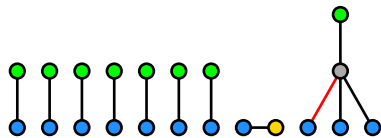


----- g,n: 4,8 ----- graphs: 40 ----- Euler Characteristic (without resolving relations):  
 -----  $-2V_1^8 - 4V_1^7 \boxtimes V_1 + 1V_1^6 \boxtimes V_2 + 2V_1^6 \boxtimes V_1 \boxtimes V_1 + 1V_1^5 \boxtimes V_1 \boxtimes V_2$  -----  
 ----- edges: 3 ----- graphs: 5 -----  
 ----- A3 case ----- graphs: 4 -----

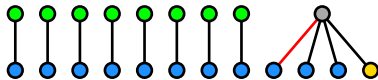
ID: 75

$V_1^7 \boxtimes V_1$



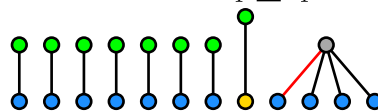
ID: 24

$V_1^8$



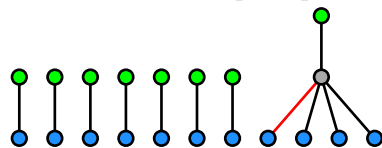
ID: 53

$V_1^7 \boxtimes V_1$

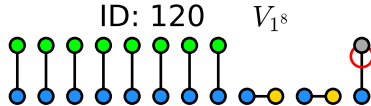


ID: 25

$V_1^7 \boxtimes V_1$



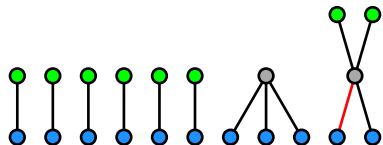
----- B,Birr cases without weight 11 relations      graphs: 1 -----



----- edges: 4      graphs: 21      -----  
 ----- A3 case      graphs: 5      -----

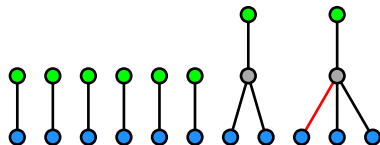
ID: 26

$V_{1^6} \boxtimes V_2$



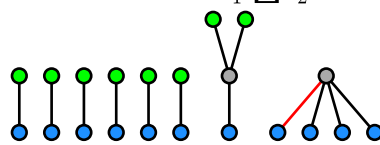
ID: 91

$V_{1^6} \boxtimes V_1 \boxtimes V_1$



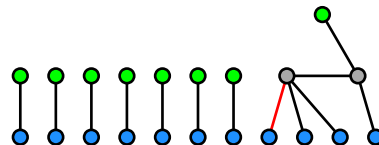
ID: 57

$V_{1^6} \boxtimes V_2$



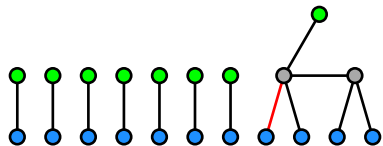
ID: 29

$V_{1^7} \boxtimes V_1$



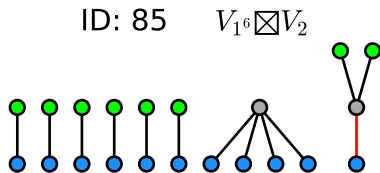
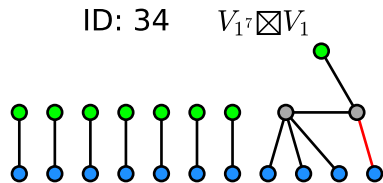
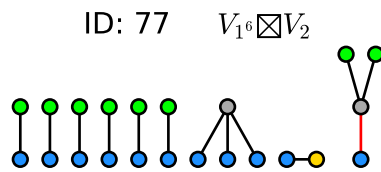
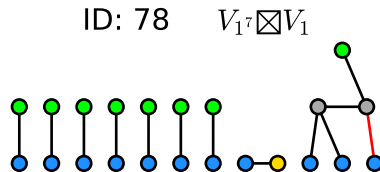
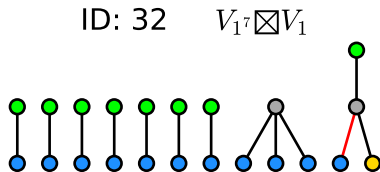
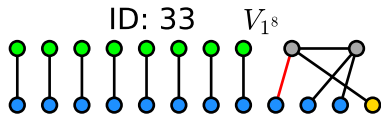
ID: 30

$V_{1^7} \boxtimes V_1$



----- A2 case with weight 13 relations

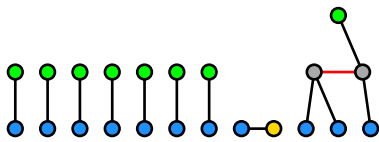
relation groups: 2 -----



----- B,Birr cases without weight 11 relations      graphs: 5 -----

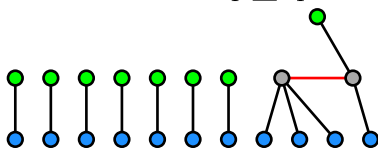
ID: 80

$V_{1^7} \boxtimes V_1$



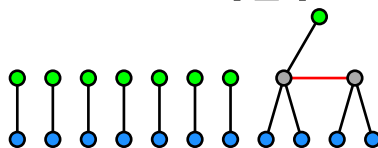
ID: 43

$V_{1^7} \boxtimes V_1$



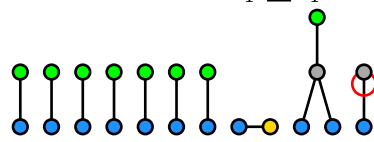
ID: 44

$V_{1^7} \boxtimes V_1$



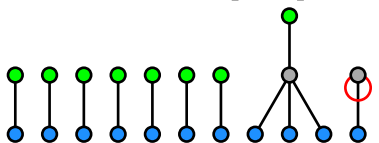
ID: 122

$V_{1^7} \boxtimes V_1$



ID: 70

$V_{1^7} \boxtimes V_1$

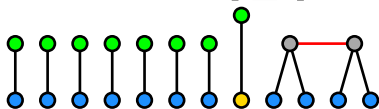


----- B,Birr cases with weight 11 relations

relation groups: 2 -----

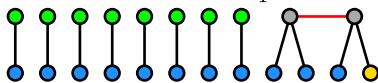
ID: 60

$V_{1^7} \boxtimes V_1$



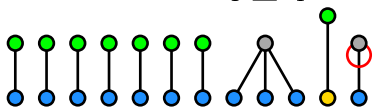
ID: 42

$V_{1^8}$



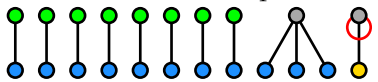
ID: 67

$V_{1^7} \boxtimes V_1$



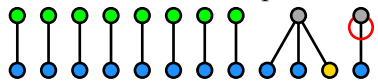
ID: 52

$V_{1^8}$



ID: 69

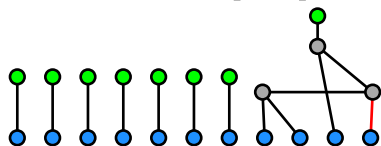
$V_{1^8}$



----- edges: 5    graphs: 14    -----  
 ----- A2 case with weight 13 relations    relation groups: 2 -----

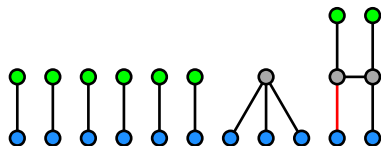
ID: 38

$V_{17} \boxtimes V_1$



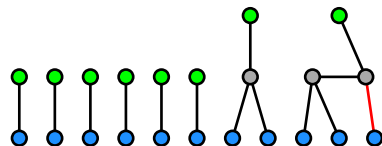
ID: 35

$V_{16} \boxtimes V_1 \boxtimes V_1$



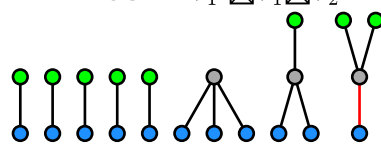
ID: 94

$V_{16} \boxtimes V_1 \boxtimes V_1$



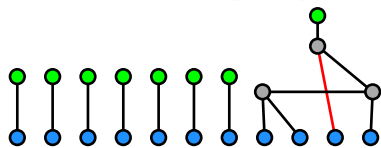
ID: 93

$V_{15} \boxtimes V_1 \boxtimes V_2$



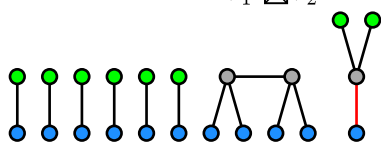
ID: 37

$V_{17} \boxtimes V_1$



ID: 101

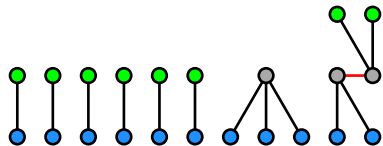
$V_{16} \boxtimes V_2$



----- B,Birr cases without weight 11 relations      graphs: 8 -----

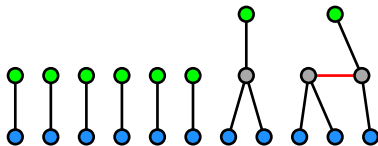
ID: 45

$V_1^6 \boxtimes V_2$



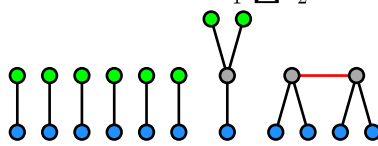
ID: 96

$V_1^6 \boxtimes V_1 \boxtimes V_1$



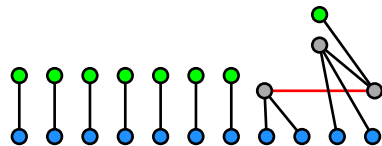
ID: 64

$V_1^6 \boxtimes V_2$



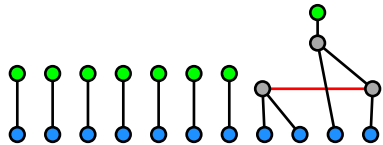
ID: 49

$V_1^7 \boxtimes V_1$



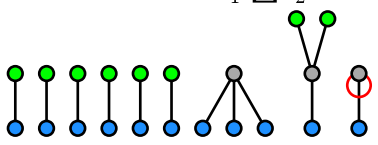
ID: 50

$V_1^7 \boxtimes V_1$



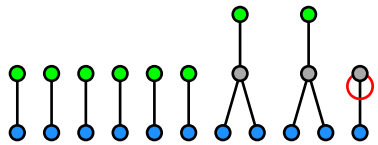
ID: 71

$V_1^6 \boxtimes V_2$



ID: 127

$V_1^6 \boxtimes V_2$



ID: 73

$V_1^7 \boxtimes V_1$

