

----- g,n: 8,2

graphs: 105

----- Euler Characteristic (without resolving relations):

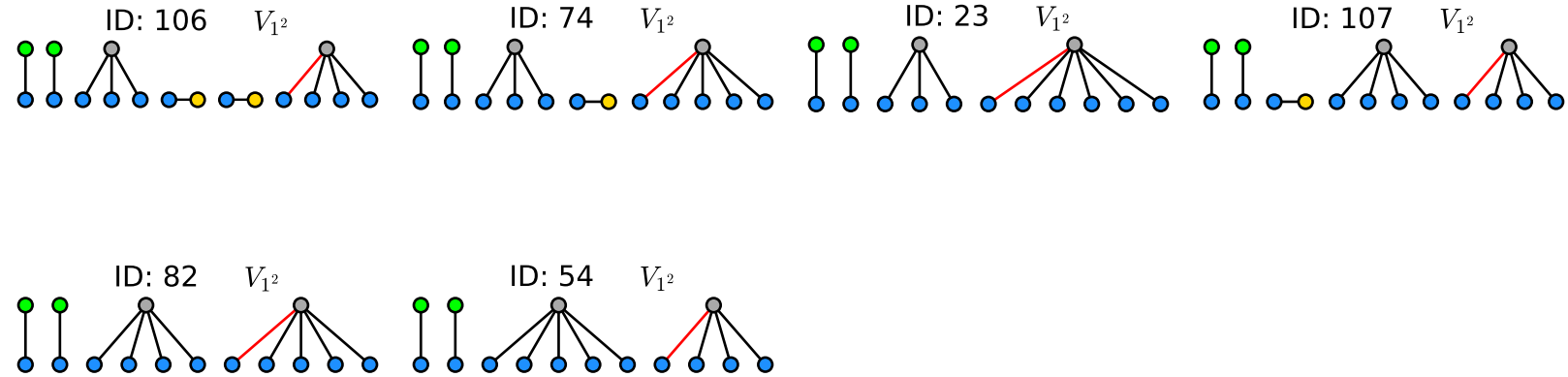
----- $-2V_1^2 - 4V_1 \boxtimes V_1 + 1V_0 \boxtimes V_2 + 2V_0 \boxtimes V_1 \boxtimes V_1$ -----

----- edges: 8

graphs: 6

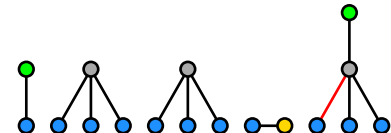
----- A3 case

graphs: 6 -----

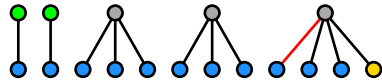


----- edges: 9 graphs: 28 -----
 ----- A3 case graphs: 17 -----

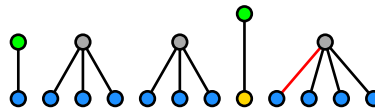
ID: 75 $V_1 \boxtimes V_1$



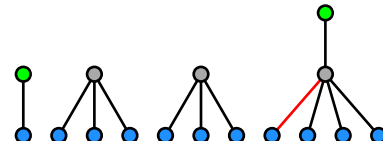
ID: 24 V_1^2



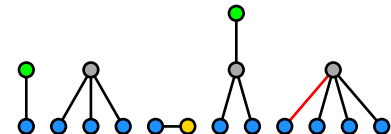
ID: 53 $V_1 \boxtimes V_1$



ID: 25 $V_1 \boxtimes V_1$



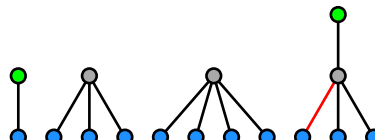
ID: 108 $V_1 \boxtimes V_1$



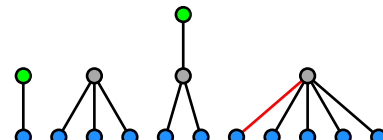
ID: 76 V_1^2



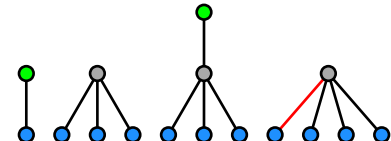
ID: 83 $V_1 \boxtimes V_1$



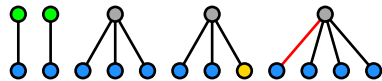
ID: 90 $V_1 \boxtimes V_1$



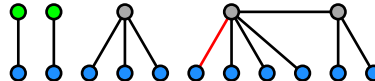
ID: 56 $V_1 \boxtimes V_1$



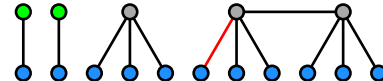
ID: 55 V_1^2



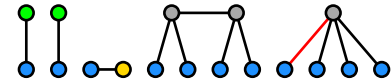
ID: 27 V_1^2



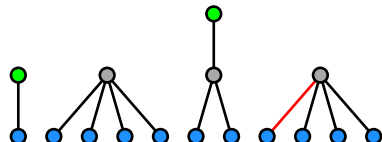
ID: 28 V_1^2



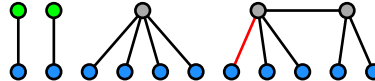
ID: 109 V_1^2



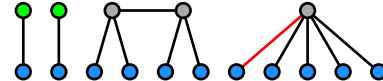
ID: 110 $V_1 \boxtimes V_1$



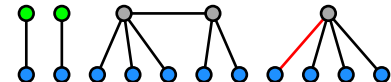
ID: 84 V_1^2



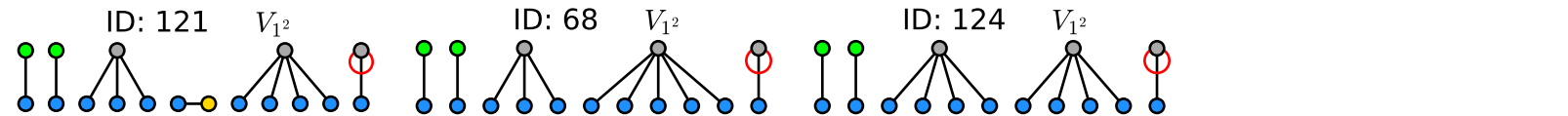
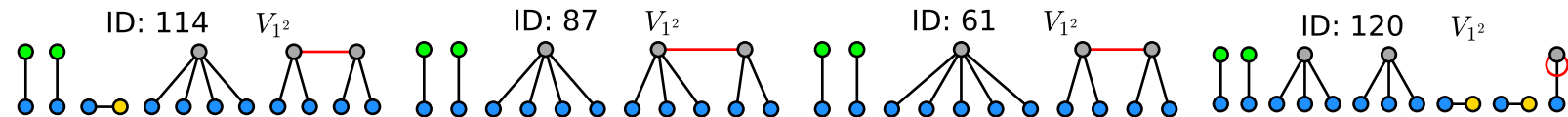
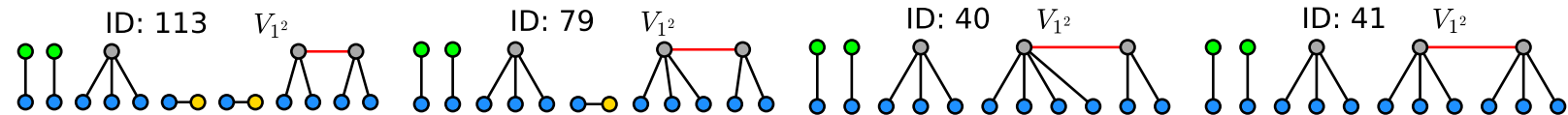
ID: 98 V_1^2



ID: 58 V_1^2

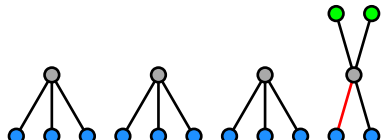


----- B,Birr cases without weight 11 relations graphs: 11 -----

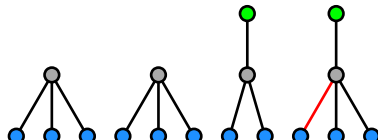


----- edges: 10 graphs: 48 -----
 ----- A3 case graphs: 12 -----

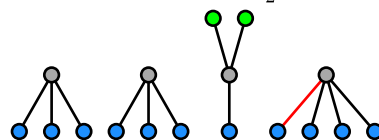
ID: 26 V_2



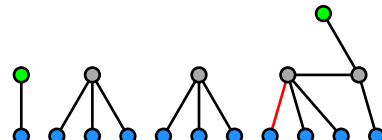
ID: 91 $V_1 \boxtimes V_1$



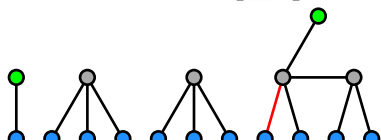
ID: 57 V_2



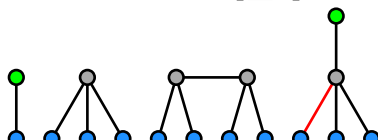
ID: 29 $V_1 \boxtimes V_1$



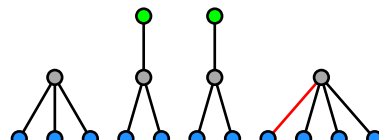
ID: 30 $V_1 \boxtimes V_1$



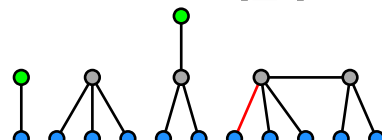
ID: 99 $V_1 \boxtimes V_1$



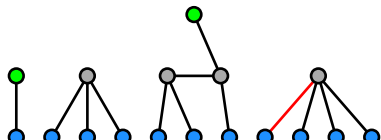
ID: 111 V_2



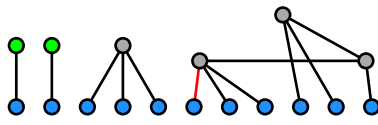
ID: 92 $V_1 \boxtimes V_1$



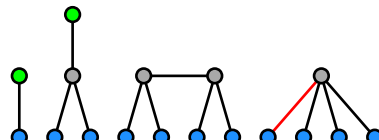
ID: 59 $V_1 \boxtimes V_1$



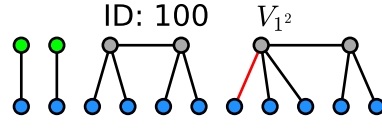
ID: 31 V_1^2



ID: 112 $V_1 \boxtimes V_1$

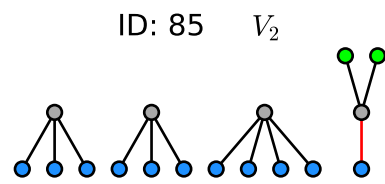
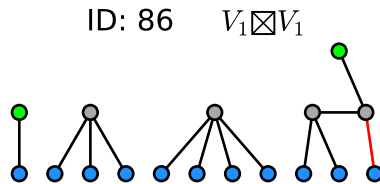
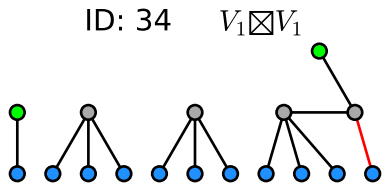
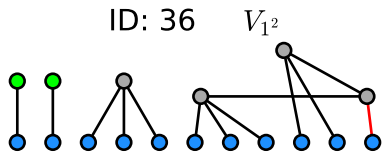
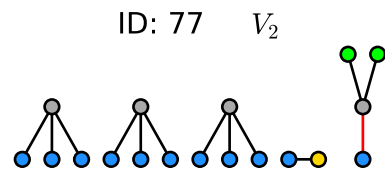
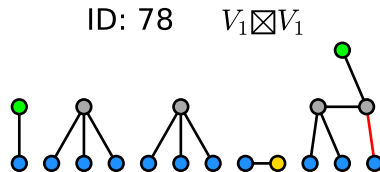
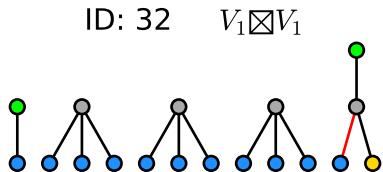
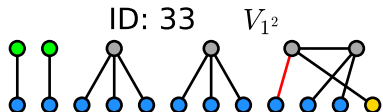


ID: 100

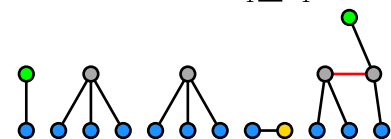


----- A2 case with weight 13 relations

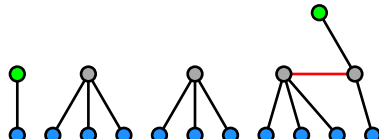
relation groups: 2 -----



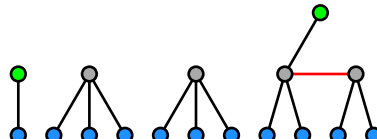
ID: 80 $V_1 \boxtimes V_1$



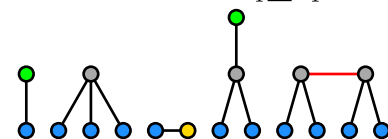
ID: 43 $V_1 \boxtimes V_1$



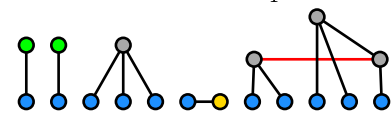
ID: 44 $V_1 \boxtimes V_1$



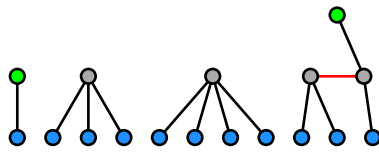
ID: 115 $V_1 \boxtimes V_1$



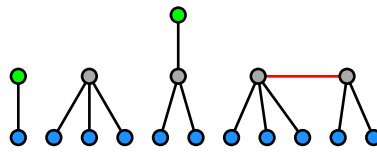
ID: 81 V_1^2



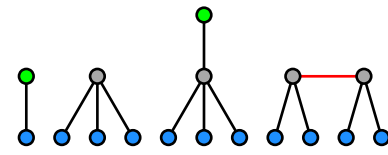
ID: 88 $V_1 \boxtimes V_1$



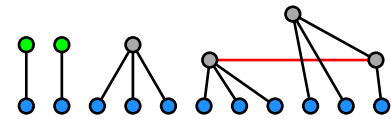
ID: 95 $V_1 \boxtimes V_1$



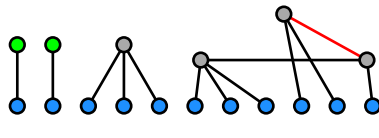
ID: 63 $V_1 \boxtimes V_1$



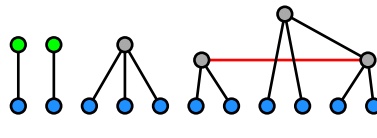
ID: 46 V_1^2



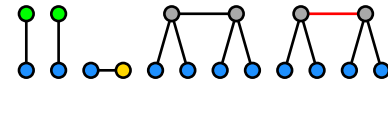
ID: 47 V_1^2



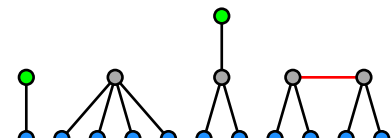
ID: 48 V_1^2



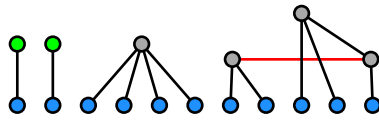
ID: 116 V_1^2



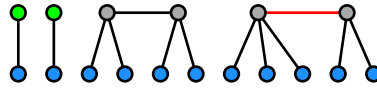
ID: 117 $V_1 \boxtimes V_1$



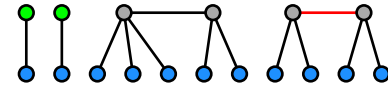
ID: 89 V_1^2



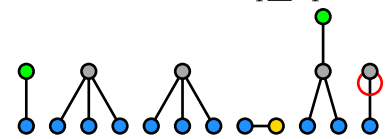
ID: 103 V_1^2



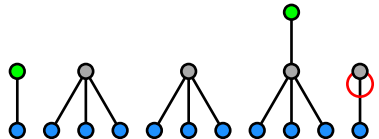
ID: 65 V_1^2



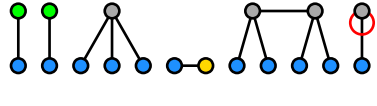
ID: 122 $V_1 \boxtimes V_1$



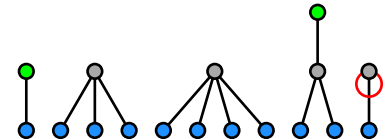
ID: 70 $V_1 \boxtimes V_1$



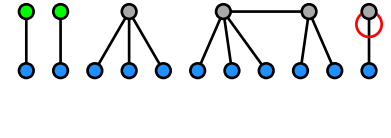
ID: 123 V_1^2



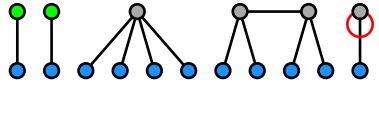
ID: 125 $V_1 \boxtimes V_1$



ID: 72 V_1^2



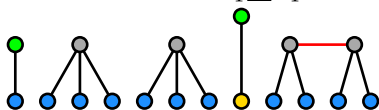
ID: 126 V_1^2



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

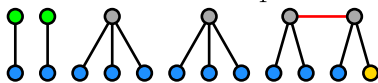
ID: 60

$V_1 \boxtimes V_1$



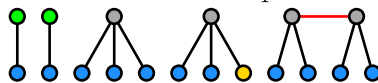
ID: 42

V_1^2



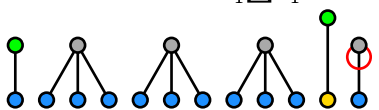
ID: 62

V_1^2



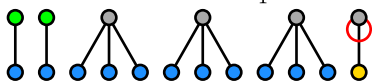
ID: 67

$V_1 \boxtimes V_1$



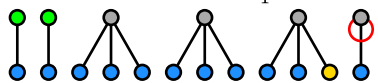
ID: 52

V_1^2



ID: 69

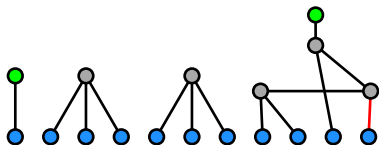
V_1^2



----- edges: 11 graphs: 23 -----
 ----- A2 case with weight 13 relations relation groups: 2 -----

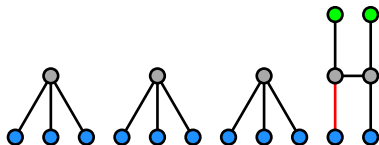
ID: 38

$V_1 \boxtimes V_1$



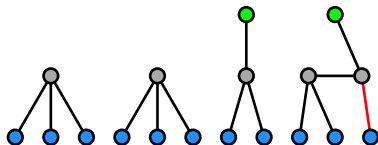
ID: 35

$V_1 \boxtimes V_1$



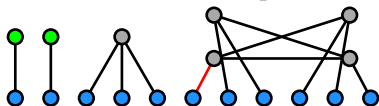
ID: 94

$V_1 \boxtimes V_1$



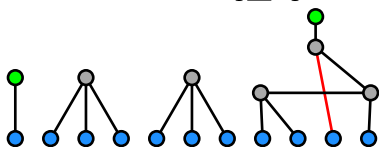
ID: 39

V_1^2



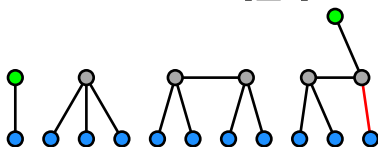
ID: 37

$V_1 \boxtimes V_1$



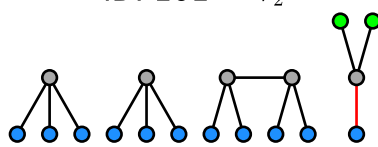
ID: 102

$V_1 \boxtimes V_1$



ID: 101

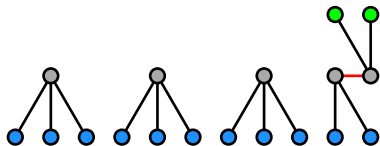
V_2



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

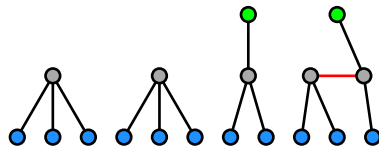
ID: 45

V_2



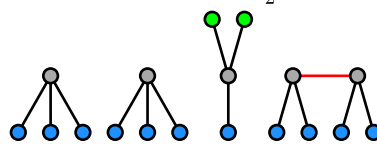
ID: 96

$V_1 \boxtimes V_1$



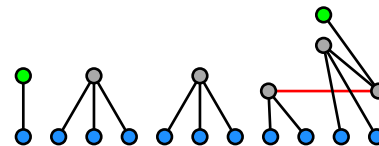
ID: 64

V_2



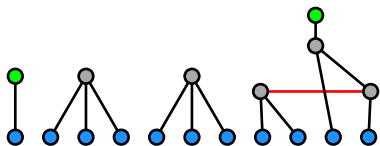
ID: 49

$V_1 \boxtimes V_1$



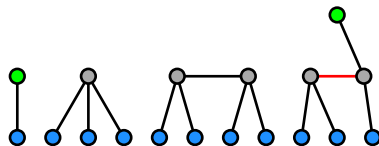
ID: 50

$V_1 \boxtimes V_1$



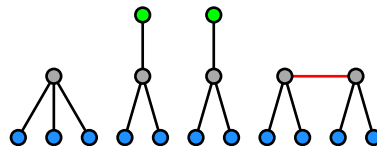
ID: 104

$V_1 \boxtimes V_1$



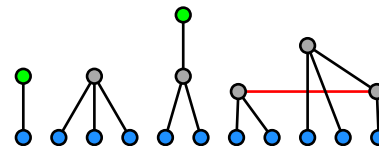
ID: 118

V_2



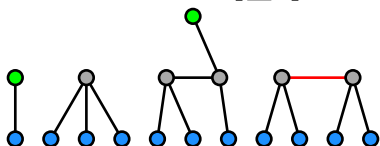
ID: 97

$V_1 \boxtimes V_1$



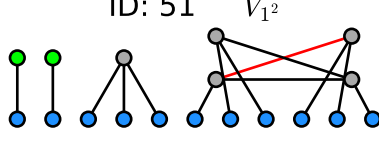
ID: 66

$V_1 \boxtimes V_1$



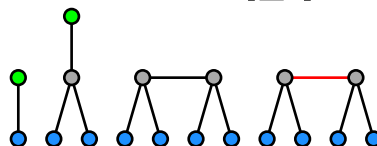
ID: 51

V_1^2



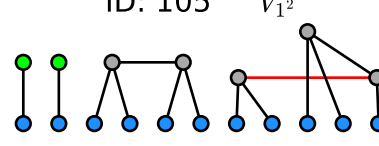
ID: 119

$V_1 \boxtimes V_1$



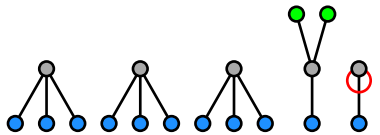
ID: 105

V_1^2



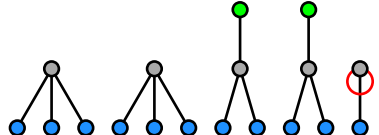
ID: 71

V_2



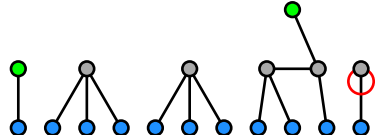
ID: 127

V_2



ID: 73

$V_1 \boxtimes V_1$



ID: 128

$V_1 \boxtimes V_1$

