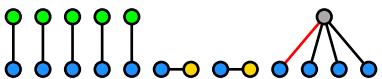
---------- g,n: 6,5 graphs: 84 ---------- Euler Characteristic (without resolving relations):

--------- $2V_1{}^5+4V_1{}^4\boxtimes V_1-1V_1{}^3\boxtimes V_2-2V_1{}^3\boxtimes V_1\boxtimes V_1-1V_1{}^2\boxtimes V_1\boxtimes V_2$ ---------

--------- edges: 5 graphs: 3 ---------

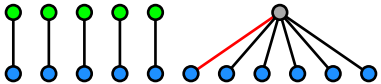
------- A3 case graphs: 3 -------

ID: 106 $V_1{}^5$ $\mapsto$ ID 113



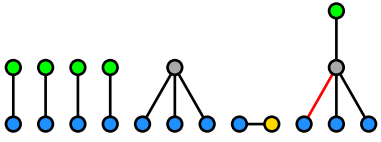
ID: 74 $V_1{}^5$ $\mapsto$ ID 76

ID: 23 $V_1{}^5$ $\mapsto$ ID 27

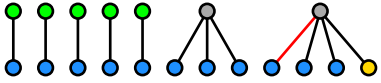


--------- edges: 6 graphs: 19 ---------
------- A3 case graphs: 12 -------

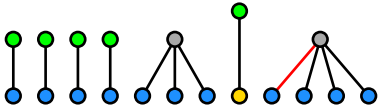
ID: 75 $V_{1^4} \boxtimes V_1$ ↦ ID 80



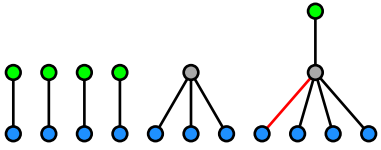
ID: 24 V_{1^5} ↦ ID 33



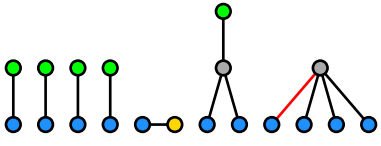
ID: 53 $V_{1^4} \boxtimes V_1$ ↦ ID 60



ID: 25 $V_{1^4} \boxtimes V_1$ ↦ ID 30

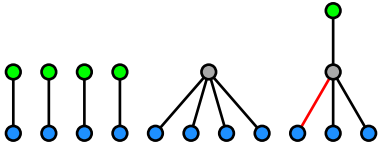


ID: 108 $V_{1^4} \boxtimes V_1$ ↦ ID 115

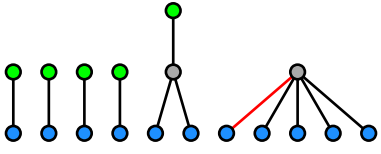


ID: 76 V_{1^5} ↤ ID 74

ID: 83 $V_{1^4} \boxtimes V_1$ ↦ ID 99



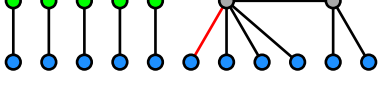
ID: 90 $V_{1^4} \boxtimes V_1$ ↦ ID 92



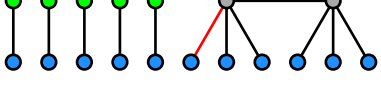
ID: 56 $V_{1^4} \boxtimes V_1$ ↦ ID 59

ID: 55 V_{1^5} ↦ ID 62

ID: 27 V_{1^5} ↤ ID 23



ID: 28 V_{1^5} ↦ ID 31

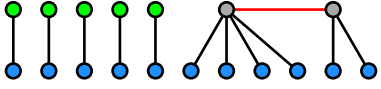


------- B,Birr cases without weight 11 relations graphs: 7 -------

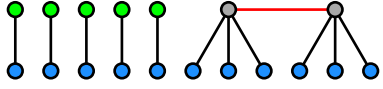
ID: 113 V_{1^5}
↤ ID 106

ID: 79 V_{1^5}
↦ ID 81

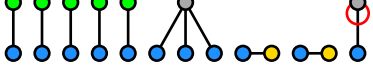
ID: 40 V_{1^5}
↦ ID 48



ID: 41 V_{1^5}
↦ ID 46



ID: 120 V_{1^5}
↦ ID 69

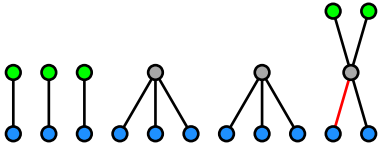


ID: 121 V_{1^5}
↦ ID 123

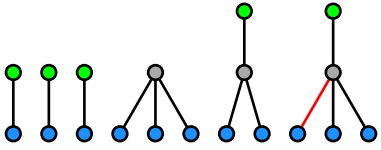
ID: 68 V_{1^5}
↦ ID 72

--------- edges: 7 graphs: 40 ---------
------- A3 case graphs: 10 -------

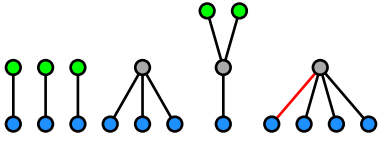
ID: 26 $V_{1^3} \boxtimes V_2$



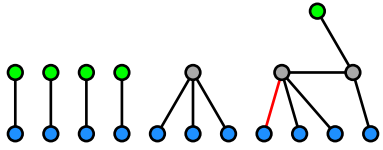
ID: 91 $V_{1^3} \boxtimes V_1 \boxtimes V_1$
$\mapsto$ ID 96



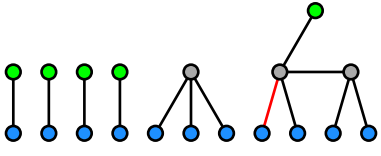
ID: 57 $V_{1^3} \boxtimes V_2$
$\mapsto$ ID 64



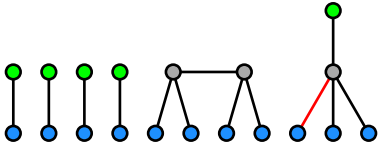
ID: 29 $V_{1^4} \boxtimes V_1$
$\mapsto$ ID 38



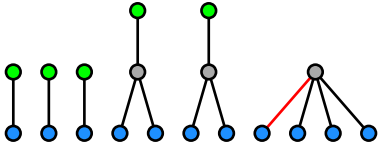
ID: 30 $V_{1^4} \boxtimes V_1$
$\mapsto$ ID 25



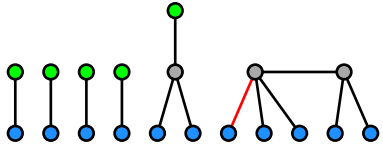
ID: 99 $V_{1^4} \boxtimes V_1$
$\mapsto$ ID 83



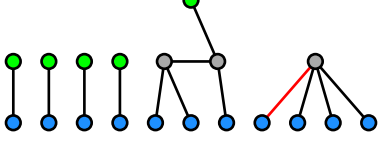
ID: 111 $V_{1^3} \boxtimes V_2$
$\mapsto$ ID 118



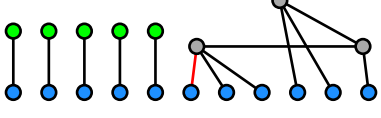
ID: 92 $V_{1^4} \boxtimes V_1$
$\mapsto$ ID 90

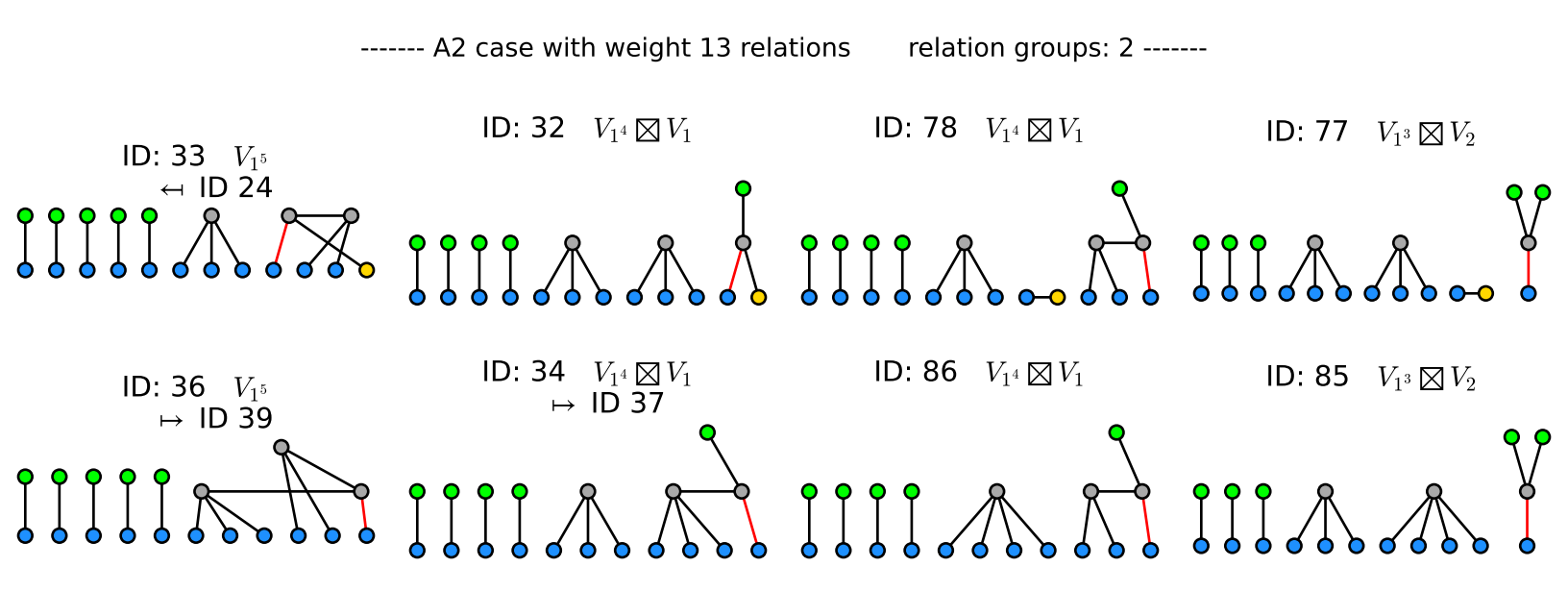


ID: 59 $V_{1^4} \boxtimes V_1$
$\mapsto$ ID 56



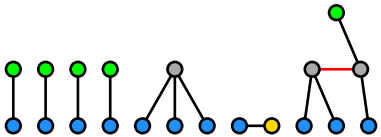
ID: 31 V_{1^5}
$\mapsto$ ID 28



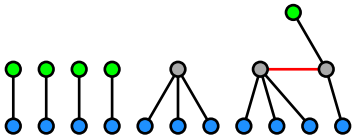

------- A2 case with weight 13 relations relation groups: 2 -------
ID: 33 V_{1^5}
↤ ID 24
ID: 32 $V_{1^4} \boxtimes V_1$
ID: 78 $V_{1^4} \boxtimes V_1$
ID: 77 $V_{1^3} \boxtimes V_2$
ID: 36 V_{1^5}
↦ ID 39
ID: 34 $V_{1^4} \boxtimes V_1$
↦ ID 37
ID: 86 $V_{1^4} \boxtimes V_1$
ID: 85 $V_{1^3} \boxtimes V_2$

------- B,Birr cases without weight 11 relations graphs: 16 -------

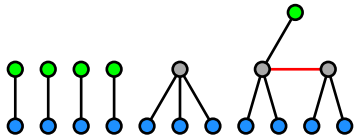
ID: 80 $V_{1^4} \boxtimes V_1$
↤ ID 75



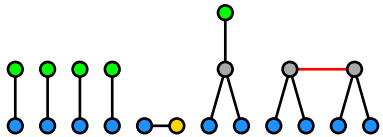
ID: 43 $V_{1^4} \boxtimes V_1$
↦ ID 49



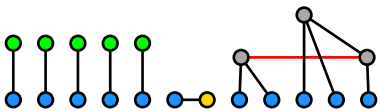
ID: 44 $V_{1^4} \boxtimes V_1$
↦ ID 50



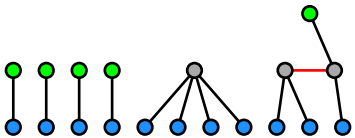
ID: 115 $V_{1^4} \boxtimes V_1$
↤ ID 108



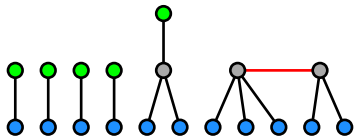
ID: 81 V_{1^5}
↤ ID 79



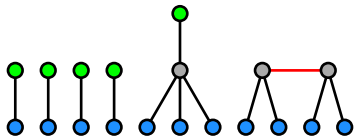
ID: 88 $V_{1^4} \boxtimes V_1$
↦ ID 104



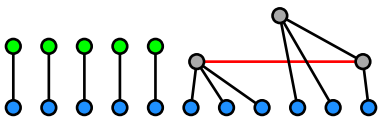
ID: 95 $V_{1^4} \boxtimes V_1$
↦ ID 97



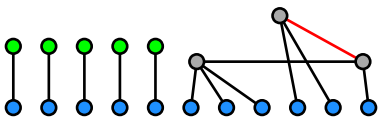
ID: 63 $V_{1^4} \boxtimes V_1$
↦ ID 66



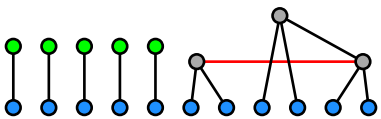
ID: 46 V_{1^5}
↤ ID 41



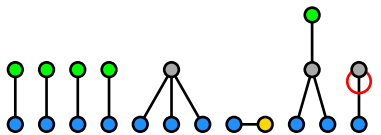
ID: 47 V_{1^5}
↦ ID 51



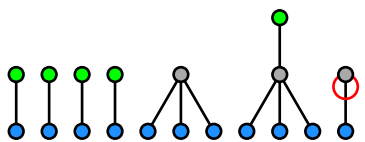
ID: 48 V_{1^5}
↤ ID 40



ID: 122 $V_{1^4} \boxtimes V_1$

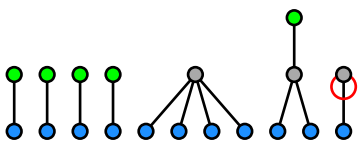


ID: 70 $V_{1^4} \boxtimes V_1$
↦ ID 73

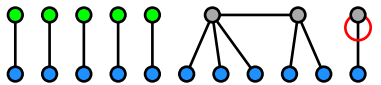


ID: 123 V_{1^5}
↤ ID 121

ID: 125 $V_{1^4} \boxtimes V_1$
↦ ID 128

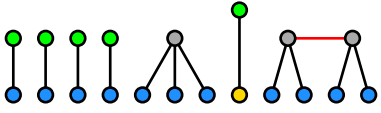


ID: 72 V_{1^5}
↤ ID 68

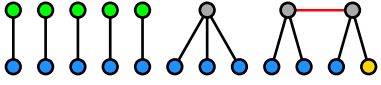


------- B,Birr cases with weight 11 relations relation groups: 2 -------

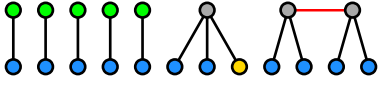
ID: 60 $V_{1^4} \boxtimes V_1$
↤ ID 53



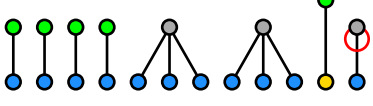
ID: 42 V_{1^5}



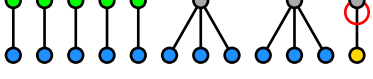
ID: 62 V_{1^5}
↤ ID 55



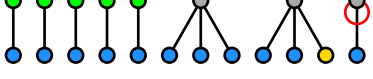
ID: 67 $V_{1^4} \boxtimes V_1$



ID: 52 V_{1^5}

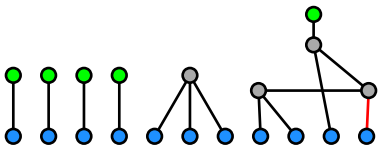


ID: 69 V_{1^5}
↤ ID 120

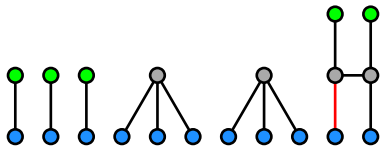


--------- edges: 8 graphs: 22 ---------
------- A2 case with weight 13 relations relation groups: 2 -------

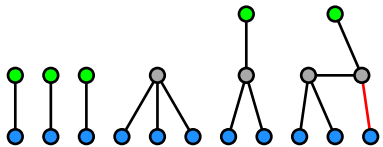
ID: 38 $V_{1^4} \boxtimes V_1$
↤ ID 29



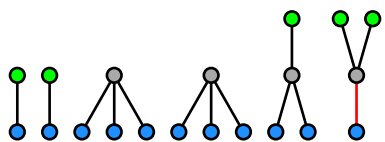
ID: 35 $V_{1^3} \boxtimes V_1 \boxtimes V_1$



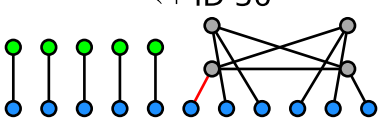
ID: 94 $V_{1^3} \boxtimes V_1 \boxtimes V_1$



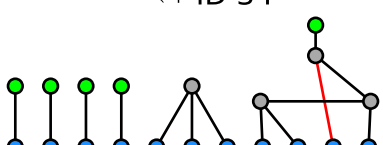
ID: 93 $V_{1^2} \boxtimes V_1 \boxtimes V_2$



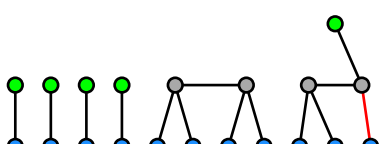
ID: 39 V_{1^5}
↤ ID 36



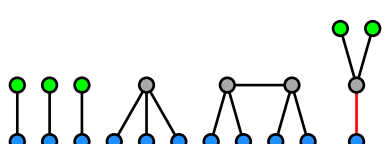
ID: 37 $V_{1^4} \boxtimes V_1$
↤ ID 34



ID: 102 $V_{1^4} \boxtimes V_1$

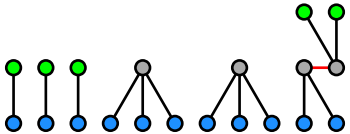


ID: 101 $V_{1^3} \boxtimes V_2$

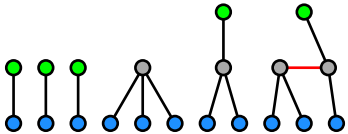


------- B,Birr cases without weight 11 relations graphs: 14 -------

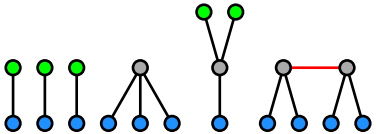
ID: 45 $V_{1^3} \boxtimes V_2$



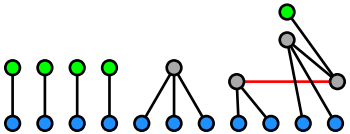
ID: 96 $V_{1^3} \boxtimes V_1 \boxtimes V_1$
↤ ID 91



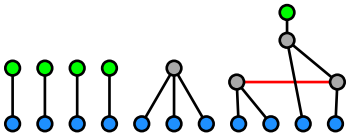
ID: 64 $V_{1^3} \boxtimes V_2$
↤ ID 57



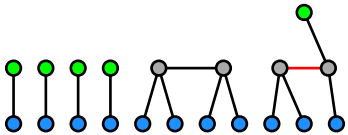
ID: 49 $V_{1^4} \boxtimes V_1$
↤ ID 43



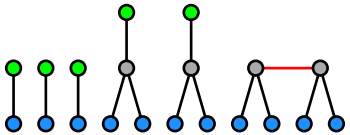
ID: 50 $V_{1^4} \boxtimes V_1$
↤ ID 44



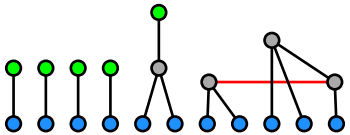
ID: 104 $V_{1^4} \boxtimes V_1$
↤ ID 88



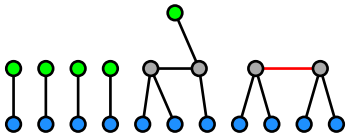
ID: 118 $V_{1^3} \boxtimes V_2$
↤ ID 111



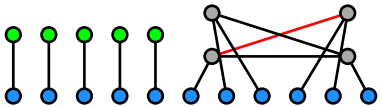
ID: 97 $V_{1^4} \boxtimes V_1$
↤ ID 95



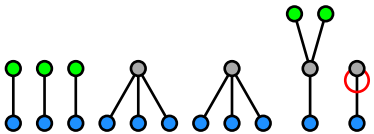
ID: 66 $V_{1^4} \boxtimes V_1$
↤ ID 63



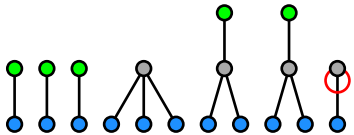
ID: 51 V_{1^5}
↤ ID 47



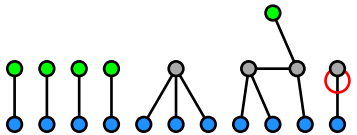
ID: 71 $V_{1^3} \boxtimes V_2$



ID: 127 $V_{1^3} \boxtimes V_2$



ID: 73 $V_{1^4} \boxtimes V_1$
↤ ID 70



ID: 128 $V_{1^4} \boxtimes V_1$
↤ ID 125