtimes V_2$



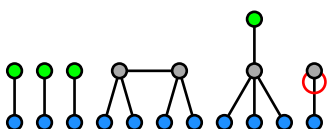
ID: 538 $V_1^3 \boxtimes V_1$



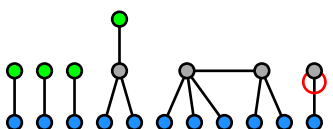
ID: 539 $V_1^3 \boxtimes V_1$



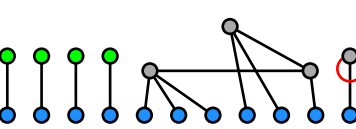
ID: 540 $V_1^3 \boxtimes V_1$



ID: 542 $V_1^3 \boxtimes V_1$



ID: 543 V_1^4



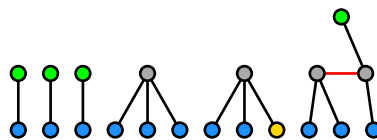
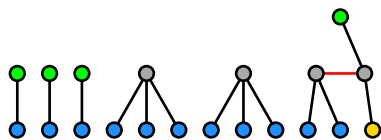
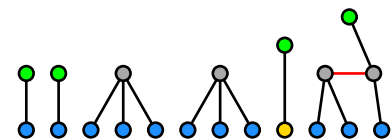
----- B,Birr cases with weight 11 relations

relation groups: 6 -----

ID: 447 $V_1^2 \boxtimes V_1 \boxtimes V_1$

ID: 451 $V_1^3 \boxtimes V_1$

ID: 463 $V_1^3 \boxtimes V_1$

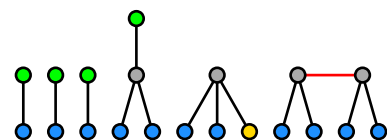
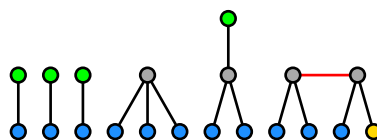
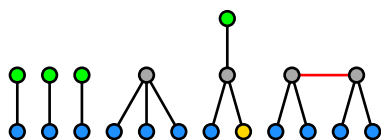
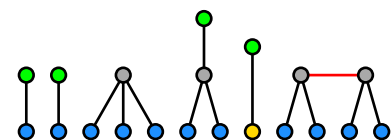


ID: 453 $V_1^2 \boxtimes V_1 \boxtimes V_1$

ID: 461 $V_1^3 \boxtimes V_1$

ID: 464 $V_1^3 \boxtimes V_1$

ID: 484 $V_1^3 \boxtimes V_1$

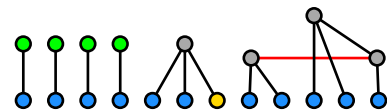
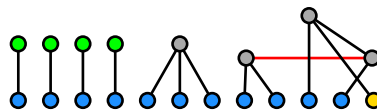
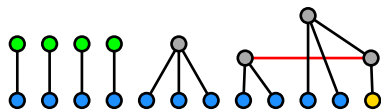
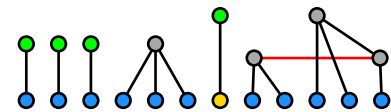


ID: 462 $V_1^3 \boxtimes V_1$

ID: 467 V_1^4

ID: 468 V_1^4

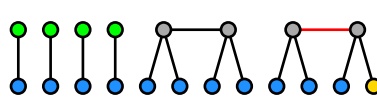
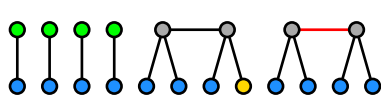
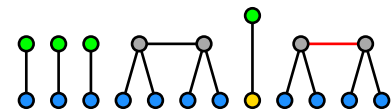
ID: 490 V_1^4



ID: 483 $V_1^3 \boxtimes V_1$

ID: 482 V_1^4

ID: 497 V_1^4

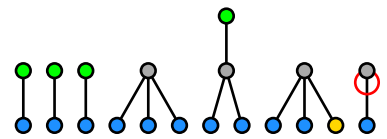
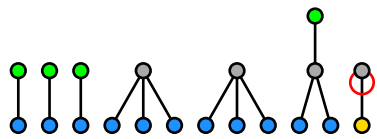
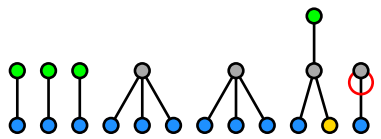
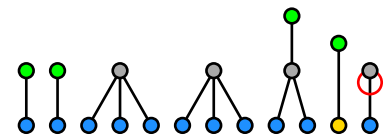


ID: 523 $V_1^2 \boxtimes V_1 \boxtimes V_1$

ID: 525 $V_1^3 \boxtimes V_1$

ID: 526 $V_1^3 \boxtimes V_1$

ID: 534 $V_1^3 \boxtimes V_1$

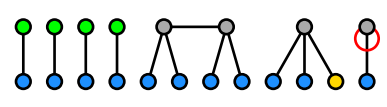
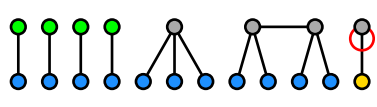
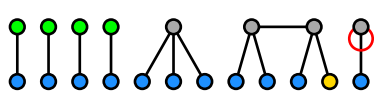
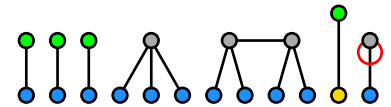


ID: 533 $V_1^3 \boxtimes V_1$

ID: 531 V_1^4

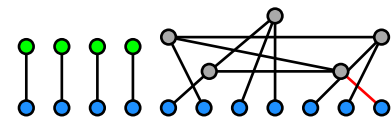
ID: 532 V_1^4

ID: 541 V_1^4

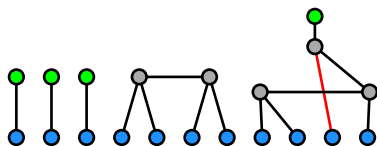


----- edges: 10 graphs: 69 -----
 ----- A2 case with weight 13 relations relation groups: 6 -----

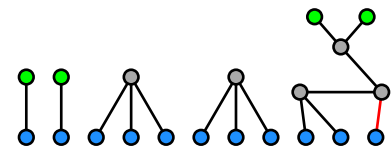
ID: 574 V_1^4



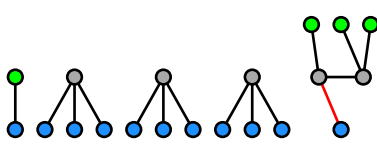
ID: 570 $V_1^3 \boxtimes V_1$



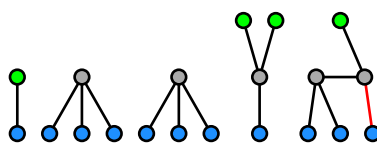
ID: 553 $V_1^2 \boxtimes V_2$



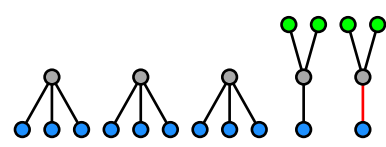
ID: 547 $V_1 \boxtimes V_1 \boxtimes V_2$



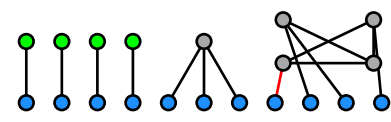
ID: 551 $V_1 \boxtimes V_2 \boxtimes V_1$



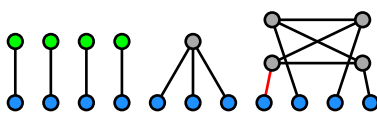
ID: 546 $V_2 \boxtimes V_2$



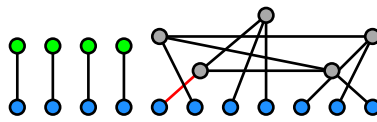
ID: 563 V_1^4



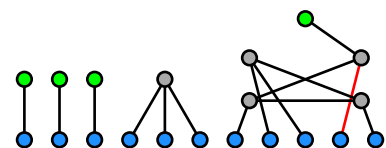
ID: 564 V_1^4



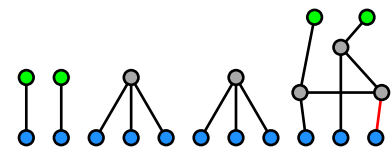
ID: 573 V_1^4



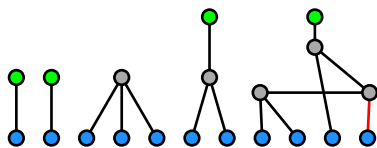
ID: 567 $V_1^3 \boxtimes V_1$



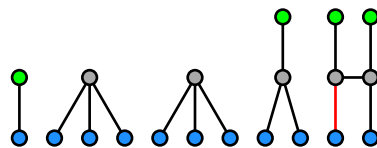
ID: 555 $V_1^2 \boxtimes V_1^2$



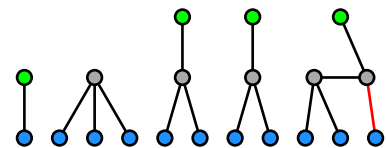
ID: 561 $V_1^2 \boxtimes V_1 \boxtimes V_1$



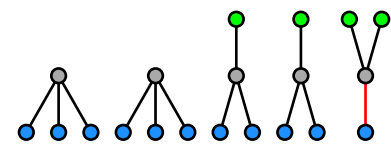
ID: 549 $V_1 \boxtimes V_1 \boxtimes V_1 \boxtimes V_1$



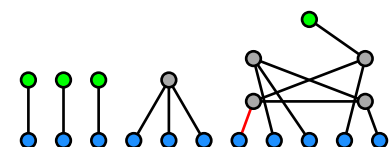
ID: 559 $V_1 \boxtimes V_2 \boxtimes V_1$



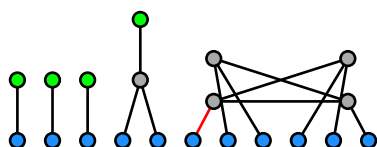
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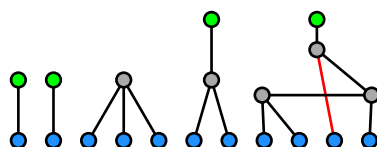
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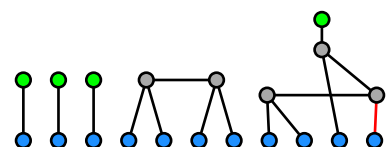
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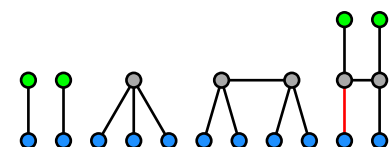
ID: 560 $V_1^2 \boxtimes V_1 \boxtimes V_1$



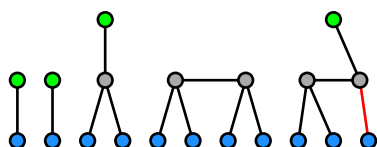
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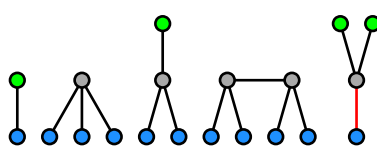
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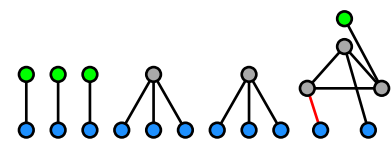
ID: 569 $V_1^2 \boxtimes V_1 \boxtimes V_1$



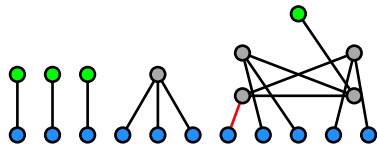
ID: 557 $V_1 \boxtimes V_1 \boxtimes V_2$



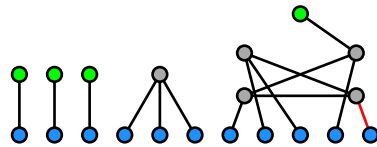
ID: 556 $V_1^3 \boxtimes V_1$



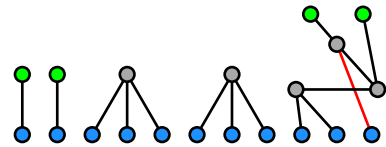
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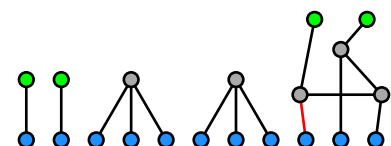
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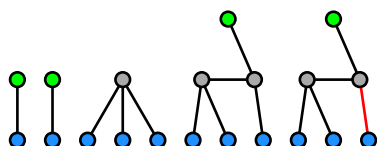
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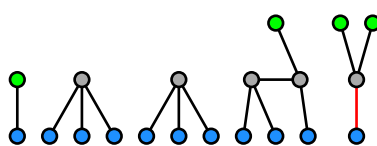
ID: 554 $V_1^2 \boxtimes V_1 \boxtimes V_1$



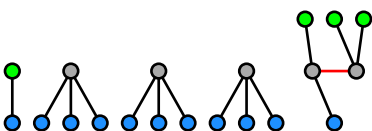
ID: 562 $V_1^2 \boxtimes V_1 \boxtimes V_1$



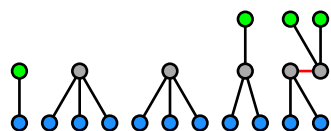
ID: 550 $V_1 \boxtimes V_1 \boxtimes V_2$



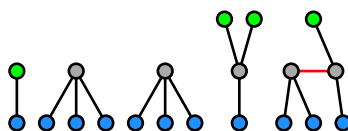
ID: 576 $V_1 \boxtimes V_1 \boxtimes V_2$



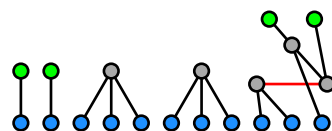
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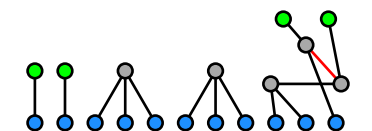
ID: 577 $V_1 \boxtimes V_2 \boxtimes V_1$



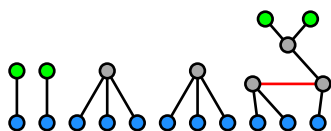
ID: 579 $V_1^2 \boxtimes V_1 \boxtimes V_1$



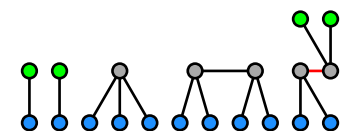
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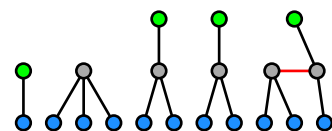
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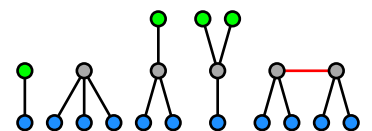
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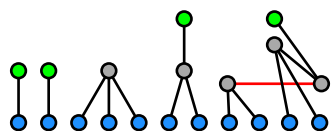
ID: 586 $V_1 \boxtimes V_2 \boxtimes V_1$



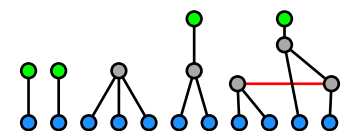
ID: 582 $V_1 \boxtimes V_1 \boxtimes V_2$



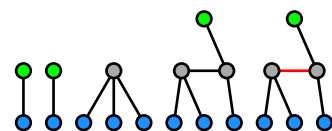
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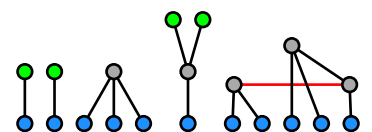
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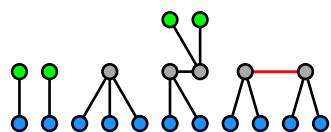
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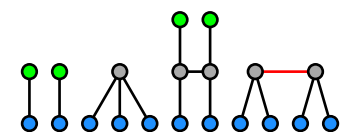
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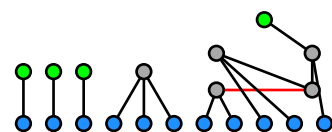
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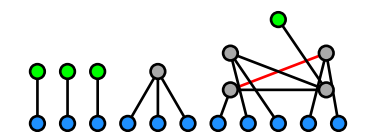
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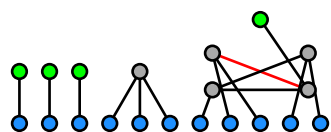
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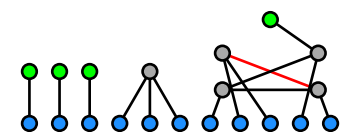
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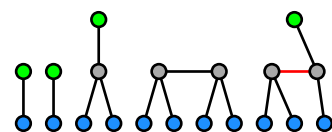
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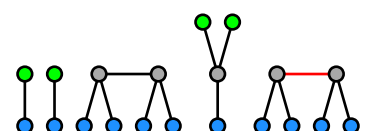
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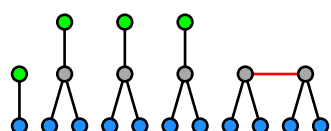
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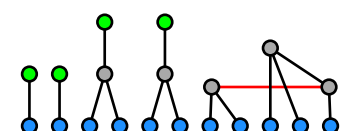
ID: 595 $V_1^2 \boxtimes V_2$



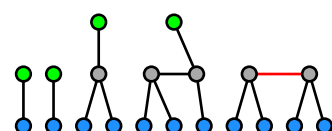
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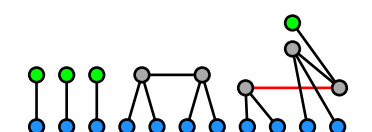
ID: 598 $V_1^2 \boxtimes V_2$



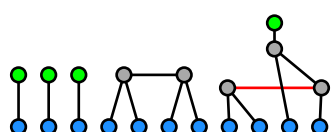
ID: 597 $V_1^2 \boxtimes V_1 \boxtimes V_1$



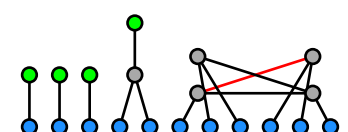
ID: 603 $V_1^3 \boxtimes V_1$



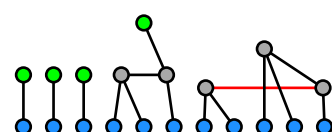
ID: 604 $V_1^3 \boxtimes V_1$



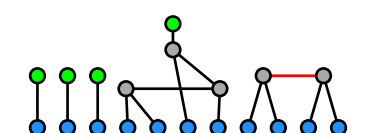
ID: 602 $V_1^3 \boxtimes V_1$



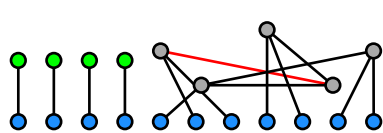
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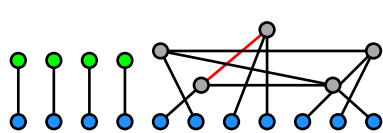
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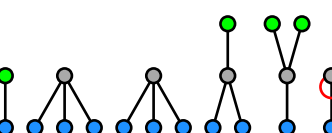
ID: 605 V_1^4



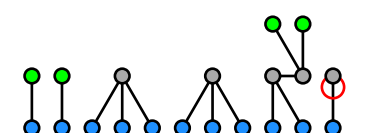
ID: 606 V_1^4



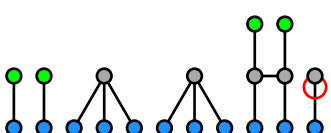
ID: 610 $V_1 \boxtimes V_1 \boxtimes V_2$



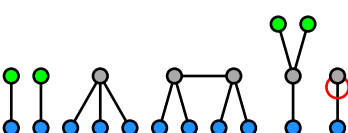
ID: 611 $V_1^2 \boxtimes V_2$



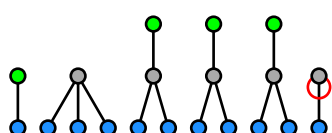
ID: 612 $V_1^2 \boxtimes V_2$



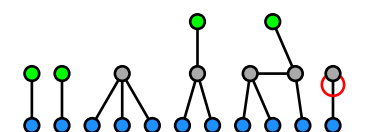
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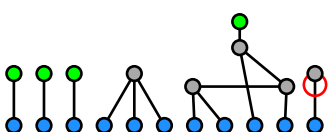
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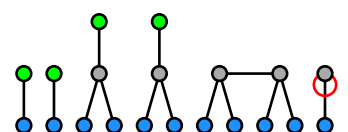
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ID: 616 $V_1^3 \boxtimes V_1$



ID: 617 $V_1^2 \boxtimes V_2$



ID: 618 $V_1^3 \boxtimes V_1$

