

List of superpotentials of toric phases

José Sá

*Department of Mathematical Sciences, Durham University
Durham DH1 3LE, U.K.*

E-mail: jose.a.cerqueira-sa@durham.ac.uk

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1 Superpotentials of toric phases of polytopes with 2 internal points

[1]

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Figure 1: Hi

1.1 $\mathbb{C}^3/\mathbb{Z}_5$ (1, 2, 2)

$$(I) -X_{14}X_{45}^1X_{51}^2 + X_{14}X_{45}^2X_{51}^1 - X_{25}X_{51}^1X_{12}^2 + X_{12}^1X_{25}X_{51}^2 - X_{12}^1X_{23}^2X_{31} + X_{23}^1X_{31}X_{12}^2 - X_{23}^1X_{34}^2X_{42} + X_{34}^1X_{42}X_{23}^2 - X_{34}^1X_{45}^2X_{53} + X_{45}^1X_{53}X_{34}^2$$

1.2 $\mathbb{C}^3/\mathbb{Z}_6$ (1, 1, 4)

$$(I) X_{15}X_{56}^1X_{61}^2 - X_{15}X_{56}^2X_{61}^1 + X_{26}X_{61}^1X_{12}^2 - X_{12}^1X_{26}X_{61}^2 + X_{12}^1X_{23}^2X_{31} - X_{23}^1X_{31}X_{12}^2 + X_{23}^1X_{34}^2X_{42} - X_{34}^1X_{42}X_{23}^2 + X_{34}^1X_{45}^2X_{53} - X_{45}^1X_{53}X_{34}^2 + X_{45}^1X_{56}^2X_{64} - X_{56}^1X_{64}X_{45}^2$$

1.3 $L^{3,3,1}$

$$(I) X_{15}X_{56}^1X_{61}^2 - X_{15}X_{56}^2X_{61}^1 + X_{26}X_{61}^1X_{12}^2 - X_{12}^1X_{26}X_{61}^2 + X_{34}^1X_{45}^2X_{53} - X_{45}^1X_{53}X_{34}^2 + X_{45}^1X_{56}^2X_{64} - X_{56}^1X_{64}X_{45}^2 - X_{23}X_{34}^1X_{41}X_{12}^2 + X_{12}^1X_{23}X_{34}^2X_{41}$$

1.4 $L^{3,3,2}$

$$(I) X_{43}X_{35}^2X_{54}^2 - X_{23}^1X_{35}^2X_{52} + X_{35}^1X_{52}X_{23}^2 - X_{35}^1X_{54}^1X_{43} - X_{31}X_{16}^2X_{62}X_{23}^2 + X_{41}X_{16}^2X_{65}X_{54}^1 + X_{16}^1X_{62}X_{23}^1X_{31} - X_{16}^1X_{65}X_{54}^2X_{41}$$

$$(II) -X_{26}X_{61}^1X_{12}^2 - X_{41}X_{15}^2X_{54}^2 + X_{43}X_{35}^2X_{54}^2 + X_{56}X_{61}^1X_{15}^2 + X_{12}^1X_{26}X_{61}^2 - X_{12}^1X_{23}^2X_{31} - X_{15}^1X_{56}X_{61}^2 + X_{15}^1X_{54}^1X_{41} + X_{23}^1X_{31}X_{12}^2 - X_{23}^1X_{35}^2X_{52} + X_{35}^1X_{52}X_{23}^2 - X_{35}^1X_{54}^1X_{43}$$

1.5 $Y^{3,0}$

$$(I) -X_{23}X_{34}^1X_{41}X_{12}^2 + X_{25}X_{56}^1X_{61}X_{12}^2 - X_{45}X_{56}^1X_{63}X_{34}^2 + X_{12}^1X_{23}X_{34}^2X_{41} - X_{12}^1X_{25}X_{56}^2X_{61} + X_{34}^1X_{45}X_{56}^2X_{63}$$

$$(II) -X_{14}X_{42}^1X_{21}^2 + X_{14}X_{42}^2X_{21}^1 + X_{16}X_{62}^1X_{21}^1 - X_{16}X_{62}^2X_{21}^2 - X_{23}X_{34}^1X_{42}^2 + X_{23}X_{34}^2X_{42}^1 + X_{25}X_{56}^1X_{62}^2 - X_{25}X_{56}^2X_{62}^1 - X_{45}X_{56}^1X_{63}X_{34}^2 + X_{34}^1X_{45}X_{56}^2X_{63}$$

1.6 $L^{2,4,1}$

$$(I) -X_{15}X_{56}^1X_{61}^2 + X_{15}X_{56}^2X_{61}^1 + X_{24}X_{41}X_{12}^2 - X_{26}X_{61}^1X_{12}^2 - X_{35}X_{56}^2X_{63} + X_{12}^1X_{26}X_{61}^2 + X_{34}X_{45}X_{56}^1X_{63} - X_{12}^1X_{23}X_{34}X_{41} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52}$$

1.7 $L^{2,5,1}$

$$(I) -X_{16}X_{67}X_{71}^1 + X_{27}X_{71}^1X_{12}^2 - X_{12}^1X_{27}X_{71}^2 + X_{12}^1X_{23}^2X_{31} - X_{23}^1X_{31}X_{12}^2 + X_{23}^1X_{34}^2X_{42} - X_{34}^1X_{42}X_{23}^2 + X_{34}^1X_{45}X_{53} + X_{16}X_{65}X_{57}X_{71}^2 - X_{46}X_{65}X_{53}X_{34}^2 - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74}$$

1.8 $L^{1,3,2}$

$$(I) -X_{24}X_{41}X_{12}^2 + X_{27}X_{71}X_{12}^2 + X_{12}^1X_{24}X_{43}X_{31} - X_{12}^1X_{26}X_{67}X_{71} - X_{15}X_{53}X_{31} + X_{15}X_{54}X_{41} + X_{26}X_{65}X_{52} - X_{27}X_{75}X_{52} - X_{36}X_{65}X_{54}X_{43} + X_{36}X_{67}X_{75}X_{53}$$

$$(II) -X_{24}X_{41}X_{12}^2 + X_{62}X_{27}X_{76} - X_{12}^1X_{27}X_{71} + X_{27}^1X_{71}X_{12}^2 + X_{12}^1X_{24}X_{43}X_{31} - X_{27}^1X_{75}X_{56}X_{62} - X_{15}X_{53}X_{31} + X_{15}X_{54}X_{41} - X_{35}X_{54}X_{43} + X_{35}X_{56}X_{63} + X_{37}X_{75}X_{53} - X_{37}X_{76}X_{63}$$

1.9 $X^{3,2}$

- (I) $-X_{36}X_{62}X_{23}^2 - X_{23}^1X_{34}^2X_{42} + X_{34}^1X_{42}X_{23}^2 - X_{34}^1X_{45}^2X_{53} + X_{45}^1X_{53}X_{34}^2 + X_{17}X_{74}X_{45}^2X_{51} + X_{23}^1X_{36}X_{67}X_{72} - X_{16}X_{67}X_{74}X_{45}^1X_{51} + X_{16}X_{62}X_{21} - X_{17}X_{72}X_{21}$
- (II) $X_{27}X_{76}^2X_{62} - X_{34}X_{45}^2X_{53} + X_{61}X_{17}^2X_{76}^1 - X_{17}^1X_{76}^2X_{61} + X_{24}X_{45}^1X_{53}X_{32} - X_{27}X_{76}^1X_{63}X_{32} + X_{17}^1X_{74}X_{45}^2X_{51} - X_{45}^1X_{51}X_{17}^2X_{74} - X_{24}X_{46}X_{62} + X_{34}X_{46}X_{63}$
- (III) $-X_{15}X_{57}^1X_{71}^1 + X_{15}X_{57}^2X_{71}^2 + X_{16}X_{67}X_{71}^1 - X_{23}X_{34}^2X_{42} - X_{34}^1X_{45}^2X_{53} + X_{45}^1X_{53}X_{34}^2 - X_{45}^1X_{57}^2X_{74} + X_{57}^1X_{74}X_{45}^2 - X_{16}X_{63}X_{37}X_{71}^2 + X_{26}X_{63}X_{34}^1X_{42} + X_{23}X_{37}X_{72} - X_{26}X_{67}X_{72}$

1.10 $X^{3,1}$

- (I) $-X_{21}X_{13}^2X_{32} + X_{37}X_{76}^1X_{61}X_{13}^2 + X_{45}X_{57}X_{76}^2X_{64} + X_{13}^1X_{32}X_{25}X_{51} - X_{13}^1X_{37}X_{76}^2X_{61} - X_{25}X_{57}X_{76}^1X_{64}X_{42} + X_{14}X_{42}X_{21} - X_{14}X_{45}X_{51}$
- (II) $X_{13}X_{32}X_{21}^2 - X_{15}X_{52}^1X_{21}^2 + X_{15}X_{52}^2X_{21}^1 - X_{24}X_{45}^1X_{52}^2 + X_{24}X_{45}^2X_{52}^1 - X_{13}X_{36}X_{62}X_{21}^1 - X_{57}X_{76}X_{64}X_{45}^2 + X_{36}X_{64}X_{45}^1X_{57}X_{73} - X_{27}X_{73}X_{32} + X_{27}X_{76}X_{62}$
- (III) $X_{15}X_{52}^2X_{21} - X_{24}X_{45}^1X_{52}^2 + X_{24}X_{45}^2X_{52}^1 - X_{37}X_{76}^2X_{63} - X_{15}X_{52}^1X_{23}X_{31} + X_{23}X_{37}X_{76}^1X_{62} - X_{57}X_{76}^1X_{64}X_{45}^2 + X_{45}^1X_{57}X_{76}^2X_{64} - X_{16}X_{62}X_{21} + X_{16}X_{63}X_{31}$
- (IV) $-X_{21}X_{13}^2X_{32} + X_{45}X_{56}^2X_{64} + X_{73}X_{36}^2X_{67}^2 - X_{75}X_{56}^2X_{67}^2 - X_{13}^1X_{36}^2X_{61} + X_{36}^1X_{61}X_{13}^2 - X_{36}^1X_{67}^1X_{73} + X_{56}^1X_{67}^1X_{75} - X_{25}X_{56}^1X_{64}X_{42} + X_{13}^1X_{32}X_{25}X_{51} + X_{14}X_{42}X_{21} - X_{14}X_{45}X_{51}$
- (V) $-X_{16}X_{67}^1X_{71}^1 + X_{16}X_{67}^2X_{71}^2 - X_{21}X_{13}^2X_{32} + X_{37}X_{71}^1X_{13}^2 + X_{45}X_{57}X_{74}^2 + X_{46}X_{67}^1X_{74}^1 - X_{46}X_{67}^2X_{74}^2 - X_{13}^1X_{37}X_{71}^2 - X_{25}X_{57}X_{74}^1X_{42} + X_{13}^1X_{32}X_{25}X_{51} + X_{14}X_{42}X_{21} - X_{14}X_{45}X_{51}$

1.11 $K^{2,4,1,1}$

- (I) $-X_{12}X_{27}X_{71}^2 - X_{16}X_{67}X_{71}^1 + X_{13}X_{32}X_{27}X_{71}^1 + X_{16}X_{65}X_{57}X_{71}^2 + X_{12}X_{24}X_{41} - X_{13}X_{34}X_{41} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74} - X_{24}X_{46}X_{65}X_{53}X_{32}$
- (II) $-X_{12}X_{23}^2X_{31} - X_{23}^1X_{34}^2X_{42} + X_{34}^1X_{42}X_{23}^2 - X_{34}^1X_{45}X_{53} + X_{16}X_{62}X_{23}^1X_{31} + X_{47}X_{75}X_{53}X_{34}^2 + X_{12}X_{27}X_{71} + X_{45}X_{56}X_{64} - X_{16}X_{64}X_{47}X_{71} - X_{27}X_{75}X_{56}X_{62}$
- (III) $X_{27}X_{71}X_{12}^2 - X_{31}X_{12}^2X_{23}^2 - X_{12}^1X_{26}X_{61} + X_{12}^1X_{23}^1X_{31} - X_{23}^1X_{34}^2X_{42} + X_{34}^1X_{42}X_{23}^2 + X_{47}X_{75}X_{53}X_{34}^2 - X_{34}^1X_{46}X_{65}X_{53} + X_{14}X_{46}X_{61} - X_{14}X_{47}X_{71} + X_{26}X_{65}X_{52} - X_{27}X_{75}X_{52}$

1.12 $\mathbb{C}^3/\mathbb{Z}_8$ (1, 3, 4)

- (I) $-X_{13}X_{32}X_{21} + X_{13}X_{38}X_{81} + X_{16}X_{67}X_{71} - X_{16}X_{68}X_{81} + X_{18}X_{82}X_{21} - X_{18}X_{87}X_{71} + X_{23}X_{34}X_{42} - X_{23}X_{38}X_{82} + X_{25}X_{53}X_{32} - X_{25}X_{54}X_{42} - X_{34}X_{45}X_{53} + X_{45}X_{57}X_{74} + X_{46}X_{65}X_{54} - X_{46}X_{67}X_{74} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76}$

1.13 dP_1/\mathbb{Z}_2 (1, 0, 0, 1)

- (I) $-X_{24}X_{43}^2X_{32} + X_{35}X_{54}^1X_{43}^2 - X_{35}X_{54}^2X_{43}^1 + X_{46}X_{65}X_{54}^2 + X_{12}X_{24}X_{43}^1X_{31} - X_{46}X_{67}X_{75}X_{54}^1 - X_{18}X_{83}X_{31} + X_{28}X_{83}X_{32} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - X_{12}X_{28}X_{87}X_{71} + X_{18}X_{86}X_{67}X_{71}$

- (II) $X_{21}X_{18}^2X_{82} - X_{35}X_{54}^2X_{43} + X_{46}X_{65}X_{54}^2 - X_{71}X_{18}^2X_{87} + X_{23}X_{35}X_{54}^1X_{42} - X_{46}X_{67}X_{75}X_{54}^1 - X_{18}^1X_{82}X_{23}X_{31} + X_{18}^1X_{86}X_{67}X_{71} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75}$
- (III) $-X_{13}X_{32}^2X_{21} + X_{24}X_{43}^1X_{32}^2 - X_{24}X_{43}^2X_{32}^1 + X_{35}X_{54}^1X_{43}^2 - X_{35}X_{54}^2X_{43}^1 + X_{46}X_{65}X_{54}^2 + X_{13}X_{32}^1X_{28}X_{81} - X_{46}X_{67}X_{75}X_{54}^1 + X_{17}X_{72}X_{21} - X_{17}X_{78}X_{81} - X_{28}X_{87}X_{72} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} + X_{67}X_{78}X_{86}$

1.14 $L^{1,3,1}/\mathbb{Z}_2$ $(1, 0, 0, 1)$

- (I) $X_{12}X_{23}X_{31} - X_{12}X_{26}X_{61} + X_{14}X_{42}X_{21} - X_{15}X_{52}X_{21} + X_{15}X_{56}X_{61} + X_{26}X_{65}X_{52} - X_{56}X_{67}X_{75} - X_{58}X_{86}X_{65} - X_{14}X_{47}X_{73}X_{31} - X_{23}X_{38}X_{84}X_{42} + X_{38}X_{86}X_{67}X_{73} + X_{47}X_{75}X_{58}X_{84}$
- (II) $X_{12}X_{23}X_{31} - X_{12}X_{26}X_{61} + X_{15}X_{56}X_{61} - X_{17}X_{73}X_{31} + X_{17}X_{74}X_{41} - X_{23}X_{38}X_{82} + X_{24}X_{48}X_{82} + X_{26}X_{65}X_{52} - X_{48}X_{87}X_{74} - X_{56}X_{67}X_{75} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - X_{15}X_{52}X_{24}X_{41} + X_{38}X_{86}X_{67}X_{73}$

1.15 $L^{3,5,2}$

- (I) $X_{12}X_{24}X_{41} - X_{13}X_{34}X_{41} + X_{17}X_{76}X_{61} - X_{17}X_{78}X_{81} - X_{24}X_{43}X_{32} + X_{34}X_{47}X_{73} + X_{35}X_{54}X_{43} - X_{35}X_{57}X_{73} - X_{12}X_{28}X_{86}X_{61} + X_{13}X_{32}X_{28}X_{81} - X_{47}X_{76}X_{65}X_{54} + X_{57}X_{78}X_{86}X_{65}$
- (II) $X_{57}X_{76}^2X_{65} - X_{68}X_{87}X_{76}^2 + X_{18}X_{87}X_{76}^1X_{61} - X_{47}X_{76}^1X_{65}X_{54} + X_{12}X_{24}X_{41} - X_{12}X_{26}X_{61} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} - X_{18}X_{82}X_{21} - X_{24}X_{43}X_{32} + X_{26}X_{68}X_{82} + X_{34}X_{47}X_{73} + X_{35}X_{54}X_{43} - X_{35}X_{57}X_{73}$

1.16 \mathcal{C}/\mathbb{Z}_4 $(0, 1, 2, 1)$

- (I) $X_{14}X_{42}X_{27}X_{71} - X_{14}X_{46}X_{63}X_{31} + X_{18}X_{82}X_{23}X_{31} - X_{18}X_{85}X_{57}X_{71} - X_{23}X_{35}X_{54}X_{42} - X_{27}X_{76}X_{68}X_{82} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$
- (II) $X_{13}X_{34}X_{41} + X_{17}X_{78}X_{81} + X_{24}X_{43}X_{32} + X_{28}X_{87}X_{72} - X_{34}X_{46}X_{63} - X_{35}X_{54}X_{43} - X_{57}X_{78}X_{85} - X_{68}X_{87}X_{76} - X_{13}X_{32}X_{28}X_{81} - X_{17}X_{72}X_{24}X_{41} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$
- (III) $X_{13}X_{34}X_{41} - X_{13}X_{38}X_{81} - X_{17}X_{74}X_{41} + X_{17}X_{78}X_{81} + X_{23}X_{38}X_{82} + X_{27}X_{74}X_{42} - X_{34}X_{46}X_{63} - X_{57}X_{78}X_{85} - X_{23}X_{35}X_{54}X_{42} - X_{27}X_{76}X_{68}X_{82} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$
- (IV) $X_{13}X_{34}^1X_{41} - X_{23}X_{34}^2X_{42} + X_{45}X_{53}X_{34}^2 - X_{34}^1X_{46}X_{63} - X_{13}X_{38}X_{81} - X_{17}X_{74}X_{41} + X_{23}X_{38}X_{82} + X_{27}X_{74}X_{42} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} + X_{17}X_{75}X_{58}X_{81} - X_{27}X_{76}X_{68}X_{82}$

1.17 \mathbf{PdP}_{4c} (2)

- (I) $X_{34}X_{45}^2X_{53} - X_{56}X_{64}X_{45}^2 - X_{13}X_{34}X_{45}^1X_{51} + X_{45}^1X_{56}X_{67}X_{74} + X_{12}X_{25}X_{51} - X_{25}X_{53}X_{32} + X_{48}X_{86}X_{64} - X_{48}X_{87}X_{74} - X_{12}X_{28}X_{86}X_{67}X_{71} + X_{13}X_{32}X_{28}X_{87}X_{71}$

- (II) $-X_{56}X_{64}X_{45}^2 + X_{23}X_{34}X_{45}^2X_{52} + X_{45}^1X_{56}X_{67}X_{74} - X_{13}X_{34}X_{45}^1X_{52}X_{21} + X_{18}X_{82}X_{21} - X_{23}X_{38}X_{82} + X_{48}X_{86}X_{64} - X_{48}X_{87}X_{74} + X_{13}X_{38}X_{87}X_{71} - X_{18}X_{86}X_{67}X_{71}$
- (III) $X_{71}X_{18}^2X_{87} - X_{82}X_{21}^2X_{18}^2 + X_{18}^1X_{82}X_{21}^1 - X_{15}X_{53}X_{32}X_{21}^1 - X_{18}^1X_{86}X_{67}X_{71} + X_{15}X_{54}X_{43}X_{32}X_{21}^2 - X_{36}X_{64}X_{43} + X_{36}X_{65}X_{53} - X_{46}X_{65}X_{54} + X_{46}X_{67}X_{74} + X_{48}X_{86}X_{64} - X_{48}X_{87}X_{74}$
- (IV) $X_{34}X_{45}^2X_{53} - X_{47}X_{76}X_{64}^2 - X_{56}X_{64}^1X_{45}^2 + X_{45}^1X_{56}X_{64}^2 - X_{13}X_{34}X_{45}^1X_{51} + X_{47}X_{78}X_{86}X_{64}^1 + X_{12}X_{25}X_{51} + X_{17}X_{76}X_{61} - X_{17}X_{78}X_{81} - X_{25}X_{53}X_{32} - X_{12}X_{28}X_{86}X_{61} + X_{13}X_{32}X_{28}X_{81}$
- (V) $-X_{23}X_{31}X_{12}^2 + X_{68}X_{87}^2X_{76} + X_{28}X_{87}^1X_{71}X_{12}^2 - X_{46}X_{68}X_{87}^1X_{74} + X_{12}^1X_{23}X_{35}X_{51} - X_{12}^1X_{28}X_{87}^2X_{71} + X_{14}X_{43}X_{31} - X_{14}X_{45}X_{51} - X_{35}X_{54}X_{43} + X_{45}X_{57}X_{74} + X_{46}X_{65}X_{54} - X_{57}X_{76}X_{65}$
- (VI) $-X_{15}X_{53}X_{31}^2 - X_{23}X_{31}^1X_{12}^2 + X_{28}X_{81}X_{12}^2 + X_{12}^1X_{23}X_{31}^2 + X_{15}X_{54}X_{43}X_{31}^1 - X_{12}^1X_{28}X_{86}X_{61} + X_{17}X_{76}X_{61} - X_{17}X_{78}X_{81} - X_{36}X_{64}X_{43} + X_{36}X_{65}X_{53} - X_{47}X_{76}X_{65}X_{54} + X_{47}X_{78}X_{86}X_{64}$
- (VII) $-X_{13}X_{32}X_{21}^1 + X_{18}X_{82}X_{21}^1 + X_{45}X_{56}X_{64}^2 - X_{47}X_{76}X_{64}^2 + X_{14}X_{43}X_{32}X_{21}^2 - X_{17}X_{78}X_{82}X_{21}^2 - X_{35}X_{56}X_{64}^1X_{43} + X_{47}X_{78}X_{86}X_{64}^1 + X_{13}X_{35}X_{51} - X_{14}X_{45}X_{51} + X_{17}X_{76}X_{61} - X_{18}X_{86}X_{61}$
- (VIII) $-X_{13}X_{32}X_{21}^1 + X_{68}X_{87}^2X_{76} + X_{71}X_{18}^2X_{87}^1 - X_{82}X_{21}^2X_{18}^2 + X_{18}^1X_{82}X_{21}^1 - X_{18}^1X_{87}^2X_{71} + X_{14}X_{43}X_{32}X_{21}^2 - X_{46}X_{68}X_{87}^1X_{74} + X_{13}X_{35}X_{51} - X_{14}X_{45}X_{51} - X_{35}X_{54}X_{43} + X_{45}X_{57}X_{74} + X_{46}X_{65}X_{54} - X_{57}X_{76}X_{65}$

1.18 PdP_{4d} (2)

- (I) $X_{35}X_{56}^1X_{64}X_{43} - X_{56}^1X_{68}X_{87}X_{75} + X_{17}X_{75}X_{56}^2X_{68}X_{81} - X_{23}X_{35}X_{56}^2X_{64}X_{42} + X_{12}X_{23}X_{31} - X_{12}X_{28}X_{81} + X_{14}X_{42}X_{21} - X_{14}X_{43}X_{31} - X_{17}X_{72}X_{21} + X_{28}X_{87}X_{72}$
- (II) $X_{14}X_{42}^1X_{21} - X_{23}X_{34}X_{42}^1 - X_{14}X_{42}^2X_{28}X_{81} + X_{25}X_{53}X_{34}X_{42}^2 - X_{17}X_{72}X_{21} + X_{23}X_{36}X_{62} - X_{25}X_{56}X_{62} + X_{28}X_{87}X_{72} + X_{17}X_{75}X_{56}X_{68}X_{81} - X_{36}X_{68}X_{87}X_{75}X_{53}$
- (III) $-X_{18}X_{87}^2X_{71} + X_{18}X_{87}^1X_{72}X_{21} + X_{56}X_{68}X_{87}^2X_{75} - X_{36}X_{68}X_{87}^1X_{75}X_{53} + X_{14}X_{47}X_{71} - X_{24}X_{47}X_{72} + X_{25}X_{53}X_{32} - X_{25}X_{56}X_{62} - X_{14}X_{43}X_{32}X_{21} + X_{24}X_{43}X_{36}X_{62}$
- (IV) $-X_{18}X_{87}^2X_{71} + X_{35}X_{56}^1X_{63} + X_{18}X_{87}^1X_{72}X_{21} - X_{23}X_{35}X_{56}^2X_{62} + X_{68}X_{87}^2X_{75}X_{56}^2 - X_{56}^1X_{68}X_{87}^1X_{75} - X_{14}X_{42}X_{21} + X_{14}X_{47}X_{71} + X_{23}X_{34}X_{42} + X_{24}X_{46}X_{62} - X_{24}X_{47}X_{72} - X_{34}X_{46}X_{63}$
- (V) $X_{27}X_{71}X_{12}^2 - X_{32}X_{24}^2X_{43} + X_{12}^1X_{24}^2X_{41} - X_{24}^1X_{41}X_{12}^2 - X_{12}^1X_{27}X_{78}X_{81} + X_{24}^1X_{43}X_{36}X_{62} - X_{15}X_{57}X_{71} + X_{25}X_{53}X_{32} - X_{25}X_{56}X_{62} + X_{57}X_{78}X_{85} + X_{15}X_{56}X_{68}X_{81} - X_{36}X_{68}X_{85}X_{53}$
- (VI) $X_{12}X_{24}^2X_{41} - X_{32}X_{24}^2X_{43} + X_{57}X_{76}^1X_{65} - X_{68}X_{87}X_{76}^1 - X_{17}X_{72}X_{24}^1X_{41} + X_{17}X_{76}^2X_{68}X_{81} - X_{35}X_{57}X_{76}^2X_{63} + X_{24}^1X_{46}X_{63}X_{32} - X_{12}X_{28}X_{81} + X_{28}X_{87}X_{72} + X_{35}X_{54}X_{43} - X_{46}X_{65}X_{54}$
- (VII) $-X_{18}X_{87}^2X_{71} + X_{36}X_{65}^2X_{53} + X_{57}X_{76}^1X_{65}^1 - X_{57}X_{76}^2X_{65}^2 - X_{68}X_{87}^1X_{76}^1 + X_{68}X_{87}^2X_{76}^2 + X_{18}X_{87}^1X_{72}X_{21} - X_{34}X_{46}X_{65}^1X_{53} - X_{14}X_{42}X_{21} + X_{14}X_{47}X_{71} + X_{23}X_{34}X_{42} - X_{23}X_{36}X_{62} + X_{24}X_{46}X_{62} - X_{24}X_{47}X_{72}$
- (VIII) $X_{53}X_{36}^2X_{65}^2 + X_{57}X_{76}^1X_{65}^1 - X_{57}X_{76}^2X_{65}^2 - X_{68}X_{87}X_{76}^1 + X_{36}^1X_{64}X_{43} - X_{36}^1X_{65}^1X_{53} + X_{17}X_{76}^2X_{68}X_{81} - X_{23}X_{36}^2X_{64}X_{42} + X_{12}X_{23}X_{31} - X_{12}X_{28}X_{81} + X_{14}X_{42}X_{21} - X_{14}X_{43}X_{31} - X_{17}X_{72}X_{21} + X_{28}X_{87}X_{72}$

1.19 $K^{2,5,1,1}$

- (I) $-X_{34}X_{42}X_{23}^2 - X_{12}^1X_{28}X_{81} + X_{12}^1X_{23}^2X_{31} - X_{23}^1X_{31}X_{12}^2 + X_{28}X_{87}X_{71}X_{12}^2 + X_{23}^1X_{36}X_{64}X_{42} - X_{15}X_{57}X_{71} + X_{15}X_{58}X_{81} + X_{34}X_{45}X_{53} - X_{36}X_{65}X_{53} + X_{57}X_{76}X_{65} - X_{45}X_{58}X_{87}X_{76}X_{64}$
- (II) $-X_{12}X_{23}^1X_{31} - X_{34}X_{42}X_{23}^2 + X_{78}X_{85}X_{57}^2 + X_{57}^1X_{76}X_{65} + X_{18}X_{82}X_{23}^2X_{31} - X_{18}X_{85}X_{57}^1X_{71} - X_{45}X_{57}^2X_{76}X_{64} + X_{23}^1X_{36}X_{64}X_{42} + X_{12}X_{27}X_{71} - X_{27}X_{78}X_{82} + X_{34}X_{45}X_{53} - X_{36}X_{65}X_{53}$
- (III) $X_{17}X_{78}X_{81}^2 + X_{28}X_{81}^1X_{12}^2 - X_{12}^1X_{28}X_{81}^2 + X_{12}^1X_{23}^2X_{31} - X_{23}^1X_{31}X_{12}^2 + X_{23}^1X_{34}X_{42} - X_{17}X_{76}X_{68}X_{81}^1 - X_{35}X_{54}X_{42}X_{23}^2 - X_{34}X_{46}X_{63} - X_{57}X_{78}X_{85} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$
- (IV) $X_{15}X_{58}X_{81}^2 - X_{16}X_{68}X_{81}^1 + X_{28}X_{81}^1X_{12}^2 - X_{12}^1X_{28}X_{81}^2 + X_{12}^1X_{23}^2X_{31} - X_{23}^1X_{31}X_{12}^2 + X_{23}^1X_{34}X_{42} - X_{34}^1X_{42}X_{23}^2 - X_{46}X_{67}X_{73}X_{34}^2 + X_{34}^1X_{45}X_{57}X_{73} - X_{15}X_{57}X_{71} + X_{16}X_{67}X_{71} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84}$

1.20 $K^{2,4,1,2}$

- (I) $-X_{45}X_{56}^2X_{64} + X_{68}X_{85}X_{56}^2 + X_{35}X_{56}^1X_{64}X_{43} - X_{56}^1X_{67}X_{78}X_{85} - X_{16}X_{68}X_{81} + X_{24}X_{45}X_{52} - X_{13}X_{35}X_{52}X_{21} + X_{13}X_{37}X_{78}X_{81} + X_{16}X_{67}X_{72}X_{21} - X_{24}X_{43}X_{37}X_{72}$
- (II) $X_{13}X_{37}X_{71} - X_{18}X_{87}X_{71} + X_{24}X_{45}X_{52} - X_{56}X_{67}X_{75} + X_{58}X_{87}X_{75} - X_{13}X_{35}X_{52}X_{21} - X_{24}X_{43}X_{37}X_{72} + X_{35}X_{56}X_{64}X_{43} - X_{45}X_{58}X_{86}X_{64} + X_{18}X_{86}X_{67}X_{72}X_{21}$
- (III) $X_{13}X_{37}X_{71} - X_{18}X_{87}X_{71} + X_{23}X_{34}X_{42} - X_{23}X_{37}X_{72} - X_{34}X_{46}X_{63} + X_{35}X_{56}X_{63} + X_{46}X_{65}X_{54} - X_{56}X_{67}X_{75} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - X_{13}X_{35}X_{54}X_{42}X_{21} + X_{18}X_{86}X_{67}X_{72}X_{21}$
- (IV) $X_{27}X_{71}X_{12}^2 + X_{12}^1X_{23}X_{31} - X_{12}^1X_{28}X_{81} - X_{24}X_{43}X_{31}X_{12}^2 - X_{15}X_{57}X_{71} + X_{15}X_{58}X_{81} - X_{23}X_{35}X_{52} + X_{24}X_{45}X_{52} - X_{27}X_{76}X_{62} + X_{28}X_{86}X_{62} - X_{45}X_{58}X_{86}X_{64} + X_{35}X_{57}X_{76}X_{64}X_{43}$
- (V) $-X_{34}X_{45}^2X_{53} + X_{24}X_{45}^1X_{53}X_{32} + X_{57}X_{76}X_{64}X_{45}^2 - X_{45}^1X_{58}X_{86}X_{64} - X_{12}X_{24}X_{41} + X_{12}X_{27}X_{71} + X_{13}X_{34}X_{41} - X_{15}X_{57}X_{71} + X_{15}X_{58}X_{81} - X_{27}X_{76}X_{62} + X_{28}X_{86}X_{62} - X_{13}X_{32}X_{28}X_{81}$
- (VI) $-X_{18}X_{87}^2X_{71} - X_{68}X_{87}^1X_{76} + X_{18}X_{87}^1X_{72}X_{21} + X_{58}X_{87}^2X_{76}X_{65} + X_{13}X_{37}X_{71} + X_{24}X_{45}X_{52} + X_{35}X_{54}X_{43} - X_{45}X_{58}X_{84} - X_{46}X_{65}X_{54} + X_{46}X_{68}X_{84} - X_{13}X_{35}X_{52}X_{21} - X_{24}X_{43}X_{37}X_{72}$
- (VII) $X_{13}X_{34}^1X_{41} - X_{23}X_{34}^2X_{42} + X_{56}X_{64}X_{45}^2 - X_{34}^1X_{45}^2X_{53} + X_{45}^1X_{53}X_{34}^2 - X_{45}^1X_{58}X_{86}X_{64} - X_{13}X_{38}X_{81} - X_{17}X_{74}X_{41} + X_{23}X_{38}X_{82} + X_{27}X_{74}X_{42} - X_{27}X_{78}X_{82} - X_{56}X_{67}X_{75} + X_{67}X_{78}X_{86} + X_{17}X_{75}X_{58}X_{81}$

1.21 PdP_{4e} (3)

- (I) $X_{13}X_{32}X_{21}^2 + X_{17}X_{72}X_{21}^1 - X_{13}X_{34}X_{42}X_{21}^1 - X_{16}X_{67}X_{72}X_{21}^2 + X_{16}X_{68}X_{81} - X_{17}X_{78}X_{81} - X_{25}X_{53}X_{32} + X_{25}X_{54}X_{42} - X_{46}X_{68}X_{85}X_{54} + X_{34}X_{46}X_{67}X_{78}X_{85}X_{53}$
- (II) $X_{13}X_{32}X_{21}^2 - X_{13}X_{34}X_{42}X_{21}^1 + X_{18}X_{87}X_{72}X_{21}^1 - X_{18}X_{86}X_{67}X_{72}X_{21}^2 - X_{25}X_{53}X_{32} + X_{25}X_{54}X_{42} - X_{46}X_{65}X_{54} + X_{58}X_{86}X_{65} - X_{58}X_{87}X_{75} + X_{34}X_{46}X_{67}X_{75}X_{53}$

- (III) $X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{28}^1X_{81} + X_{28}^1X_{87}X_{72} - X_{67}X_{72}X_{28}^2X_{86} + X_{12}^1X_{24}X_{43}X_{31} - X_{24}X_{45}X_{53}X_{31}X_{12}^2 - X_{36}X_{64}X_{43} - X_{58}X_{87}X_{75} + X_{36}X_{67}X_{75}X_{53} + X_{45}X_{58}X_{86}X_{64}$
- (IV) $X_{13}X_{32}X_{21}^2 + X_{68}X_{87}^2X_{76} - X_{13}X_{34}X_{42}X_{21}^1 + X_{18}X_{87}^1X_{72}X_{21}^1 - X_{18}X_{87}^2X_{72}X_{21}^2 - X_{56}X_{68}X_{87}^1X_{75} - X_{25}X_{53}X_{32} - X_{47}X_{76}X_{64} + X_{25}X_{56}X_{64}X_{42} + X_{34}X_{47}X_{75}X_{53}$
- (V) $-X_{14}X_{42}X_{21}^1 + X_{15}X_{52}X_{21}^2 - X_{72}X_{21}^2X_{17}^2 + X_{81}X_{17}^2X_{78}^2 + X_{17}^1X_{72}X_{21}^1 - X_{17}^1X_{78}^1X_{81} + X_{37}X_{78}^1X_{86}X_{65}X_{53} - X_{37}X_{78}^2X_{86}X_{64}X_{43} + X_{14}X_{43}X_{31} - X_{15}X_{53}X_{31} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52}$
- (VI) $X_{13}X_{32}^1X_{21}^2 - X_{13}X_{32}^2X_{21}^1 + X_{17}X_{72}X_{21}^1 + X_{24}X_{43}X_{32}^2 - X_{16}X_{67}X_{72}X_{21}^2 - X_{24}X_{45}X_{53}X_{32}^1 + X_{16}X_{68}X_{81} - X_{17}X_{78}X_{81} - X_{36}X_{64}X_{43} + X_{45}X_{56}X_{64} - X_{56}X_{68}X_{85} + X_{36}X_{67}X_{78}X_{85}X_{53}$
- (VII) $-X_{72}X_{21}^2X_{17}^2 + X_{81}X_{17}^2X_{78}^2 + X_{17}^1X_{72}X_{21}^1 - X_{17}^1X_{78}^1X_{81} - X_{13}X_{34}X_{42}X_{21}^1 + X_{13}X_{35}X_{52}X_{21}^2 - X_{47}X_{78}^2X_{86}X_{64} + X_{57}X_{78}^1X_{86}X_{65} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73}$
- (VIII) $X_{13}X_{32}^1X_{21}^2 - X_{13}X_{32}^2X_{21}^1 + X_{18}X_{82}X_{21}^1 + X_{24}X_{43}X_{32}^2 - X_{18}X_{86}X_{62}X_{21}^2 - X_{24}X_{45}X_{53}X_{32}^1 + X_{27}X_{76}X_{62} - X_{27}X_{78}X_{82} - X_{36}X_{64}X_{43} + X_{36}X_{65}X_{53} - X_{57}X_{76}X_{65} + X_{45}X_{57}X_{78}X_{86}X_{64}$
- (IX) $-X_{13}X_{32}X_{21}^1 - X_{67}X_{78}^2X_{86} - X_{72}X_{21}^2X_{17}^2 + X_{81}X_{17}^2X_{78}^2 + X_{17}^1X_{72}X_{21}^1 - X_{17}^1X_{78}^1X_{81} + X_{13}X_{35}X_{52}X_{21}^2 + X_{57}X_{78}^1X_{86}X_{65} + X_{24}X_{43}X_{32} + X_{46}X_{67}X_{74} - X_{24}X_{46}X_{65}X_{52} - X_{35}X_{57}X_{74}X_{43}$
- (X) $X_{12}X_{28}^2X_{81} - X_{35}X_{54}^2X_{43} - X_{46}X_{65}X_{54}^1 + X_{28}^1X_{87}X_{72} - X_{13}X_{32}X_{28}^1X_{81} + X_{25}X_{54}^1X_{43}X_{32} + X_{46}X_{67}X_{75}X_{54}^2 - X_{67}X_{72}X_{28}^2X_{86} - X_{12}X_{25}X_{51} + X_{13}X_{35}X_{51} + X_{58}X_{86}X_{65} - X_{58}X_{87}X_{75}$
- (XI) $X_{35}X_{54}X_{43}^2 - X_{36}X_{64}X_{43}^1 + X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{28}^1X_{81} - X_{24}X_{43}^2X_{31}X_{12}^2 - X_{67}X_{72}X_{28}^2X_{86} + X_{12}^1X_{24}X_{43}^1X_{31} + X_{28}^1X_{85}X_{57}X_{72} - X_{35}X_{57}X_{73} + X_{36}X_{67}X_{73} - X_{48}X_{85}X_{54} + X_{48}X_{86}X_{64}$
- (XII) $X_{13}X_{32}^1X_{21}^2 - X_{13}X_{32}^2X_{21}^1 - X_{25}X_{53}X_{32}^1 + X_{26}X_{63}X_{32}^2 + X_{18}X_{87}^1X_{72}X_{21}^1 - X_{18}X_{87}^2X_{72}X_{21}^2 - X_{48}X_{87}^1X_{75}X_{54} + X_{48}X_{87}^2X_{76}X_{64} + X_{25}X_{54}X_{42} - X_{26}X_{64}X_{42} + X_{37}X_{75}X_{53} - X_{37}X_{76}X_{63}$
- (XIII) $-X_{31}X_{12}^2X_{23}^2 + X_{35}X_{52}X_{23}^2 - X_{47}X_{76}^1X_{64} + X_{57}X_{76}^2X_{65} - X_{68}X_{87}^1X_{76}^2 + X_{68}X_{87}^2X_{76}^1 - X_{72}X_{28}^2X_{87}^2 + X_{81}X_{12}^2X_{28}^2 + X_{12}^1X_{23}^1X_{31} - X_{12}^1X_{28}^1X_{81} - X_{23}^1X_{34}X_{42} + X_{28}^1X_{87}^1X_{72} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73}$

1.22 PdP_{4f} (2)

- (I) $X_{13}X_{34}X_{42}X_{21}^1 + X_{18}X_{87}X_{72}X_{21}^2 - X_{13}X_{35}X_{54}X_{42}X_{21}^2 - X_{18}X_{86}X_{67}X_{72}X_{21}^1 - X_{34}X_{46}X_{63} - X_{58}X_{87}X_{75} + X_{35}X_{58}X_{86}X_{63} + X_{46}X_{67}X_{75}X_{54}$
- (II) $-X_{28}X_{81}X_{12}^2 - X_{12}^1X_{23}X_{31} + X_{24}X_{43}X_{31}X_{12}^2 + X_{12}^1X_{27}X_{78}X_{81} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} - X_{27}X_{75}X_{52} + X_{28}X_{85}X_{52} + X_{46}X_{67}X_{75}X_{54} - X_{36}X_{67}X_{78}X_{85}X_{54}X_{43}$
- (III) $-X_{13}X_{32}X_{21}^2 + X_{13}X_{36}X_{62}X_{21}^1 - X_{18}X_{87}X_{72}X_{21}^1 + X_{18}X_{85}X_{57}X_{72}X_{21}^2 + X_{24}X_{43}X_{32} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76} - X_{36}X_{68}X_{85}X_{54}X_{43}$
- (IV) $X_{15}X_{52}X_{21}^2 - X_{16}X_{62}X_{21}^1 - X_{13}X_{34}X_{42}X_{21}^2 + X_{13}X_{34}^2X_{42}X_{21}^1 - X_{47}X_{76}X_{68}X_{83}X_{34}^2 + X_{34}^1X_{47}X_{75}X_{58}X_{83} - X_{15}X_{58}X_{81} + X_{16}X_{68}X_{81} - X_{27}X_{75}X_{52} + X_{27}X_{76}X_{62}$

- (V) $-X_{13}X_{34}X_{42}X_{21}^2 + X_{16}X_{64}X_{42}X_{21}^1 - X_{18}X_{87}^1X_{72}X_{21}^1 + X_{18}X_{87}^2X_{72}X_{21}^2 - X_{35}X_{58}X_{87}^2X_{73} + X_{58}X_{87}^1X_{76}X_{65} + X_{13}X_{35}X_{51} - X_{16}X_{65}X_{51} + X_{34}X_{47}X_{73} - X_{47}X_{76}X_{64}$
- (VI) $-X_{14}X_{42}X_{21}^2 - X_{58}X_{87}^2X_{75} + X_{16}X_{64}X_{42}X_{21}^1 - X_{18}X_{87}^1X_{72}X_{21}^1 + X_{18}X_{87}^2X_{72}X_{21}^2 + X_{58}X_{87}^1X_{76}X_{65} + X_{14}X_{43}X_{31} + X_{37}X_{75}X_{53} - X_{16}X_{65}X_{53}X_{31} - X_{37}X_{76}X_{64}X_{43}$
- (VII) $-X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{23}X_{31} + X_{12}^1X_{28}^1X_{81} - X_{28}^1X_{87}X_{72} + X_{24}X_{43}X_{31}X_{12}^2 + X_{57}X_{72}X_{28}^2X_{85} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76} - X_{36}X_{68}X_{85}X_{54}X_{43}$
- (VIII) $-X_{58}X_{87}^2X_{75} + X_{72}X_{28}^2X_{87}^2 - X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{23}X_{31} + X_{12}^1X_{28}^1X_{81} - X_{28}^1X_{87}^1X_{72} + X_{24}X_{43}X_{31}X_{12}^2 + X_{56}X_{68}X_{87}^1X_{75} + X_{23}X_{36}X_{62} + X_{45}X_{58}X_{84} - X_{24}X_{45}X_{56}X_{62} - X_{36}X_{68}X_{84}X_{43}$
- (IX) $-X_{12}X_{28}^2X_{81} + X_{34}X_{46}^2X_{63} - X_{28}^1X_{87}X_{72} + X_{46}^1X_{65}X_{54} + X_{13}X_{32}X_{28}^1X_{81} - X_{24}X_{46}^1X_{63}X_{32} - X_{54}X_{46}^2X_{68}X_{85} + X_{57}X_{72}X_{28}^2X_{85} + X_{12}X_{24}X_{41} - X_{13}X_{34}X_{41} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76}$
- (X) $X_{31}X_{12}^2X_{23}^2 - X_{34}X_{42}X_{23}^2 - X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{23}^1X_{31} + X_{12}^1X_{28}^1X_{81} - X_{28}^1X_{87}X_{72} + X_{57}X_{72}X_{28}^2X_{85} + X_{23}^1X_{36}X_{64}X_{42} + X_{34}X_{45}X_{53} + X_{68}X_{87}X_{76} - X_{36}X_{68}X_{85}X_{53} - X_{45}X_{57}X_{76}X_{64}$
- (XI) $X_{31}X_{12}^2X_{23}^2 - X_{34}X_{42}X_{23}^2 + X_{72}X_{28}^2X_{87}^2 - X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{23}^1X_{31} + X_{12}^1X_{28}^1X_{81} + X_{23}^1X_{36}X_{62} - X_{28}^1X_{87}^1X_{72} - X_{48}X_{87}^2X_{75}X_{54} + X_{56}X_{68}X_{87}^1X_{75} + X_{25}X_{54}X_{42} - X_{25}X_{56}X_{62} + X_{34}X_{48}X_{83} - X_{36}X_{68}X_{83}$
- (XII) $X_{52}X_{28}^2X_{85} - X_{63}X_{37}^2X_{76} + X_{74}X_{43}^2X_{37}^2 - X_{81}X_{12}^2X_{28}^2 + X_{12}^1X_{28}^1X_{81} - X_{28}^1X_{86}X_{62} - X_{37}^1X_{74}X_{43}^1 + X_{37}^1X_{75}X_{53} + X_{24}X_{43}^1X_{31}X_{12}^2 - X_{12}^1X_{24}X_{43}^2X_{31} - X_{27}X_{75}X_{52} + X_{27}X_{76}X_{62} - X_{38}X_{85}X_{53} + X_{38}X_{86}X_{63}$
- (XIII) $X_{31}X_{12}^2X_{23}^2 - X_{46}X_{63}X_{34}^2 - X_{81}X_{12}^2X_{28}^2 - X_{12}^1X_{23}^1X_{31} + X_{12}^1X_{28}^1X_{81} + X_{23}^1X_{34}^2X_{42} - X_{34}^1X_{42}X_{23}^2 + X_{34}^1X_{45}X_{53} + X_{57}X_{72}X_{28}^2X_{85} - X_{28}^1X_{86}X_{67}X_{72} - X_{38}X_{85}X_{53} + X_{38}X_{86}X_{63} - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74}$

1.23 $L^{5,4,1}$

- (I) $X_{12}X_{23}X_{31} - X_{12}X_{28}X_{81} + X_{14}X_{42}X_{21} - X_{14}X_{43}X_{31} - X_{19}X_{92}X_{21} + X_{19}X_{98}X_{81} - X_{23}X_{34}X_{42} + X_{28}X_{89}X_{92} + X_{34}X_{45}X_{53} + X_{36}X_{64}X_{43} - X_{45}X_{56}X_{64} + X_{67}X_{79}X_{96} - X_{68}X_{89}X_{96} - X_{79}X_{98}X_{87} - X_{36}X_{67}X_{75}X_{53} + X_{56}X_{68}X_{87}X_{75}$

1.24 $\text{SPP}/\mathbb{Z}_3 (1, 0, 0, 2)$

- (I) $-X_{12}X_{28}X_{81} + X_{14}X_{43}X_{31} - X_{14}X_{45}X_{51} + X_{19}X_{98}X_{81} + X_{48}X_{86}X_{64} - X_{48}X_{87}X_{74} + X_{12}X_{23}X_{35}X_{51} - X_{19}X_{92}X_{23}X_{31} + X_{28}X_{87}X_{79}X_{92} - X_{35}X_{56}X_{64}X_{43} + X_{45}X_{56}X_{67}X_{74} - X_{67}X_{79}X_{98}X_{86}$
- (II) $-X_{29}X_{98}^2X_{82} + X_{79}X_{98}^2X_{87} + X_{19}X_{98}^1X_{82}X_{21} - X_{67}X_{79}X_{98}^1X_{86} - X_{13}X_{32}X_{21} + X_{13}X_{35}X_{51} + X_{14}X_{43}X_{31} - X_{14}X_{45}X_{51} - X_{19}X_{93}X_{31} + X_{29}X_{93}X_{32} + X_{48}X_{86}X_{64} - X_{48}X_{87}X_{74} - X_{35}X_{56}X_{64}X_{43} + X_{45}X_{56}X_{67}X_{74}$

$$(III) -X_{29}X_{98}^2X_{82}+X_{68}X_{87}^2X_{76}-X_{79}X_{98}^1X_{87}^2+X_{79}X_{98}^2X_{87}^1+X_{19}X_{98}^1X_{82}X_{21}-X_{46}X_{68}X_{87}^1X_{74}-X_{13}X_{32}X_{21}+X_{13}X_{35}X_{51}+X_{14}X_{43}X_{31}-X_{14}X_{45}X_{51}-X_{19}X_{93}X_{31}+X_{29}X_{93}X_{32}-X_{35}X_{54}X_{43}+X_{45}X_{57}X_{74}+X_{46}X_{65}X_{54}-X_{57}X_{76}X_{65}$$

1.25 PdP_{5b} (2)

- (I) $X_{12}X_{24}X_{41}-X_{12}X_{28}X_{81}+X_{13}X_{32}X_{21}-X_{19}X_{92}X_{21}+X_{19}X_{98}X_{81}-X_{24}X_{43}X_{32}+X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}+X_{28}X_{87}X_{79}X_{92}-X_{67}X_{79}X_{98}X_{86}-X_{13}X_{36}X_{65}X_{54}X_{41}+X_{36}X_{67}X_{75}X_{54}X_{43}$
- (II) $X_{12}X_{24}X_{41}-X_{24}X_{43}X_{32}+X_{28}X_{87}X_{72}-X_{29}X_{97}X_{72}+X_{35}X_{56}X_{63}-X_{37}X_{76}X_{63}-X_{12}X_{28}X_{89}X_{91}+X_{13}X_{32}X_{29}X_{91}-X_{13}X_{35}X_{54}X_{41}+X_{37}X_{75}X_{54}X_{43}-X_{56}X_{68}X_{87}X_{75}+X_{68}X_{89}X_{97}X_{76}$
- (III) $-X_{29}X_{98}^2X_{82}+X_{19}X_{98}^1X_{82}X_{21}+X_{57}X_{79}X_{98}^2X_{85}-X_{56}X_{67}X_{79}X_{98}^1X_{85}-X_{13}X_{32}X_{21}+X_{13}X_{34}X_{41}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}-X_{19}X_{93}X_{31}+X_{29}X_{93}X_{32}-X_{34}X_{46}X_{63}+X_{45}X_{56}X_{64}-X_{45}X_{57}X_{74}+X_{46}X_{67}X_{74}$
- (IV) $-X_{29}X_{98}^2X_{82}+X_{79}X_{98}^2X_{87}+X_{19}X_{98}^1X_{82}X_{21}-X_{67}X_{79}X_{98}^1X_{86}-X_{13}X_{32}X_{21}+X_{13}X_{34}X_{41}+X_{16}X_{63}X_{31}-X_{19}X_{93}X_{31}+X_{29}X_{93}X_{32}-X_{34}X_{46}X_{63}+X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}-X_{16}X_{65}X_{54}X_{41}+X_{46}X_{67}X_{75}X_{54}$
- (V) $X_{36}X_{64}^2X_{43}-X_{45}X_{56}X_{64}^2-X_{13}X_{36}X_{64}^1X_{41}+X_{45}X_{57}X_{76}X_{64}^1+X_{12}X_{24}X_{41}-X_{12}X_{28}X_{81}+X_{13}X_{32}X_{21}-X_{19}X_{92}X_{21}+X_{19}X_{98}X_{81}-X_{24}X_{43}X_{32}+X_{56}X_{69}X_{95}-X_{57}X_{79}X_{95}+X_{28}X_{87}X_{79}X_{92}-X_{69}X_{98}X_{87}X_{76}$
- (VI) $X_{45}X_{56}^1X_{64}-X_{56}^1X_{67}X_{75}-X_{34}X_{45}X_{56}^2X_{63}+X_{69}X_{97}X_{75}X_{56}^2-X_{12}X_{28}X_{81}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}+X_{19}X_{98}X_{81}+X_{28}X_{89}X_{92}+X_{67}X_{78}X_{86}-X_{69}X_{98}X_{86}-X_{78}X_{89}X_{97}+X_{12}X_{23}X_{34}X_{41}-X_{19}X_{92}X_{23}X_{31}$
- (VII) $X_{13}^1X_{32}X_{21}-X_{13}^1X_{34}X_{41}-X_{28}X_{81}X_{13}^2X_{32}+X_{34}X_{45}X_{51}X_{13}^2+X_{16}X_{64}X_{41}-X_{16}X_{65}X_{51}-X_{19}X_{92}X_{21}+X_{19}X_{98}X_{81}-X_{45}X_{56}X_{64}+X_{56}X_{67}X_{75}+X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}+X_{28}X_{87}X_{79}X_{92}-X_{67}X_{79}X_{98}X_{86}$
- (VIII) $X_{36}X_{64}^2X_{43}+X_{45}X_{56}^1X_{64}^1-X_{45}X_{56}^2X_{64}^2-X_{56}^1X_{67}X_{75}-X_{13}X_{36}X_{64}^1X_{41}+X_{69}X_{97}X_{75}X_{56}^2+X_{12}X_{24}X_{41}-X_{12}X_{28}X_{81}+X_{13}X_{32}X_{21}-X_{19}X_{92}X_{21}+X_{19}X_{98}X_{81}-X_{24}X_{43}X_{32}+X_{28}X_{89}X_{92}+X_{67}X_{78}X_{86}-X_{69}X_{98}X_{86}-X_{78}X_{89}X_{97}$

1.26 K^{2,5,1,2}

- (I) $-X_{13}X_{32}X_{21}+X_{24}X_{43}X_{32}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{35}X_{54}X_{43}+X_{35}X_{57}X_{73}-X_{36}X_{67}X_{73}+X_{67}X_{79}X_{96}-X_{18}X_{82}X_{24}X_{41}+X_{18}X_{89}X_{92}X_{21}+X_{13}X_{36}X_{65}X_{54}X_{41}-X_{57}X_{78}X_{89}X_{96}X_{65}$
- (II) $X_{56}X_{67}^2X_{75}+X_{67}^1X_{79}X_{96}-X_{36}X_{67}^1X_{75}X_{53}-X_{78}X_{89}X_{96}X_{67}^2-X_{13}X_{32}X_{21}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{45}X_{56}X_{64}+X_{13}X_{36}X_{64}X_{41}-X_{18}X_{82}X_{24}X_{41}+X_{18}X_{89}X_{92}X_{21}+X_{24}X_{45}X_{53}X_{32}$

- (III) $X_{14}X_{42}X_{21}^2 - X_{18}X_{82}X_{21}^2 - X_{13}X_{34}X_{42}X_{21}^1 + X_{18}X_{89}X_{92}X_{21}^1 - X_{14}X_{45}X_{51} + X_{27}X_{78}X_{82} - X_{27}X_{79}X_{92} - X_{36}X_{67}X_{73} + X_{67}X_{79}X_{96} + X_{13}X_{36}X_{65}X_{51} + X_{34}X_{45}X_{57}X_{73} - X_{57}X_{78}X_{89}X_{96}X_{65}$
- (IV) $-X_{43}X_{35}^2X_{54} + X_{63}X_{35}^2X_{56}^2 - X_{35}^1X_{56}^1X_{63} + X_{56}^1X_{68}X_{85} + X_{13}X_{35}^1X_{54}X_{41} - X_{67}X_{78}X_{85}X_{56}^2 + X_{24}X_{43}X_{32} - X_{68}X_{89}X_{96} - X_{13}X_{32}X_{29}X_{91} - X_{17}X_{72}X_{24}X_{41} + X_{17}X_{78}X_{89}X_{91} + X_{29}X_{96}X_{67}X_{72}$
- (V) $-X_{14}X_{43}^2X_{31} - X_{35}X_{54}X_{43}^1 + X_{12}X_{24}X_{43}^1X_{31} + X_{36}X_{65}X_{54}X_{43}^2 - X_{12}X_{28}X_{81} + X_{14}X_{48}X_{81} - X_{24}X_{48}X_{82} + X_{27}X_{78}X_{82} - X_{27}X_{79}X_{92} + X_{28}X_{89}X_{92} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{67}X_{79}X_{96} - X_{57}X_{78}X_{89}X_{96}X_{65}$
- (VI) $-X_{14}X_{43}^2X_{31} + X_{35}^1X_{54}X_{43}^2 - X_{35}^1X_{56}X_{63} - X_{43}^1X_{35}^2X_{54} + X_{12}X_{24}X_{43}^1X_{31} + X_{57}X_{76}X_{63}X_{35}^2 - X_{12}X_{28}X_{81} + X_{14}X_{48}X_{81} - X_{24}X_{48}X_{82} + X_{27}X_{78}X_{82} + X_{28}X_{89}X_{92} + X_{56}X_{69}X_{95} - X_{27}X_{76}X_{69}X_{92} - X_{57}X_{78}X_{89}X_{95}$
- (VII) $X_{14}X_{42}X_{21}^2 - X_{18}X_{82}^1X_{21}^2 + X_{18}X_{82}^2X_{21}^1 + X_{27}X_{78}X_{82}^1 - X_{29}X_{98}X_{82}^2 - X_{13}X_{34}X_{42}X_{21}^1 + X_{13}X_{35}X_{51} - X_{14}X_{45}X_{51} - X_{27}X_{76}X_{62} + X_{29}X_{96}X_{62} - X_{57}X_{78}X_{85} + X_{59}X_{98}X_{85} - X_{35}X_{59}X_{96}X_{63} + X_{34}X_{45}X_{57}X_{76}X_{63}$
- (VIII) $-X_{43}X_{35}^2X_{54} + X_{63}X_{35}^2X_{56}^2 - X_{35}^1X_{56}^1X_{63} + X_{13}X_{35}^1X_{54}X_{41} - X_{67}X_{78}X_{85}X_{56}^2 + X_{56}^1X_{69}X_{98}X_{85} - X_{13}X_{32}X_{21} + X_{17}X_{78}X_{81} + X_{19}X_{92}X_{21} - X_{19}X_{98}X_{81} + X_{24}X_{43}X_{32} + X_{26}X_{67}X_{72} - X_{26}X_{69}X_{92} - X_{17}X_{72}X_{24}X_{41}$
- (IX) $X_{14}X_{42}X_{21}^2 - X_{17}X_{72}X_{21}^2 + X_{19}X_{92}X_{21}^1 - X_{35}X_{56}^1X_{63} - X_{13}X_{34}X_{42}X_{21}^1 + X_{34}X_{45}X_{56}^2X_{63} - X_{67}X_{78}X_{85}X_{56}^2 + X_{56}^1X_{69}X_{98}X_{85} + X_{13}X_{35}X_{51} - X_{14}X_{45}X_{51} + X_{17}X_{78}X_{81} - X_{19}X_{98}X_{81} + X_{26}X_{67}X_{72} - X_{26}X_{69}X_{92}$
- (X) $-X_{18}X_{82}X_{21}^2 + X_{31}X_{14}^2X_{43}^1 + X_{35}X_{54}X_{43}^2 - X_{36}X_{64}X_{43}^1 + X_{14}^1X_{42}X_{21}^2 - X_{14}^1X_{43}^2X_{31} - X_{21}^1X_{14}^2X_{42} + X_{18}X_{89}X_{92}X_{21}^1 + X_{27}X_{78}X_{82} - X_{35}X_{59}X_{93} + X_{36}X_{69}X_{93} - X_{47}X_{75}X_{54} + X_{47}X_{76}X_{64} + X_{59}X_{97}X_{75} - X_{78}X_{89}X_{97} - X_{27}X_{76}X_{69}X_{92}$

1.27 $K^{2,4,1,3}$

- (I) $-X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{18}X_{82}X_{21} + X_{23}X_{34}X_{42} - X_{45}X_{56}X_{64} + X_{14}X_{45}X_{53}X_{31} - X_{18}X_{86}X_{69}X_{91} - X_{29}X_{97}X_{78}X_{82} - X_{34}X_{47}X_{75}X_{53} + X_{47}X_{78}X_{86}X_{64} + X_{56}X_{69}X_{97}X_{75}$
- (II) $-X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} + X_{18}X_{82}X_{21} - X_{18}X_{86}X_{61} + X_{19}X_{96}X_{61} + X_{23}X_{34}X_{42} - X_{27}X_{78}X_{82} + X_{27}X_{79}X_{92} - X_{34}X_{47}X_{73} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{19}X_{92}X_{23}X_{31} - X_{57}X_{79}X_{96}X_{65} + X_{47}X_{78}X_{86}X_{65}X_{54}$
- (III) $-X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} + X_{18}X_{82}X_{21} + X_{23}X_{34}X_{42} - X_{34}X_{47}X_{73} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{57}X_{76}X_{65} + X_{69}X_{97}X_{76} - X_{18}X_{86}X_{69}X_{91} - X_{29}X_{97}X_{78}X_{82} + X_{47}X_{78}X_{86}X_{65}X_{54}$
- (IV) $-X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{16}X_{68}X_{81} - X_{16}X_{69}X_{91} + X_{23}X_{34}X_{42} + X_{28}X_{87}X_{72} - X_{29}X_{97}X_{72} - X_{45}X_{56}X_{64} + X_{47}X_{76}X_{64} - X_{68}X_{87}X_{76} - X_{14}X_{42}X_{28}X_{81} + X_{14}X_{45}X_{53}X_{31} - X_{34}X_{47}X_{75}X_{53} + X_{56}X_{69}X_{97}X_{75}$

$$(V) -X_{57}X_{76}^1X_{65} - X_{68}X_{87}X_{76}^2 + X_{69}X_{97}X_{76}^1 + X_{47}X_{76}^2X_{65}X_{54} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{14}X_{43}X_{31} + X_{16}X_{68}X_{81} - X_{16}X_{69}X_{91} + X_{23}X_{34}X_{42} + X_{28}X_{87}X_{72} - X_{29}X_{97}X_{72} - X_{34}X_{47}X_{73} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{14}X_{42}X_{28}X_{81}$$

1.28 $K^{4,3,2,2}$

- (I) $X_{13}X_{32}X_{21} - X_{19}X_{92}X_{21} + X_{28}X_{89}X_{92} - X_{13}X_{35}X_{54}X_{41} - X_{24}X_{46}X_{63}X_{32} - X_{28}X_{85}X_{57}X_{72} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54} - X_{68}X_{89}X_{97}X_{76} + X_{19}X_{97}X_{72}X_{24}X_{41}$
- (II) $X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{28}X_{89}X_{92} - X_{36}X_{65}X_{53} + X_{57}X_{76}X_{65} - X_{19}X_{92}X_{23}X_{31} - X_{28}X_{85}X_{57}X_{72} + X_{46}X_{68}X_{85}X_{54} - X_{68}X_{89}X_{97}X_{76} + X_{19}X_{97}X_{72}X_{24}X_{41}$
- (III) $-X_{14}X_{42}X_{21} + X_{28}X_{89}X_{92} - X_{36}X_{65}X_{53} - X_{45}X_{56}X_{64} + X_{56}X_{68}X_{85} + X_{57}X_{76}X_{65} + X_{14}X_{45}X_{53}X_{31} - X_{19}X_{92}X_{23}X_{31} + X_{19}X_{97}X_{72}X_{21} + X_{23}X_{36}X_{64}X_{42} - X_{28}X_{85}X_{57}X_{72} - X_{68}X_{89}X_{97}X_{76}$
- (IV) $-X_{36}X_{65}^1X_{53} + X_{46}X_{65}^2X_{54} + X_{57}X_{76}X_{65}^1 - X_{58}X_{86}X_{65}^2 + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} - X_{25}X_{57}X_{72} + X_{25}X_{58}X_{82} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86} + X_{19}X_{97}X_{72}X_{24}X_{41} - X_{19}X_{98}X_{82}X_{23}X_{31}$
- (V) $X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} - X_{19}X_{92}X_{21} - X_{24}X_{43}X_{32} - X_{28}X_{87}X_{72} + X_{28}X_{89}X_{92} + X_{34}X_{45}X_{53} + X_{36}X_{64}X_{43} + X_{58}X_{87}X_{75} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} - X_{36}X_{67}X_{75}X_{53} - X_{45}X_{58}X_{86}X_{64} + X_{19}X_{97}X_{72}X_{24}X_{41}$
- (VI) $-X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} - X_{17}X_{79}X_{91} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} - X_{36}X_{65}X_{53} + X_{57}X_{76}X_{65} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} + X_{17}X_{72}X_{24}X_{41} + X_{46}X_{68}X_{85}X_{54} - X_{29}X_{98}X_{85}X_{57}X_{72}$
- (VII) $-X_{27}X_{79}X_{92}^2 + X_{28}X_{89}X_{92}^1 - X_{19}X_{92}^1X_{23}X_{31} + X_{19}X_{92}^2X_{24}X_{41} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{27}X_{75}X_{52} - X_{28}X_{85}X_{52} + X_{67}X_{79}X_{96} - X_{68}X_{89}X_{96} - X_{36}X_{67}X_{75}X_{53} + X_{46}X_{68}X_{85}X_{54}$
- (VIII) $X_{13}X_{32}X_{21}^1 - X_{14}X_{42}X_{21}^2 - X_{19}X_{92}X_{21}^1 + X_{19}X_{97}X_{72}X_{21}^2 - X_{13}X_{35}X_{51} + X_{14}X_{45}X_{51} - X_{26}X_{63}X_{32} + X_{26}X_{64}X_{42} + X_{28}X_{89}X_{92} - X_{45}X_{56}X_{64} + X_{56}X_{68}X_{85} - X_{28}X_{85}X_{57}X_{72} + X_{35}X_{57}X_{76}X_{63} - X_{68}X_{89}X_{97}X_{76}$
- (IX) $X_{13}X_{32}X_{21}^1 - X_{14}X_{42}X_{21}^2 - X_{19}X_{92}X_{21}^1 + X_{19}X_{92}^2X_{21}^2 - X_{27}X_{79}X_{92}^2 + X_{28}X_{89}X_{92}^1 + X_{35}X_{56}^2X_{63} - X_{45}X_{56}^1X_{64} - X_{67}X_{75}X_{56}^2 + X_{56}^1X_{68}X_{85} - X_{13}X_{35}X_{51} + X_{14}X_{45}X_{51} - X_{26}X_{63}X_{32} + X_{26}X_{64}X_{42} + X_{27}X_{75}X_{52} - X_{28}X_{85}X_{52} + X_{67}X_{79}X_{96} - X_{68}X_{89}X_{96}$

1.29 PdP_{5c} (3)

- (I) $X_{19}X_{92}X_{21} - X_{36}X_{64}X_{43} + X_{36}X_{65}X_{53} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76} - X_{19}X_{96}X_{68}X_{81} - X_{28}X_{87}X_{79}X_{92} + X_{14}X_{43}X_{32}X_{28}X_{81} - X_{14}X_{45}X_{53}X_{32}X_{21} + X_{45}X_{57}X_{79}X_{96}X_{64}$
- (II) $-X_{18}X_{82}X_{21} - X_{36}X_{64}X_{43} + X_{36}X_{65}X_{53} - X_{69}X_{97}X_{76} + X_{14}X_{43}X_{32}X_{21} + X_{18}X_{86}X_{69}X_{91} + X_{29}X_{97}X_{78}X_{82} + X_{45}X_{57}X_{76}X_{64} - X_{57}X_{78}X_{86}X_{65} - X_{14}X_{45}X_{53}X_{32}X_{29}X_{91}$

- (III) $-X_{34}X_{45}^1X_{53}+X_{23}X_{34}X_{45}^2X_{52}+X_{45}^1X_{57}X_{76}X_{64}-X_{57}X_{78}X_{86}X_{64}X_{45}^2+X_{15}X_{53}X_{31}-X_{69}X_{97}X_{76}-X_{15}X_{52}X_{29}X_{91}-X_{18}X_{82}X_{23}X_{31}+X_{18}X_{86}X_{69}X_{91}+X_{29}X_{97}X_{78}X_{82}$
- (IV) $-X_{18}X_{82}X_{21}+X_{29}X_{98}X_{82}-X_{36}X_{64}X_{43}+X_{36}X_{65}X_{53}+X_{45}X_{56}X_{64}-X_{56}X_{67}X_{75}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{79}X_{98}X_{87}+X_{14}X_{43}X_{32}X_{21}+X_{18}X_{86}X_{67}X_{79}X_{91}-X_{14}X_{45}X_{53}X_{32}X_{29}X_{91}$
- (V) $X_{14}X_{42}X_{21}^1-X_{18}X_{82}X_{21}^1+X_{19}X_{92}X_{21}^2-X_{14}X_{45}X_{52}X_{21}^2+X_{18}X_{86}X_{61}-X_{19}X_{96}X_{61}-X_{23}X_{34}X_{42}+X_{23}X_{35}X_{52}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{35}X_{57}X_{78}X_{86}X_{63}+X_{34}X_{45}X_{57}X_{79}X_{96}X_{63}$
- (VI) $-X_{43}X_{35}^2X_{54}+X_{24}X_{43}X_{35}^1X_{52}+X_{57}X_{79}X_{96}X_{63}X_{35}^2-X_{35}^1X_{57}X_{78}X_{86}X_{63}-X_{15}X_{52}X_{21}+X_{15}X_{54}X_{41}+X_{18}X_{86}X_{61}+X_{19}X_{92}X_{21}-X_{19}X_{96}X_{61}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{18}X_{82}X_{24}X_{41}$
- (VII) $X_{14}X_{42}X_{21}^1-X_{14}X_{45}X_{52}X_{21}^2-X_{18}X_{87}X_{72}X_{21}^1+X_{19}X_{97}X_{72}X_{21}^2+X_{18}X_{86}X_{61}-X_{19}X_{96}X_{61}-X_{23}X_{34}X_{42}+X_{23}X_{35}X_{52}+X_{58}X_{87}X_{75}-X_{59}X_{97}X_{75}-X_{35}X_{58}X_{86}X_{63}+X_{34}X_{45}X_{59}X_{96}X_{63}$
- (VIII) $-X_{12}X_{24}X_{41}+X_{19}X_{94}X_{41}-X_{19}X_{98}X_{81}+X_{24}X_{43}X_{32}-X_{36}X_{64}X_{43}+X_{36}X_{65}X_{53}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}+X_{45}X_{57}X_{76}X_{64}-X_{57}X_{78}X_{86}X_{65}+X_{12}X_{29}X_{97}X_{78}X_{81}-X_{29}X_{94}X_{45}X_{53}X_{32}$
- (IX) $X_{35}X_{54}X_{43}^2+X_{14}X_{43}^1X_{32}X_{21}-X_{35}X_{56}X_{64}X_{43}^1-X_{14}X_{43}^2X_{32}X_{29}X_{91}-X_{18}X_{82}X_{21}-X_{47}X_{75}X_{54}+X_{47}X_{76}X_{64}+X_{56}X_{67}X_{75}-X_{67}X_{78}X_{86}-X_{69}X_{97}X_{76}+X_{18}X_{86}X_{69}X_{91}+X_{29}X_{97}X_{78}X_{82}$
- (X) $X_{35}^1X_{54}X_{43}-X_{14}X_{43}X_{35}^2X_{51}+X_{57}X_{76}X_{63}X_{35}^2-X_{35}^1X_{57}X_{78}X_{86}X_{63}-X_{19}X_{98}X_{81}-X_{25}X_{54}X_{42}-X_{28}X_{89}X_{92}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}+X_{78}X_{89}X_{97}+X_{14}X_{42}X_{28}X_{81}+X_{19}X_{92}X_{25}X_{51}$
- (XI) $-X_{19}^1X_{98}X_{81}-X_{21}X_{19}^2X_{93}X_{32}+X_{78}X_{81}X_{19}^2X_{97}+X_{19}^1X_{94}X_{42}X_{21}+X_{26}X_{63}X_{32}-X_{26}X_{64}X_{42}+X_{35}X_{59}X_{93}-X_{45}X_{59}X_{94}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}+X_{45}X_{57}X_{76}X_{64}-X_{35}X_{57}X_{78}X_{86}X_{63}$
- (XII) $X_{14}X_{43}^1X_{31}+X_{35}X_{54}X_{43}^2-X_{14}X_{43}^2X_{39}X_{91}-X_{35}X_{56}X_{64}X_{43}^1-X_{12}X_{23}X_{31}-X_{26}X_{68}X_{82}-X_{47}X_{75}X_{54}+X_{47}X_{76}X_{64}+X_{12}X_{26}X_{69}X_{91}+X_{23}X_{39}X_{98}X_{82}+X_{56}X_{68}X_{87}X_{75}-X_{69}X_{98}X_{87}X_{76}$
- (XIII) $-X_{43}X_{35}^2X_{54}+X_{57}X_{73}X_{35}^2+X_{24}X_{43}X_{35}^1X_{52}-X_{35}^1X_{57}X_{78}X_{83}+X_{15}X_{54}X_{41}+X_{18}X_{89}X_{91}-X_{36}X_{67}X_{73}+X_{36}X_{68}X_{83}-X_{68}X_{89}X_{96}-X_{15}X_{52}X_{29}X_{91}-X_{18}X_{82}X_{24}X_{41}+X_{29}X_{96}X_{67}X_{78}X_{82}$
- (XIV) $-X_{18}X_{82}X_{21}^1+X_{19}X_{92}X_{21}^2+X_{14}X_{43}X_{32}X_{21}^1-X_{14}X_{45}X_{53}X_{32}X_{21}^2+X_{18}X_{86}X_{61}-X_{19}X_{96}X_{61}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{36}X_{64}X_{43}+X_{36}X_{65}X_{53}-X_{57}X_{78}X_{86}X_{65}+X_{45}X_{57}X_{79}X_{96}X_{64}$
- (XV) $-X_{19}X_{98}^2X_{81}-X_{79}X_{98}^1X_{87}+X_{12}X_{29}X_{98}^1X_{81}+X_{67}X_{79}X_{98}^2X_{86}+X_{19}X_{94}X_{41}+X_{23}X_{35}X_{52}-X_{56}X_{67}X_{75}+X_{58}X_{87}X_{75}-X_{12}X_{23}X_{34}X_{41}-X_{29}X_{94}X_{45}X_{52}+X_{34}X_{45}X_{56}X_{63}-X_{35}X_{58}X_{86}X_{63}$

- (XVI) $-X_{46}X_{65}^2X_{54}+X_{57}X_{76}X_{65}^2+X_{34}X_{46}X_{65}^1X_{53}-X_{57}X_{78}X_{86}X_{65}^1+X_{13}X_{32}X_{21}-X_{13}X_{34}X_{41}+X_{15}X_{54}X_{41}-X_{18}X_{82}X_{21}-X_{69}X_{97}X_{76}+X_{18}X_{86}X_{69}X_{91}+X_{29}X_{97}X_{78}X_{82}-X_{15}X_{53}X_{32}X_{29}X_{91}$
- (XVII) $-X_{34}X_{45}X_{53}^1+X_{36}X_{65}^1X_{53}^1-X_{36}X_{65}^2X_{53}^2+X_{57}X_{76}X_{65}^2+X_{15}X_{53}^2X_{34}X_{41}-X_{57}X_{78}X_{86}X_{65}^1+X_{24}X_{45}X_{52}-X_{69}X_{97}X_{76}-X_{15}X_{52}X_{29}X_{91}-X_{18}X_{82}X_{24}X_{41}+X_{18}X_{86}X_{69}X_{91}+X_{29}X_{97}X_{78}X_{82}$
- (XVIII) $-X_{21}X_{19}^2X_{92}-X_{19}^1X_{98}X_{81}+X_{78}X_{81}X_{19}^2X_{97}+X_{19}^1X_{94}X_{42}X_{21}+X_{23}X_{39}X_{92}+X_{36}X_{65}X_{53}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}-X_{23}X_{36}X_{64}X_{42}-X_{39}X_{94}X_{45}X_{53}+X_{45}X_{57}X_{76}X_{64}-X_{57}X_{78}X_{86}X_{65}$
- (XIX) $X_{19}^1X_{92}X_{21}-X_{19}^1X_{98}X_{81}-X_{21}X_{19}^2X_{93}X_{32}+X_{78}X_{81}X_{19}^2X_{97}-X_{24}X_{49}X_{92}-X_{46}X_{65}X_{54}+X_{57}X_{76}X_{65}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}+X_{24}X_{46}X_{63}X_{32}+X_{35}X_{54}X_{49}X_{93}-X_{35}X_{57}X_{78}X_{86}X_{63}$
- (XX) $-X_{13}X_{34}X_{45}^1X_{51}+X_{23}X_{34}X_{45}^2X_{52}+X_{45}^1X_{57}X_{76}X_{64}-X_{57}X_{78}X_{86}X_{64}X_{45}^2+X_{13}X_{38}X_{81}+X_{19}X_{95}X_{51}-X_{19}X_{98}X_{81}-X_{23}X_{38}X_{82}-X_{29}X_{95}X_{52}-X_{69}X_{97}X_{76}+X_{69}X_{98}X_{86}+X_{29}X_{97}X_{78}X_{82}$
- (XXI) $X_{13}X_{32}X_{21}^1+X_{19}X_{92}X_{21}^2-X_{15}X_{53}X_{32}X_{21}^2-X_{18}X_{89}X_{92}X_{21}^1-X_{13}X_{34}X_{41}+X_{15}X_{54}X_{41}-X_{19}X_{97}X_{71}-X_{58}X_{86}X_{65}+X_{18}X_{86}X_{67}X_{71}+X_{34}X_{46}X_{65}X_{53}-X_{46}X_{67}X_{75}X_{54}+X_{58}X_{89}X_{97}X_{75}$
- (XXII) $X_{13}X_{32}X_{21}^1-X_{17}X_{72}X_{21}^1-X_{15}X_{53}X_{32}X_{21}^2+X_{19}X_{97}X_{72}X_{21}^2-X_{13}X_{34}X_{41}+X_{15}X_{54}X_{41}+X_{17}X_{78}X_{81}-X_{46}X_{65}X_{54}+X_{59}X_{96}X_{65}-X_{19}X_{96}X_{68}X_{81}-X_{59}X_{97}X_{78}X_{85}+X_{34}X_{46}X_{68}X_{85}X_{53}$
- (XXIII) $X_{14}X_{43}^2X_{31}+X_{35}X_{54}X_{43}^1-X_{14}X_{43}^1X_{39}X_{91}-X_{35}X_{56}X_{64}X_{43}^2-X_{12}X_{23}X_{31}+X_{23}X_{39}X_{92}-X_{28}X_{89}X_{92}-X_{47}X_{75}X_{54}+X_{47}X_{76}X_{64}+X_{56}X_{67}X_{75}-X_{67}X_{78}X_{86}-X_{69}X_{97}X_{76}+X_{78}X_{89}X_{97}+X_{12}X_{28}X_{86}X_{69}X_{91}$
- (XXIV) $X_{14}X_{42}^1X_{21}^1-X_{14}X_{42}^2X_{21}^2-X_{18}X_{82}X_{21}^1+X_{19}X_{92}X_{21}^2+X_{23}X_{34}X_{42}^2-X_{23}X_{35}X_{54}X_{42}^1+X_{18}X_{86}X_{61}-X_{19}X_{96}X_{61}+X_{27}X_{78}X_{82}-X_{27}X_{79}X_{92}-X_{34}X_{47}X_{73}+X_{35}X_{57}X_{73}-X_{57}X_{78}X_{86}X_{65}+X_{47}X_{79}X_{96}X_{65}X_{54}$
- (XXV) $-X_{79}X_{98}^1X_{87}+X_{81}X_{19}^2X_{98}^1-X_{19}^1X_{98}^2X_{81}-X_{21}X_{19}^2X_{93}X_{32}+X_{67}X_{79}X_{98}^2X_{86}+X_{19}^1X_{94}X_{42}X_{21}+X_{26}X_{63}X_{32}-X_{26}X_{64}X_{42}+X_{35}X_{59}X_{93}+X_{45}X_{56}X_{64}-X_{45}X_{59}X_{94}-X_{56}X_{67}X_{75}+X_{58}X_{87}X_{75}-X_{35}X_{58}X_{86}X_{63}$
- (XXVI) $X_{14}X_{42}^1X_{21}+X_{25}X_{54}X_{42}^2-X_{14}X_{42}^2X_{29}X_{91}-X_{25}X_{53}X_{34}X_{42}^1-X_{18}X_{82}X_{21}+X_{18}X_{89}X_{91}+X_{34}X_{47}X_{73}-X_{36}X_{67}X_{73}+X_{36}X_{68}X_{83}+X_{37}X_{75}X_{53}-X_{37}X_{78}X_{83}-X_{47}X_{75}X_{54}-X_{68}X_{89}X_{96}+X_{29}X_{96}X_{67}X_{78}X_{82}$
- (XXVII) $-X_{35}X_{54}^2X_{43}+X_{46}X_{65}^1X_{54}^2-X_{46}X_{65}^2X_{54}^1-X_{57}X_{76}X_{65}^1+X_{15}X_{54}^1X_{43}X_{31}+X_{57}X_{79}X_{96}X_{65}^2-X_{12}X_{23}X_{31}+X_{12}X_{28}X_{81}-X_{15}X_{52}X_{21}+X_{19}X_{92}X_{21}+X_{23}X_{35}X_{52}+X_{68}X_{87}X_{76}-X_{19}X_{96}X_{68}X_{81}-X_{28}X_{87}X_{79}X_{92}$
- (XXVIII) $-X_{21}X_{19}^2X_{92}-X_{79}X_{98}^1X_{87}+X_{81}X_{19}^2X_{98}^1-X_{19}^1X_{98}^2X_{81}+X_{67}X_{79}X_{98}^2X_{86}+X_{19}^1X_{94}X_{42}X_{21}+X_{23}X_{39}X_{92}+X_{36}X_{65}X_{53}+X_{45}X_{56}X_{64}-X_{56}X_{67}X_{75}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{23}X_{36}X_{64}X_{42}-X_{39}X_{94}X_{45}X_{53}$

$$\begin{aligned}
(\text{XXIX}) \quad & X_{13}X_{32}X_{21}^1 + X_{19}X_{92}X_{21}^2 - X_{15}X_{53}X_{32}X_{21}^2 - X_{18}X_{89}X_{92}X_{21}^1 - X_{13}X_{34}X_{41} + X_{15}X_{54}X_{41} + \\
& X_{18}X_{87}X_{71} - X_{19}X_{97}X_{71} + X_{34}X_{45}X_{53} - X_{45}X_{56}X_{64} - X_{47}X_{75}X_{54} + X_{47}X_{76}X_{64} - \\
& X_{68}X_{87}X_{76} + X_{56}X_{68}X_{89}X_{97}X_{75} \\
(\text{XXX}) \quad & X_{15}X_{53}^1X_{31} - X_{25}X_{53}^2X_{32} - X_{34}X_{45}^1X_{53}^1 + X_{34}X_{45}^2X_{53}^2 + X_{45}^1X_{57}X_{76}X_{64} - X_{57}X_{78}X_{86}X_{64}X_{45}^2 - \\
& X_{15}X_{59}X_{91} - X_{18}X_{83}X_{31} + X_{25}X_{59}X_{92} + X_{28}X_{83}X_{32} - X_{28}X_{89}X_{92} - X_{69}X_{97}X_{76} + \\
& X_{78}X_{89}X_{97} + X_{18}X_{86}X_{69}X_{91} \\
(\text{XXXI}) \quad & -X_{21}X_{19}^2X_{92} - X_{19}^1X_{98}X_{81} + X_{78}X_{81}X_{19}^2X_{97} + X_{19}^1X_{94}X_{42}X_{21} + X_{23}X_{39}X_{92} + X_{35}X_{54}X_{43} - \\
& X_{39}X_{94}X_{43} - X_{47}X_{75}X_{54} + X_{47}X_{76}X_{64} + X_{56}X_{67}X_{75} - X_{67}X_{78}X_{86} - X_{69}X_{97}X_{76} + \\
& X_{69}X_{98}X_{86} - X_{23}X_{35}X_{56}X_{64}X_{42} \\
(\text{XXXII}) \quad & -X_{35}X_{54}^2X_{43} + X_{46}X_{65}^1X_{54}^2 - X_{46}X_{65}^2X_{54}^1 + X_{15}X_{54}^1X_{43}X_{31} - X_{57}X_{78}X_{86}X_{65}^1 + X_{57}X_{79}X_{96}X_{65}^2 - \\
& X_{15}X_{52}X_{21} + X_{18}X_{86}X_{61} + X_{19}X_{92}X_{21} - X_{19}X_{96}X_{61} + X_{23}X_{35}X_{52} + X_{27}X_{78}X_{82} - \\
& X_{27}X_{79}X_{92} - X_{18}X_{82}X_{23}X_{31} \\
(\text{XXXIII}) \quad & X_{13}X_{32}X_{21}^1 + X_{81}X_{19}^2X_{98} + X_{19}^1X_{92}X_{21}^2 - X_{19}^1X_{97}X_{71} - X_{21}^1X_{19}^2X_{92} - X_{15}X_{53}X_{32}X_{21}^2 - \\
& X_{13}X_{34}X_{41} + X_{15}X_{54}X_{41} + X_{16}X_{67}X_{71} - X_{16}X_{68}X_{81} + X_{59}X_{97}X_{75} - X_{59}X_{98}X_{85} - \\
& X_{46}X_{67}X_{75}X_{54} + X_{34}X_{46}X_{68}X_{85}X_{53} \\
(\text{XXXIV}) \quad & -X_{43}X_{35}^2X_{54} + X_{68}X_{87}X_{76}^2 - X_{69}X_{97}X_{76}^1 + X_{24}X_{43}X_{35}^1X_{52} + X_{57}X_{76}^1X_{63}X_{35}^2 - X_{35}^1X_{57}X_{76}^2X_{63} - \\
& X_{12}X_{24}X_{41} + X_{12}X_{28}X_{81} + X_{15}X_{54}X_{41} - X_{16}X_{68}X_{81} + X_{16}X_{69}X_{91} - X_{28}X_{87}X_{72} + \\
& X_{29}X_{97}X_{72} - X_{15}X_{52}X_{29}X_{91} \\
(\text{XXXV}) \quad & X_{13}X_{32}X_{21}^1 - X_{18}X_{82}X_{21}^1 + X_{19}X_{92}X_{21}^2 - X_{46}X_{65}^2X_{54} - X_{15}X_{53}X_{32}X_{21}^2 + X_{34}X_{46}X_{65}^1X_{53} - \\
& X_{57}X_{78}X_{86}X_{65}^1 + X_{57}X_{79}X_{96}X_{65}^2 - X_{13}X_{34}X_{41} + X_{15}X_{54}X_{41} + X_{18}X_{86}X_{61} - X_{19}X_{96}X_{61} + \\
& X_{27}X_{78}X_{82} - X_{27}X_{79}X_{92} \\
(\text{XXXVI}) \quad & -X_{19}X_{98}^2X_{81} + X_{29}X_{98}^1X_{82} + X_{56}X_{63}X_{35}^2 - X_{79}X_{98}^1X_{87} - X_{14}X_{43}X_{35}^2X_{51} + X_{24}X_{43}X_{35}^1X_{52} + \\
& X_{67}X_{79}X_{98}^2X_{86} - X_{35}^1X_{58}X_{86}X_{63} + X_{14}X_{48}X_{81} + X_{19}X_{95}X_{51} - X_{24}X_{48}X_{82} - X_{29}X_{95}X_{52} - \\
& X_{56}X_{67}X_{75} + X_{58}X_{87}X_{75} \\
(\text{XXXVII}) \quad & X_{14}X_{42}^1X_{21}^1 - X_{14}X_{42}^2X_{21}^2 - X_{18}X_{82}X_{21}^1 + X_{19}X_{92}X_{21}^2 - X_{23}X_{34}^1X_{42}^1 + X_{23}X_{34}^2X_{42}^2 + \\
& X_{34}^1X_{45}X_{53} - X_{47}X_{75}X_{53}X_{34}^2 + X_{18}X_{86}X_{61} - X_{19}X_{96}X_{61} + X_{27}X_{78}X_{82} - X_{27}X_{79}X_{92} - \\
& X_{45}X_{56}X_{64} + X_{56}X_{67}X_{75} - X_{67}X_{78}X_{86} + X_{47}X_{79}X_{96}X_{64} \\
(\text{XXXVIII}) \quad & -X_{19}X_{92}^1X_{21} + X_{23}X_{39}X_{92}^1 - X_{24}X_{49}X_{92}^2 + X_{36}X_{65}^1X_{53} - X_{46}X_{65}^2X_{54} + X_{57}X_{76}^1X_{65}^2 - \\
& X_{57}X_{76}^2X_{65}^1 + X_{68}X_{87}X_{76}^2 + X_{18}X_{89}X_{92}^2X_{21} - X_{68}X_{89}X_{97}X_{76}^1 - X_{18}X_{87}X_{71} + X_{19}X_{97}X_{71} - \\
& X_{23}X_{36}X_{62} + X_{24}X_{46}X_{62} - X_{39}X_{95}X_{53} + X_{49}X_{95}X_{54} \\
(\text{XXXIX}) \quad & -X_{21}X_{19}^2X_{92}^1 + X_{23}X_{39}X_{92}^1 - X_{24}X_{49}X_{92}^2 - X_{79}X_{98}^1X_{87} + X_{81}X_{19}^2X_{98}^1 + X_{19}^1X_{92}^2X_{21} - \\
& X_{19}^1X_{98}^2X_{81} + X_{67}X_{79}X_{98}^2X_{86} - X_{23}X_{36}X_{62} + X_{24}X_{46}X_{62} + X_{36}X_{65}X_{53} - X_{39}X_{95}X_{53} + \\
& X_{49}X_{95}X_{54} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - X_{46}X_{67}X_{75}X_{54} \\
(\text{XL}) \quad & -X_{21}X_{19}^2X_{92}^1 + X_{23}X_{39}X_{92}^1 - X_{24}X_{49}X_{92}^2 + X_{36}X_{65}^1X_{53} - X_{46}X_{65}^2X_{54} + X_{57}X_{76}^2X_{65}^2 - \\
& X_{19}^1X_{98}X_{81} + X_{19}^1X_{92}^2X_{21} - X_{57}X_{78}X_{86}X_{65}^1 + X_{78}X_{81}X_{19}^2X_{97} - X_{23}X_{36}X_{62} + X_{24}X_{46}X_{62} - \\
& X_{39}X_{95}X_{53} + X_{49}X_{95}X_{54} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86}
\end{aligned}$$

1.30 $\mathbb{C}^3/(\mathbb{Z}_2 \times \mathbb{Z}_5) (1, 0, 1)(0, 1, 4)$

$$(I) -X_{34}X_{4,10}X_{10,3} + X_{39}X_{9,10}X_{10,3} + X_{4,10}X_{10,9}X_{94} + X_{56}X_{6,10}X_{10,5} - X_{59}X_{9,10}X_{10,5} - X_{6,10}X_{10,9}X_{96} + X_{12}X_{25}X_{51} - X_{12}X_{27}X_{71} + X_{16}X_{62}X_{21} - X_{16}X_{65}X_{51} - X_{18}X_{82}X_{21} + X_{18}X_{87}X_{71} - X_{25}X_{56}X_{62} + X_{27}X_{78}X_{82} + X_{34}X_{48}X_{83} + X_{37}X_{74}X_{43} - X_{37}X_{78}X_{83} - X_{39}X_{94}X_{43} - X_{48}X_{87}X_{74} + X_{59}X_{96}X_{65}$$

1.31 $L^{2,3,2}/\mathbb{Z}_2 (1, 0, 0, 1)$

$$(I) -X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{12}X_{24}X_{41} - X_{12}X_{29}X_{91} + X_{13}X_{32}X_{21} - X_{13}X_{36}X_{64}X_{41} - X_{24}X_{45}X_{53}X_{32} + X_{36}X_{68}X_{85}X_{53} + X_{45}X_{57}X_{76}X_{64} - X_{68}X_{89}X_{97}X_{76}$$

$$(II) -X_{1,10}X_{10,2}X_{23}X_{31} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{12}X_{24}X_{41} - X_{12}X_{29}X_{91} + X_{16}X_{63}X_{31} - X_{16}X_{64}X_{41} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52} - X_{35}X_{56}X_{63} + X_{56}X_{68}X_{85} + X_{45}X_{57}X_{76}X_{64} - X_{68}X_{89}X_{97}X_{76}$$

$$(III) -X_{1,10}X_{10,2}X_{21} - X_{7,10}X_{10,8}X_{87} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} + X_{12}X_{24}X_{41} - X_{12}X_{29}X_{91} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} - X_{24}X_{43}X_{32} + X_{34}X_{46}X_{63} + X_{35}X_{54}X_{43} + X_{58}X_{87}X_{75} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} - X_{35}X_{58}X_{86}X_{63} - X_{46}X_{67}X_{75}X_{54}$$

$$(IV) -X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{27}X_{7,10}X_{10,2} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} - X_{19}X_{98}X_{81} - X_{27}X_{79}X_{92} + X_{34}X_{46}X_{63} + X_{38}X_{85}X_{53} - X_{38}X_{86}X_{63} + X_{45}X_{57}X_{74} - X_{46}X_{67}X_{74} + X_{19}X_{92}X_{24}X_{41} - X_{24}X_{45}X_{53}X_{32} + X_{67}X_{79}X_{98}X_{86}$$

$$(V) X_{12}X_{2,10}X_{10,1} - X_{18}X_{8,10}X_{10,1} - X_{2,10}X_{10,7}X_{72} + X_{78}X_{8,10}X_{10,7} - X_{12}X_{23}X_{31} + X_{18}X_{89}X_{91} + X_{29}X_{97}X_{72} - X_{35}X_{56}X_{63} - X_{46}X_{65}X_{54} + X_{56}X_{68}X_{85} + X_{57}X_{76}X_{65} - X_{57}X_{78}X_{85} - X_{14}X_{42}X_{29}X_{91} + X_{14}X_{46}X_{63}X_{31} + X_{23}X_{35}X_{54}X_{42} - X_{68}X_{89}X_{97}X_{76}$$

$$(VI) X_{2,10}X_{10,1}X_{12}^2 - X_{18}X_{8,10}X_{10,1} - X_{2,10}X_{10,7}X_{72} + X_{78}X_{8,10}X_{10,7} - X_{23}X_{31}X_{12}^2 + X_{12}^1X_{24}X_{41} - X_{12}^1X_{29}X_{91} + X_{16}X_{63}X_{31} - X_{16}X_{64}X_{41} + X_{18}X_{89}X_{91} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52} + X_{29}X_{97}X_{72} - X_{35}X_{56}X_{63} + X_{56}X_{68}X_{85} - X_{57}X_{78}X_{85} + X_{45}X_{57}X_{76}X_{64} - X_{68}X_{89}X_{97}X_{76}$$

1.32 $L^{1,4,1}/\mathbb{Z}_2 (1, 0, 0, 1)$

$$(I) -X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,9}X_{91} + X_{29}X_{9,10}X_{10,2} - X_{79}X_{9,10}X_{10,7} - X_{8,10}X_{10,9}X_{98} + X_{58}X_{8,10}X_{10,7}X_{75} + X_{12}X_{24}X_{41} - X_{12}X_{29}X_{91} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} - X_{24}X_{43}X_{32} + X_{34}X_{46}X_{63} + X_{35}X_{54}X_{43} - X_{35}X_{58}X_{86}X_{63} - X_{46}X_{67}X_{75}X_{54} + X_{67}X_{79}X_{98}X_{86}$$

$$(II) -X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,9}X_{91} + X_{29}X_{9,10}X_{10,2} + X_{78}X_{8,10}X_{10,7} - X_{79}X_{9,10}X_{10,7} - X_{8,10}X_{10,9}X_{98} + X_{12}X_{24}X_{41} - X_{12}X_{29}X_{91} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} + X_{34}X_{46}X_{63} + X_{38}X_{85}X_{53} - X_{38}X_{86}X_{63} + X_{45}X_{57}X_{74} - X_{46}X_{67}X_{74} - X_{57}X_{78}X_{85} - X_{24}X_{45}X_{53}X_{32} + X_{67}X_{79}X_{98}X_{86}$$

1.33 $\text{PdP}_2/\mathbb{Z}_2$ (1, 1, 1, 1)

- (I) $-X_{12}X_{2,10}X_{10,1}+X_{18}X_{8,10}X_{10,1}+X_{2,10}X_{10,9}X_{98}X_{82}-X_{78}X_{8,10}X_{10,9}X_{97}+X_{12}X_{23}X_{31}+X_{14}X_{42}X_{21}-X_{18}X_{82}X_{21}-X_{23}X_{34}X_{42}+X_{45}X_{57}X_{74}-X_{46}X_{67}X_{74}-X_{57}X_{76}X_{65}+X_{67}X_{78}X_{86}+X_{69}X_{97}X_{76}-X_{69}X_{98}X_{86}-X_{14}X_{45}X_{53}X_{31}+X_{34}X_{46}X_{65}X_{53}$
- (II) $X_{18}X_{8,10}X_{10,1}-X_{13}X_{32}X_{2,10}X_{10,1}+X_{2,10}X_{10,9}X_{98}X_{82}-X_{78}X_{8,10}X_{10,9}X_{97}+X_{13}X_{35}X_{51}-X_{14}X_{45}X_{51}-X_{18}X_{82}X_{21}-X_{35}X_{54}X_{43}+X_{45}X_{57}X_{74}+X_{46}X_{65}X_{54}-X_{46}X_{67}X_{74}-X_{57}X_{76}X_{65}+X_{67}X_{78}X_{86}+X_{69}X_{97}X_{76}-X_{69}X_{98}X_{86}+X_{14}X_{43}X_{32}X_{21}$
- (III) $-X_{28}X_{8,10}^2X_{10,2}+X_{98}X_{8,10}^2X_{10,9}+X_{12}X_{28}X_{8,10}^1X_{10,1}-X_{78}X_{8,10}^1X_{10,9}X_{97}-X_{13}X_{3,10}X_{10,1}+X_{23}X_{3,10}X_{10,2}-X_{12}X_{23}X_{31}+X_{13}X_{35}X_{51}+X_{14}X_{43}X_{31}-X_{14}X_{45}X_{51}-X_{35}X_{54}X_{43}+X_{45}X_{57}X_{74}+X_{46}X_{65}X_{54}-X_{46}X_{67}X_{74}-X_{57}X_{76}X_{65}+X_{67}X_{78}X_{86}+X_{69}X_{97}X_{76}-X_{69}X_{98}X_{86}$

1.34 PdP_{6a} (2)

- (I) $X_{2,10}X_{10,8}X_{82}+X_{67}X_{7,10}X_{10,6}-X_{68}X_{8,10}X_{10,6}-X_{7,10}X_{10,8}X_{87}+X_{8,10}X_{10,9}X_{98}-X_{14}X_{42}X_{2,10}X_{10,9}X_{91}-X_{13}X_{35}X_{51}+X_{14}X_{45}X_{51}-X_{29}X_{98}X_{82}-X_{34}X_{45}X_{53}+X_{35}X_{57}X_{73}+X_{36}X_{65}X_{53}-X_{36}X_{67}X_{73}-X_{57}X_{76}X_{65}+X_{68}X_{87}X_{76}+X_{13}X_{34}X_{42}X_{29}X_{91}$
- (II) $X_{2,10}X_{10,8}X_{82}+X_{67}X_{7,10}X_{10,6}-X_{68}X_{8,10}X_{10,6}-X_{7,10}X_{10,8}X_{87}+X_{8,10}X_{10,9}X_{98}-X_{12}X_{2,10}X_{10,9}X_{91}+X_{12}X_{24}X_{41}-X_{24}X_{43}X_{32}-X_{29}X_{98}X_{82}+X_{35}X_{57}X_{73}-X_{36}X_{67}X_{73}-X_{57}X_{76}X_{65}+X_{68}X_{87}X_{76}+X_{13}X_{32}X_{29}X_{91}-X_{13}X_{35}X_{54}X_{41}+X_{36}X_{65}X_{54}X_{43}$
- (III) $-X_{12}X_{2,10}X_{10,1}+X_{19}X_{9,10}X_{10,1}+X_{67}X_{7,10}X_{10,6}-X_{7,10}X_{10,8}X_{87}+X_{2,10}X_{10,8}X_{89}X_{92}-X_{68}X_{89}X_{9,10}X_{10,6}+X_{12}X_{24}X_{41}+X_{13}X_{32}X_{21}-X_{19}X_{92}X_{21}-X_{24}X_{43}X_{32}+X_{35}X_{57}X_{73}-X_{36}X_{67}X_{73}-X_{57}X_{76}X_{65}+X_{68}X_{87}X_{76}-X_{13}X_{35}X_{54}X_{41}+X_{36}X_{65}X_{54}X_{43}$
- (IV) $X_{2,10}X_{10,8}X_{82}-X_{2,10}X_{10,9}X_{92}+X_{67}X_{7,10}X_{10,6}-X_{68}X_{8,10}X_{10,6}-X_{7,10}X_{10,8}X_{87}+X_{8,10}X_{10,9}X_{98}+X_{13}X_{34}^1X_{41}-X_{34}^1X_{45}X_{53}-X_{19}X_{93}X_{34}^2X_{41}+X_{45}X_{57}X_{73}X_{34}^2-X_{13}X_{32}X_{21}+X_{19}X_{92}X_{21}+X_{29}X_{93}X_{32}-X_{29}X_{98}X_{82}+X_{36}X_{65}X_{53}-X_{36}X_{67}X_{73}-X_{57}X_{76}X_{65}+X_{68}X_{87}X_{76}$

1.35 $K^{2,5,1,3}$

- (I) $X_{19}X_{9,10}X_{10,1}+X_{12}X_{2,10}X_{10,8}X_{81}-X_{14}X_{42}X_{2,10}X_{10,1}-X_{79}X_{9,10}X_{10,8}X_{87}-X_{12}X_{23}X_{31}+X_{14}X_{43}X_{31}-X_{35}X_{56}X_{63}-X_{19}X_{96}X_{68}X_{81}+X_{23}X_{35}X_{54}X_{42}-X_{37}X_{75}X_{54}X_{43}+X_{37}X_{79}X_{96}X_{63}+X_{56}X_{68}X_{87}X_{75}$
- (II) $-X_{14}X_{4,10}X_{10,1}+X_{19}X_{9,10}X_{10,1}-X_{1,10}X_{10,2}X_{21}+X_{1,10}X_{10,8}X_{81}+X_{24}X_{4,10}X_{10,2}-X_{79}X_{9,10}X_{10,8}X_{87}-X_{37}X_{74}X_{43}+X_{45}X_{57}X_{74}-X_{57}X_{76}X_{65}+X_{68}X_{87}X_{76}+X_{14}X_{43}X_{32}X_{21}-X_{19}X_{96}X_{68}X_{81}-X_{24}X_{45}X_{53}X_{32}+X_{37}X_{79}X_{96}X_{65}X_{53}$
- (III) $-X_{28}X_{8,10}X_{10,2}+X_{29}X_{9,10}X_{10,2}-X_{69}X_{9,10}X_{10,7}X_{76}+X_{56}X_{68}X_{8,10}X_{10,7}X_{75}-X_{12}X_{23}X_{31}+X_{12}X_{28}X_{81}+X_{14}X_{43}X_{31}-X_{16}X_{68}X_{81}+X_{16}X_{69}X_{91}-X_{35}X_{56}X_{63}+X_{37}X_{76}X_{63}-X_{14}X_{42}X_{29}X_{91}+X_{23}X_{35}X_{54}X_{42}-X_{37}X_{75}X_{54}X_{43}$

- (IV) $X_{19}X_{9,10}X_{10,1} + X_{12}X_{2,10}X_{10,8}X_{81} - X_{14}X_{42}X_{2,10}X_{10,1} - X_{79}X_{9,10}X_{10,8}X_{87} - X_{12}X_{23}X_{31} + X_{14}X_{43}X_{31} + X_{23}X_{34}X_{42} - X_{34}X_{45}X_{53} - X_{37}X_{74}X_{43} + X_{45}X_{57}X_{74} - X_{57}X_{76}X_{65} + X_{68}X_{87}X_{76} - X_{19}X_{96}X_{68}X_{81} + X_{37}X_{79}X_{96}X_{65}X_{53}$
- (V) $-X_{14}X_{4,10}X_{10,1} + X_{19}X_{9,10}X_{10,1} - X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{79}X_{9,10}X_{10,8}X_{87} - X_{24}X_{43}^2X_{32} + X_{35}X_{54}X_{43}^2 + X_{14}X_{43}^1X_{32}X_{21} - X_{37}X_{75}X_{54}X_{43}^1 - X_{35}X_{56}X_{63} - X_{19}X_{96}X_{68}X_{81} + X_{37}X_{79}X_{96}X_{63} + X_{56}X_{68}X_{87}X_{75}$
- (VI) $-X_{14}X_{4,10}X_{10,1} + X_{19}X_{9,10}X_{10,1} - X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{67}X_{79}X_{9,10}X_{10,8}X_{86} + X_{14}X_{42}X_{21} - X_{19}X_{98}X_{81} - X_{23}X_{34}X_{42} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52} - X_{35}X_{57}X_{73} - X_{56}X_{69}X_{95} + X_{57}X_{79}X_{95} + X_{69}X_{98}X_{86} + X_{34}X_{45}X_{56}X_{67}X_{73}$
- (VII) $-X_{14}X_{4,10}X_{10,1} + X_{19}X_{9,10}X_{10,1} - X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{79}X_{9,10}X_{10,8}X_{87} - X_{35}X_{57}^2X_{73} - X_{57}^1X_{76}X_{65} + X_{34}X_{45}X_{57}^1X_{73} + X_{65}X_{57}^2X_{79}X_{96} + X_{14}X_{42}X_{21} - X_{23}X_{34}X_{42} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52} + X_{68}X_{87}X_{76} - X_{19}X_{96}X_{68}X_{81}$
- (VIII) $-X_{14}X_{4,10}X_{10,1} + X_{19}X_{9,10}X_{10,1} - X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{57}X_{79}X_{9,10}X_{10,8}X_{85} - X_{24}X_{43}^2X_{32} + X_{36}X_{64}X_{43}^2 - X_{37}X_{74}X_{43}^1 + X_{14}X_{43}^1X_{32}X_{21} - X_{19}X_{98}X_{81} - X_{36}X_{69}X_{93} + X_{37}X_{79}X_{93} - X_{45}X_{56}X_{64} + X_{45}X_{57}X_{74} + X_{56}X_{69}X_{98}X_{85}$
- (IX) $-X_{14}X_{4,10}X_{10,1} + X_{19}X_{9,10}X_{10,1} - X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{79}X_{9,10}X_{10,8}X_{87} - X_{24}X_{43}^2X_{32} + X_{14}X_{43}^1X_{32}X_{21} + X_{36}X_{65}X_{54}X_{43}^2 - X_{37}X_{75}X_{54}X_{43}^1 - X_{19}X_{98}X_{81} - X_{36}X_{69}X_{93} + X_{37}X_{79}X_{93} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} + X_{69}X_{98}X_{86}$
- (X) $-X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{7,10}X_{10,8}X_{87} + X_{7,10}X_{10,9}X_{97} - X_{14}X_{4,10}X_{10,9}X_{91} - X_{24}X_{43}^2X_{32} + X_{35}X_{54}X_{43}^2 + X_{14}X_{43}^1X_{32}X_{21} - X_{37}X_{75}X_{54}X_{43}^1 - X_{16}X_{68}X_{81} + X_{16}X_{69}X_{91} - X_{35}X_{56}X_{63} + X_{37}X_{76}X_{63} - X_{69}X_{97}X_{76} + X_{56}X_{68}X_{87}X_{75}$
- (XI) $-X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{7,10}X_{10,8}X_{87} + X_{7,10}X_{10,9}X_{97} - X_{14}X_{4,10}X_{10,9}X_{91} - X_{57}X_{76}^1X_{65} + X_{68}X_{87}X_{76}^1 - X_{69}X_{97}X_{76}^2 + X_{37}X_{76}^2X_{65}X_{53} - X_{16}X_{68}X_{81} + X_{16}X_{69}X_{91} - X_{37}X_{74}X_{43} + X_{45}X_{57}X_{74} + X_{14}X_{43}X_{32}X_{21} - X_{24}X_{45}X_{53}X_{32}$
- (XII) $-X_{1,10}X_{10,2}X_{21} + X_{1,10}X_{10,8}X_{81} + X_{24}X_{4,10}X_{10,2} - X_{7,10}X_{10,8}X_{87} + X_{7,10}X_{10,9}X_{97} - X_{14}X_{4,10}X_{10,9}X_{91} - X_{35}X_{57}^2X_{73} + X_{65}X_{57}^2X_{76}^2 + X_{68}X_{87}X_{76}^1 - X_{69}X_{97}X_{76}^2 - X_{57}^1X_{76}^1X_{65} + X_{34}X_{45}X_{57}^1X_{73} + X_{14}X_{42}X_{21} - X_{16}X_{68}X_{81} + X_{16}X_{69}X_{91} - X_{23}X_{34}X_{42} + X_{23}X_{35}X_{52} - X_{24}X_{45}X_{52}$

1.36 $K^{4,4,2,2}$

- (I) $X_{12}X_{2,10}X_{10,1} - X_{19}X_{9,10}X_{10,1} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{13}X_{32}X_{2,10}X_{10,8}X_{81} - X_{12}X_{25}X_{51} + X_{13}X_{35}X_{51} - X_{35}X_{54}X_{43} + X_{47}X_{75}X_{54} + X_{19}X_{97}X_{78}X_{81} - X_{47}X_{78}X_{86}X_{64} - X_{56}X_{69}X_{97}X_{75} + X_{25}X_{56}X_{64}X_{43}X_{32}$
- (II) $-X_{19}X_{9,10}X_{10,1} - X_{12}X_{2,10}X_{10,8}X_{81} + X_{13}X_{32}X_{2,10}X_{10,1} + X_{69}X_{9,10}X_{10,8}X_{86} + X_{12}X_{24}X_{41} + X_{35}X_{56}X_{63} - X_{67}X_{78}X_{86} - X_{13}X_{35}X_{54}X_{41} + X_{19}X_{97}X_{78}X_{81} - X_{24}X_{46}X_{63}X_{32} + X_{46}X_{67}X_{75}X_{54} - X_{56}X_{69}X_{97}X_{75}$

- (III) $X_{67}X_{7,10}X_{10,6} - X_{7,10}X_{10,9}X_{97} + X_{28}X_{8,10}X_{10,9}X_{92} - X_{47}X_{78}X_{8,10}X_{10,6}X_{64} + X_{12}X_{23}X_{31} - X_{12}X_{28}X_{81} - X_{23}X_{34}X_{42} - X_{56}X_{67}X_{75} + X_{19}X_{97}X_{78}X_{81} + X_{25}X_{56}X_{64}X_{42} + X_{34}X_{47}X_{75}X_{53} - X_{19}X_{92}X_{25}X_{53}X_{31}$
- (IV) $X_{23}X_{3,10}X_{10,2} - X_{13}X_{3,10}X_{10,8}X_{81} - X_{19}X_{9,10}X_{10,2}X_{21} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{23}X_{35}^2X_{52} - X_{35}^1X_{54}X_{43} + X_{13}X_{35}^1X_{52}X_{21} + X_{43}X_{35}^2X_{56}X_{64} + X_{47}X_{75}X_{54} + X_{19}X_{97}X_{78}X_{81} - X_{47}X_{78}X_{86}X_{64} - X_{56}X_{69}X_{97}X_{75}$
- (V) $-X_{19}X_{9,10}X_{10,1} - X_{12}X_{2,10}X_{10,8}X_{81} + X_{13}X_{32}X_{2,10}X_{10,1} + X_{69}X_{9,10}X_{10,8}X_{86} + X_{12}X_{24}X_{41} - X_{13}X_{34}X_{41} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - X_{67}X_{78}X_{86} - X_{69}X_{97}X_{76} + X_{19}X_{97}X_{78}X_{81} - X_{24}X_{46}X_{65}X_{53}X_{32}$
- (VI) $X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} + X_{67}X_{79}X_{9,10}X_{10,6} - X_{47}X_{78}X_{8,10}X_{10,6}X_{64} - X_{12}X_{25}X_{51} + X_{12}X_{29}X_{91} + X_{13}X_{35}X_{51} + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} - X_{35}X_{54}X_{43} + X_{47}X_{75}X_{54} - X_{56}X_{67}X_{75} - X_{13}X_{32}X_{28}X_{81} + X_{25}X_{56}X_{64}X_{43}X_{32}$
- (VII) $X_{2,10}X_{10,1}X_{12}^2 - X_{12}^1X_{2,10}X_{10,8}X_{81} - X_{19}X_{9,10}X_{10,1} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{23}X_{31}X_{12}^2 + X_{12}^1X_{24}X_{43}X_{31} + X_{23}X_{35}X_{52} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - X_{67}X_{78}X_{86} - X_{69}X_{97}X_{76} + X_{19}X_{97}X_{78}X_{81} - X_{24}X_{46}X_{65}X_{52} - X_{35}X_{57}X_{74}X_{43}$
- (VIII) $X_{7,10}X_{10,8}X_{87} - X_{29}X_{9,10}X_{10,8}X_{82} - X_{47}X_{7,10}X_{10,6}X_{64} + X_{57}X_{79}X_{9,10}X_{10,6}X_{65} - X_{12}X_{23}^2X_{31} + X_{35}X_{52}X_{23}^2 - X_{23}^1X_{34}X_{42} + X_{18}X_{82}X_{23}^1X_{31} + X_{12}X_{29}X_{91} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73} - X_{18}X_{87}X_{79}X_{91}$
- (IX) $X_{23}X_{3,10}X_{10,2} - X_{13}X_{3,10}X_{10,8}X_{81} - X_{19}X_{9,10}X_{10,2}X_{21} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{23}X_{35}^2X_{52} + X_{13}X_{35}^1X_{52}X_{21} + X_{43}X_{35}^2X_{56}X_{64} - X_{35}^1X_{57}X_{74}X_{43} + X_{19}X_{98}X_{81} - X_{48}X_{86}X_{64} + X_{48}X_{87}X_{74} - X_{56}X_{69}X_{95} + X_{57}X_{79}X_{95} - X_{79}X_{98}X_{87}$
- (X) $-X_{1,10}X_{10,2}X_{21} + X_{28}X_{8,10}X_{10,2} - X_{8,10}X_{10,9}X_{98} + X_{1,10}X_{10,9}X_{97}X_{78}X_{81} + X_{12}X_{24}X_{41} - X_{12}X_{28}X_{81} + X_{13}X_{32}X_{21} - X_{13}X_{34}X_{41} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - X_{67}X_{78}X_{86} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86} - X_{24}X_{46}X_{65}X_{53}X_{32}$
- (XI) $X_{13}X_{3,10}X_{10,1} - X_{19}X_{9,10}X_{10,1} + X_{1,10}X_{10,2}X_{21} - X_{1,10}X_{10,8}X_{81} - X_{23}X_{3,10}X_{10,2} + X_{69}X_{9,10}X_{10,8}X_{86} + X_{23}X_{34}^2X_{42} + X_{34}^1X_{45}X_{53} - X_{13}X_{34}^1X_{42}X_{21} - X_{46}X_{65}X_{53}X_{34}^2 - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - X_{67}X_{78}X_{86} - X_{69}X_{97}X_{76} + X_{19}X_{97}X_{78}X_{81}$
- (XII) $X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} - X_{47}X_{78}X_{8,10}X_{10,6}X_{64} + X_{57}X_{79}X_{9,10}X_{10,6}X_{65} + X_{29}X_{91}X_{12}^2 - X_{31}X_{12}^2X_{23}^2 + X_{35}X_{52}X_{23}^2 - X_{12}^1X_{28}X_{81} + X_{12}^1X_{23}^1X_{31} - X_{23}^1X_{34}X_{42} + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73}$
- (XIII) $X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} + X_{46}X_{6,10}X_{10,4} - X_{56}X_{6,10}X_{10,5} - X_{47}X_{78}X_{8,10}X_{10,4} + X_{57}X_{79}X_{9,10}X_{10,5} + X_{29}X_{91}X_{12}^2 - X_{31}X_{12}^2X_{23}^2 - X_{12}^1X_{28}X_{81} + X_{12}^1X_{23}^1X_{31} + X_{35}X_{56}X_{62}X_{23}^2 - X_{23}^1X_{34}X_{46}X_{62} + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73}$
- (XIV) $-X_{18}X_{8,10}^2X_{10,1} - X_{8,10}^1X_{10,9}X_{98} + X_{18}X_{8,10}^1X_{10,2}X_{21} + X_{78}X_{8,10}^2X_{10,9}X_{97} + X_{13}X_{3,10}X_{10,1} - X_{23}X_{3,10}X_{10,2} + X_{23}X_{35}X_{52} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73} + X_{57}X_{76}X_{65} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86} - X_{13}X_{34}X_{42}X_{21} - X_{47}X_{78}X_{86}X_{64}$

- (XV) $X_{2,10}X_{10,1}X_{12}^2 - X_{12}^1X_{2,10}X_{10,8}X_{81} - X_{19}X_{9,10}X_{10,1} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{31}X_{12}^2X_{23}^2 + X_{35}X_{52}X_{23}^2 + X_{12}^1X_{23}^1X_{31} - X_{23}^1X_{34}X_{42} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73} + X_{57}X_{76}X_{65} - X_{69}X_{97}X_{76} + X_{19}X_{97}X_{78}X_{81} - X_{47}X_{78}X_{86}X_{64}$
- (XVI) $X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} + X_{46}X_{6,10}X_{10,4} - X_{6,10}X_{10,7}X_{76} + X_{79}X_{9,10}X_{10,7} - X_{47}X_{78}X_{8,10}X_{10,4} + X_{29}X_{91}X_{12}^2 + X_{12}^1X_{23}X_{31} - X_{12}^1X_{28}X_{81} - X_{25}X_{53}X_{31}X_{12}^2 + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} - X_{23}X_{34}X_{42} + X_{25}X_{54}X_{42} - X_{46}X_{65}X_{54} + X_{34}X_{47}X_{76}X_{65}X_{53}$
- (XVII) $-X_{78}X_{8,10}X_{10,6}X_{67}^2 + X_{67}^1X_{79}X_{9,10}X_{10,6} + X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} + X_{29}X_{91}X_{12}^2 + X_{46}X_{67}^2X_{74} - X_{56}X_{67}^1X_{75} - X_{12}^1X_{28}X_{81} - X_{25}X_{53}X_{31}X_{12}^2 + X_{12}^1X_{24}X_{43}X_{31} + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} - X_{24}X_{46}X_{62} + X_{25}X_{56}X_{62} - X_{37}X_{74}X_{43} + X_{37}X_{75}X_{53}$
- (XVIII) $-X_{78}X_{8,10}X_{10,6}X_{67}^2 + X_{67}^1X_{79}X_{9,10}X_{10,6} + X_{28}X_{8,10}X_{10,2} - X_{29}X_{9,10}X_{10,2} - X_{25}X_{51}X_{12}^2 + X_{29}X_{91}X_{12}^2 + X_{12}^1X_{24}X_{41} - X_{12}^1X_{28}X_{81} + X_{34}X_{46}X_{67}^2X_{73} - X_{35}X_{56}X_{67}^1X_{73} - X_{13}X_{34}X_{41} + X_{13}X_{35}X_{51} + X_{17}X_{78}X_{81} - X_{17}X_{79}X_{91} - X_{24}X_{46}X_{62} + X_{25}X_{56}X_{62}$
- (XIX) $X_{18}X_{8,10}X_{10,1}^2 - X_{19}X_{9,10}X_{10,1}^1 + X_{2,10}X_{10,1}^1X_{12}^2 - X_{12}^1X_{2,10}X_{10,1}^2 - X_{68}X_{8,10}X_{10,6} + X_{69}X_{9,10}X_{10,6} - X_{31}X_{12}^2X_{23}^2 + X_{35}X_{52}X_{23}^2 - X_{47}X_{76}^2X_{64} + X_{57}X_{76}^1X_{65} + X_{68}X_{87}X_{76}^2 - X_{69}X_{97}X_{76}^1 + X_{12}^1X_{23}^1X_{31} - X_{23}^1X_{34}X_{42} - X_{18}X_{87}X_{71} + X_{19}X_{97}X_{71} + X_{26}X_{64}X_{42} - X_{26}X_{65}X_{52} + X_{34}X_{47}X_{73} - X_{35}X_{57}X_{73}$

1.37 PdP_{6b} (3)

- (I) $X_{1,10}X_{10,2}X_{21} - X_{1,10}X_{10,7}X_{79}X_{91} - X_{29}X_{98}X_{8,10}X_{10,2} + X_{68}X_{8,10}X_{10,7}X_{76} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} - X_{56}X_{68}X_{85} + X_{57}X_{79}X_{98}X_{85} + X_{23}X_{35}X_{56}X_{64}X_{42} - X_{35}X_{57}X_{76}X_{64}X_{43}$
- (II) $-X_{14}X_{42}X_{2,10}X_{10,1} + X_{19}X_{97}X_{7,10}X_{10,1} + X_{2,10}X_{10,8}X_{89}X_{92} - X_{67}X_{7,10}X_{10,8}X_{86} + X_{14}X_{43}X_{31} - X_{46}X_{65}X_{54} + X_{46}X_{67}X_{74} - X_{78}X_{89}X_{97} - X_{19}X_{92}X_{23}X_{31} + X_{23}X_{35}X_{54}X_{42} - X_{35}X_{57}X_{74}X_{43} + X_{57}X_{78}X_{86}X_{65}$
- (III) $-X_{14}X_{4,10}X_{10,1} + X_{24}X_{4,10}X_{10,2} - X_{29}X_{98}X_{86}X_{6,10}X_{10,2} + X_{19}X_{98}X_{87}X_{76}X_{6,10}X_{10,1} + X_{14}X_{43}X_{31} - X_{19}X_{93}X_{31} + X_{29}X_{93}X_{32} - X_{37}X_{74}X_{43} + X_{37}X_{75}X_{53} + X_{45}X_{57}X_{74} - X_{57}X_{76}X_{65} + X_{58}X_{86}X_{65} - X_{58}X_{87}X_{75} - X_{24}X_{45}X_{53}X_{32}$
- (IV) $X_{17}X_{7,10}X_{10,1} + X_{2,10}X_{10,8}X_{82} - X_{67}X_{7,10}X_{10,8}X_{86} - X_{13}X_{34}X_{42}X_{2,10}X_{10,1} - X_{17}X_{79}X_{91} - X_{25}X_{53}X_{32} + X_{25}X_{54}X_{42} - X_{29}X_{98}X_{82} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} - X_{46}X_{65}X_{54} + X_{46}X_{67}X_{74} + X_{13}X_{32}X_{29}X_{91} + X_{57}X_{79}X_{98}X_{86}X_{65}$
- (V) $X_{2,10}X_{10,9}X_{92} - X_{14}X_{42}X_{2,10}X_{10,1} - X_{6,10}X_{10,9}X_{98}X_{86} + X_{19}X_{98}X_{87}X_{76}X_{6,10}X_{10,1} + X_{14}X_{43}X_{31} + X_{23}X_{34}X_{42} - X_{34}X_{45}X_{53} - X_{37}X_{74}X_{43} + X_{37}X_{75}X_{53} + X_{45}X_{57}X_{74} - X_{57}X_{76}X_{65} + X_{58}X_{86}X_{65} - X_{58}X_{87}X_{75} - X_{19}X_{92}X_{23}X_{31}$
- (VI) $X_{17}X_{7,10}X_{10,1} + X_{2,10}X_{10,8}X_{82} - X_{14}X_{42}X_{2,10}X_{10,1} - X_{67}X_{7,10}X_{10,8}X_{86} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{14}X_{43}X_{31} - X_{17}X_{79}X_{91} - X_{29}X_{98}X_{82} - X_{46}X_{65}X_{54} + X_{46}X_{67}X_{74} + X_{23}X_{35}X_{54}X_{42} - X_{35}X_{57}X_{74}X_{43} + X_{57}X_{79}X_{98}X_{86}X_{65}$

- (VII) $X_{2,10}X_{10,9}X_{92}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{8,10}X_{10,9}X_{98}-X_{14}X_{42}X_{2,10}X_{10,1}+$
 $X_{19}X_{98}X_{87}X_{7,10}X_{10,1}+X_{14}X_{43}X_{31}+X_{23}X_{34}X_{42}-X_{34}X_{45}X_{53}-X_{37}X_{74}X_{43}+X_{37}X_{75}X_{53}-$
 $X_{19}X_{92}X_{23}X_{31}+X_{45}X_{56}X_{67}X_{74}-X_{56}X_{68}X_{87}X_{75}$
- (VIII) $-X_{14}X_{4,10}X_{10,1}+X_{24}X_{4,10}X_{10,2}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{29}X_{98}X_{8,10}X_{10,2}+$
 $X_{19}X_{98}X_{87}X_{7,10}X_{10,1}+X_{14}X_{43}X_{31}-X_{19}X_{93}X_{31}+X_{29}X_{93}X_{32}-X_{37}X_{74}X_{43}+X_{37}X_{75}X_{53}-$
 $X_{24}X_{45}X_{53}X_{32}+X_{45}X_{56}X_{67}X_{74}-X_{56}X_{68}X_{87}X_{75}$
- (IX) $X_{1,10}X_{10,2}X_{21}+X_{78}X_{8,10}X_{10,7}-X_{1,10}X_{10,7}X_{79}X_{91}-X_{29}X_{98}X_{8,10}X_{10,2}-X_{12}X_{23}X_{31}+$
 $X_{12}X_{29}X_{91}-X_{14}X_{42}X_{21}+X_{14}X_{43}X_{31}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}-X_{67}X_{78}X_{86}+$
 $X_{23}X_{35}X_{54}X_{42}-X_{35}X_{57}X_{74}X_{43}+X_{57}X_{79}X_{98}X_{86}X_{65}$
- (X) $X_{2,10}X_{10,9}X_{92}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{8,10}X_{10,9}X_{98}-X_{14}X_{42}X_{2,10}X_{10,1}+$
 $X_{19}X_{98}X_{87}X_{7,10}X_{10,1}+X_{14}X_{43}X_{31}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}+X_{57}X_{76}X_{65}-X_{68}X_{87}X_{76}-$
 $X_{19}X_{92}X_{23}X_{31}+X_{23}X_{35}X_{54}X_{42}-X_{35}X_{57}X_{74}X_{43}$
- (XI) $X_{1,10}X_{10,2}X_{21}-X_{1,10}X_{10,7}X_{71}-X_{28}X_{8,10}X_{10,2}+X_{68}X_{8,10}X_{10,7}X_{76}-X_{14}X_{42}X_{21}+$
 $X_{14}X_{43}X_{31}+X_{19}X_{97}X_{71}+X_{28}X_{89}X_{92}-X_{56}X_{68}X_{85}+X_{57}X_{78}X_{85}-X_{78}X_{89}X_{97}-$
 $X_{19}X_{92}X_{23}X_{31}+X_{23}X_{35}X_{56}X_{64}X_{42}-X_{35}X_{57}X_{76}X_{64}X_{43}$
- (XII) $X_{1,10}X_{10,2}X_{21}+X_{78}X_{8,10}X_{10,7}-X_{1,10}X_{10,7}X_{79}X_{91}-X_{29}X_{98}X_{8,10}X_{10,2}-X_{25}X_{53}X_{32}+$
 $X_{25}X_{54}X_{42}+X_{34}X_{45}X_{53}-X_{45}X_{57}X_{74}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}-X_{67}X_{78}X_{86}+$
 $X_{13}X_{32}X_{29}X_{91}-X_{13}X_{34}X_{42}X_{21}+X_{57}X_{79}X_{98}X_{86}X_{65}$
- (XIII) $-X_{7,10}X_{10,8}X_{87}-X_{14}X_{42}X_{2,10}X_{10,1}+X_{19}X_{97}X_{7,10}X_{10,1}+X_{2,10}X_{10,8}X_{89}X_{92}-X_{57}X_{76}^1X_{65}+$
 $X_{68}X_{87}X_{76}^1+X_{37}X_{76}^2X_{65}X_{53}-X_{68}X_{89}X_{97}X_{76}^2+X_{14}X_{43}X_{31}+X_{23}X_{34}X_{42}-X_{34}X_{45}X_{53}-$
 $X_{37}X_{74}X_{43}+X_{45}X_{57}X_{74}-X_{19}X_{92}X_{23}X_{31}$
- (XIV) $-X_{14}X_{4,10}X_{10,1}+X_{24}X_{4,10}X_{10,2}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{29}X_{98}X_{8,10}X_{10,2}+$
 $X_{19}X_{98}X_{87}X_{7,10}X_{10,1}+X_{14}X_{43}^1X_{31}-X_{24}X_{43}^2X_{32}+X_{35}X_{54}X_{43}^2-X_{35}X_{57}X_{74}X_{43}^1-$
 $X_{19}X_{93}X_{31}+X_{29}X_{93}X_{32}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}+X_{57}X_{76}X_{65}-X_{68}X_{87}X_{76}$
- (XV) $X_{2,10}X_{10,9}X_{92}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{8,10}X_{10,9}X_{98}-X_{13}X_{34}X_{42}X_{2,10}X_{10,1}+$
 $X_{19}X_{98}X_{87}X_{7,10}X_{10,1}+X_{13}X_{32}X_{21}-X_{19}X_{92}X_{21}-X_{25}X_{53}X_{32}+X_{25}X_{54}X_{42}+X_{34}X_{45}X_{53}-$
 $X_{45}X_{57}X_{74}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}+X_{57}X_{76}X_{65}-X_{68}X_{87}X_{76}$
- (XVI) $-X_{1,10}X_{10,9}^2X_{91}-X_{8,10}X_{10,9}^1X_{98}+X_{12}X_{2,10}X_{10,9}^1X_{91}+X_{7,10}X_{10,9}^2X_{98}X_{87}+X_{1,10}X_{10,3}X_{31}-$
 $X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{2,10}X_{10,3}X_{34}X_{42}+X_{25}X_{54}X_{42}+X_{34}X_{45}X_{53}-$
 $X_{45}X_{57}X_{74}-X_{46}X_{65}X_{54}+X_{46}X_{67}X_{74}+X_{57}X_{76}X_{65}-X_{68}X_{87}X_{76}-X_{12}X_{25}X_{53}X_{31}$
- (XVII) $-X_{1,10}X_{10,9}^2X_{91}+X_{2,10}X_{10,9}^1X_{92}-X_{6,10}X_{10,9}^1X_{98}X_{86}+X_{6,10}X_{10,9}^2X_{98}X_{87}X_{76}+X_{1,10}X_{10,4}X_{41}-$
 $X_{2,10}X_{10,4}X_{42}+X_{13}X_{39}X_{91}+X_{23}X_{34}X_{42}-X_{23}X_{39}X_{92}-X_{34}X_{45}X_{53}+X_{37}X_{75}X_{53}+$
 $X_{45}X_{57}X_{74}-X_{57}X_{76}X_{65}+X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}-X_{13}X_{37}X_{74}X_{41}$
- (XVIII) $X_{1,10}X_{10,4}X_{41}-X_{1,10}X_{10,9}X_{91}-X_{2,10}X_{10,4}X_{42}-X_{7,10}X_{10,8}X_{87}+X_{7,10}X_{10,9}X_{97}+$
 $X_{2,10}X_{10,8}X_{89}X_{92}-X_{57}X_{76}^1X_{65}+X_{68}X_{87}X_{76}^1+X_{37}X_{76}^2X_{65}X_{53}-X_{68}X_{89}X_{97}X_{76}^2+$
 $X_{13}X_{39}X_{91}+X_{23}X_{34}X_{42}-X_{23}X_{39}X_{92}-X_{34}X_{45}X_{53}+X_{45}X_{57}X_{74}-X_{13}X_{37}X_{74}X_{41}$

$$\begin{aligned}
(\text{XIX}) \quad & X_{1,10}X_{10,2}X_{21}^1 - X_{1,10}X_{10,7}X_{71} - X_{28}X_{8,10}X_{10,2} + X_{68}X_{8,10}X_{10,7}X_{76} + X_{13}X_{32}X_{21}^2 - \\
& X_{19}X_{92}X_{21}^2 - X_{13}X_{34}X_{42}X_{21}^1 + X_{19}X_{97}X_{71} - X_{25}X_{53}X_{32} + X_{28}X_{89}X_{92} + X_{34}X_{45}X_{53} - \\
& X_{56}X_{68}X_{85} + X_{57}X_{78}X_{85} - X_{78}X_{89}X_{97} + X_{25}X_{56}X_{64}X_{42} - X_{45}X_{57}X_{76}X_{64} \\
(\text{XX}) \quad & -X_{8,10}X_{10,9}^1X_{98} + X_{12}X_{2,10}X_{10,9}^1X_{91} - X_{13}X_{3,10}X_{10,9}^2X_{91} + X_{7,10}X_{10,9}^2X_{98}X_{87} - X_{2,10}X_{10,4}X_{42} + \\
& X_{3,10}X_{10,4}X_{43} - X_{67}X_{7,10}X_{10,6} + X_{68}X_{8,10}X_{10,6} - X_{12}X_{25}X_{51} + X_{13}X_{35}X_{51} + X_{25}X_{54}X_{42} - \\
& X_{46}X_{65}X_{54} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - X_{68}X_{87}X_{76} - X_{35}X_{57}X_{74}X_{43} \\
(\text{XXI}) \quad & -X_{1,10}X_{10,9}^2X_{91} + X_{2,10}X_{10,9}^1X_{92} - X_{8,10}X_{10,9}^1X_{98} + X_{7,10}X_{10,9}^2X_{98}X_{87} + X_{1,10}X_{10,4}X_{41} - \\
& X_{2,10}X_{10,4}X_{42} - X_{67}X_{7,10}X_{10,6} + X_{68}X_{8,10}X_{10,6} + X_{13}X_{39}X_{91} + X_{23}X_{34}X_{42} - X_{23}X_{39}X_{92} - \\
& X_{34}X_{45}X_{53} + X_{37}X_{75}X_{53} - X_{13}X_{37}X_{74}X_{41} + X_{45}X_{56}X_{67}X_{74} - X_{56}X_{68}X_{87}X_{75} \\
(\text{XXII}) \quad & -X_{21}X_{1,10}^2X_{10,2} - X_{8,10}X_{10,9}^1X_{98} + X_{91}X_{1,10}^2X_{10,9}^1 + X_{1,10}^1X_{10,3}X_{31} - X_{1,10}^1X_{10,9}^2X_{91} + \\
& X_{7,10}X_{10,9}^2X_{98}X_{87} + X_{24}X_{4,10}X_{10,2} - X_{34}X_{4,10}X_{10,3} - X_{67}X_{7,10}X_{10,6} + X_{68}X_{8,10}X_{10,6} + \\
& X_{15}X_{52}X_{21} - X_{15}X_{53}X_{31} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} + X_{46}X_{67}X_{74} + X_{57}X_{76}X_{65} - \\
& X_{68}X_{87}X_{76} - X_{24}X_{46}X_{65}X_{52} \\
(\text{XXIII}) \quad & X_{1,10}X_{10,2}X_{21}^2 + X_{8,10}X_{10,7}X_{78}^2 - X_{1,10}X_{10,7}X_{71} - X_{28}X_{8,10}X_{10,2} + X_{13}X_{32}X_{21}^1 - \\
& X_{19}X_{92}X_{21}^1 - X_{67}X_{78}^2X_{86} - X_{78}^1X_{89}X_{97} - X_{13}X_{34}X_{42}X_{21}^2 + X_{57}X_{78}^1X_{86}X_{65} + X_{19}X_{97}X_{71} - \\
& X_{25}X_{53}X_{32} + X_{25}X_{54}X_{42} + X_{28}X_{89}X_{92} + X_{34}X_{45}X_{53} - X_{45}X_{57}X_{74} - X_{46}X_{65}X_{54} + \\
& X_{46}X_{67}X_{74}
\end{aligned}$$

1.38 PdP_{6c} (3)

$$\begin{aligned}
(\text{I}) \quad & -X_{7,10}X_{10,8}X_{87} - X_{1,10}X_{10,2}X_{24}X_{41} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} - X_{35}X_{56}X_{63} - \\
& X_{13}X_{32}X_{29}X_{91} + X_{13}X_{35}X_{54}X_{41} + X_{24}X_{46}X_{63}X_{32} + X_{56}X_{68}X_{87}X_{75} - X_{46}X_{68}X_{89}X_{97}X_{75}X_{54} \\
(\text{II}) \quad & X_{12}X_{2,10}X_{10,1} - X_{18}X_{8,10}X_{10,1} - X_{2,10}X_{10,7}X_{72} + X_{56}X_{68}X_{8,10}X_{10,7}X_{75} - X_{12}X_{24}X_{41} + \\
& X_{18}X_{89}X_{91} + X_{29}X_{97}X_{72} - X_{35}X_{56}X_{63} - X_{13}X_{32}X_{29}X_{91} + X_{13}X_{35}X_{54}X_{41} + X_{24}X_{46}X_{63}X_{32} - \\
& X_{46}X_{68}X_{89}X_{97}X_{75}X_{54} \\
(\text{III}) \quad & -X_{7,10}X_{10,8}X_{87} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} - X_{1,10}X_{10,2}X_{24}X_{45}X_{51} - \\
& X_{12}X_{29}X_{91} - X_{23}X_{36}X_{62} + X_{24}X_{46}X_{62} - X_{35}X_{57}X_{73} + X_{45}X_{57}X_{74} + X_{12}X_{23}X_{35}X_{51} + \\
& X_{36}X_{68}X_{87}X_{73} - X_{46}X_{68}X_{89}X_{97}X_{74} \\
(\text{IV}) \quad & -X_{1,10}X_{10,2}X_{21} - X_{7,10}X_{10,8}X_{87} + X_{1,10}X_{10,8}X_{89}X_{91} + X_{29}X_{97}X_{7,10}X_{10,2} + X_{12}X_{23}X_{31} - \\
& X_{12}X_{29}X_{91} + X_{14}X_{42}X_{21} + X_{45}X_{56}X_{64} - X_{14}X_{45}X_{53}X_{31} - X_{23}X_{36}X_{64}X_{42} + X_{36}X_{68}X_{87}X_{75}X_{53} - \\
& X_{56}X_{68}X_{89}X_{97}X_{75} \\
(\text{V}) \quad & -X_{19}X_{9,10}X_{10,1} + X_{14}X_{42}X_{2,10}X_{10,1} - X_{2,10}X_{10,7}X_{79}X_{92} + X_{78}X_{89}X_{9,10}X_{10,7} - X_{14}X_{43}X_{31} + \\
& X_{48}X_{86}X_{64} + X_{57}X_{79}X_{95} + X_{19}X_{92}X_{23}X_{31} - X_{23}X_{36}X_{64}X_{42} + X_{36}X_{65}X_{54}X_{43} - \\
& X_{48}X_{89}X_{95}X_{54} - X_{57}X_{78}X_{86}X_{65} \\
(\text{VI}) \quad & X_{12}X_{2,10}X_{10,1} - X_{2,10}X_{10,8}X_{82} + X_{69}X_{9,10}X_{10,8}X_{86} - X_{13}X_{32}X_{29}X_{9,10}X_{10,1} - X_{12}X_{24}X_{41} - \\
& X_{35}X_{56}X_{63} + X_{56}X_{67}X_{75} - X_{67}X_{78}X_{86} + X_{13}X_{35}X_{54}X_{41} + X_{24}X_{46}X_{63}X_{32} + X_{29}X_{97}X_{78}X_{82} - \\
& X_{46}X_{69}X_{97}X_{75}X_{54}
\end{aligned}$$

- (VII) $-X_{7,10}X_{10,8}X_{87}-X_{1,10}X_{10,2}X_{24}X_{41}+X_{1,10}X_{10,8}X_{89}X_{91}+X_{29}X_{97}X_{7,10}X_{10,2}+X_{24}X_{43}X_{32}-X_{36}X_{64}X_{43}+X_{48}X_{86}X_{64}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{13}X_{32}X_{29}X_{91}+X_{13}X_{36}X_{65}X_{54}X_{41}-X_{48}X_{89}X_{97}X_{75}X_{54}$
- (VIII) $-X_{8,10}X_{10,9}X_{98}^1+X_{29}X_{98}^2X_{8,10}X_{10,2}+X_{1,10}X_{10,9}X_{91}-X_{1,10}X_{10,2}X_{24}X_{41}-X_{79}X_{98}^2X_{87}+X_{69}X_{98}^1X_{87}X_{76}+X_{57}X_{79}X_{95}-X_{13}X_{32}X_{29}X_{91}+X_{13}X_{35}X_{54}X_{41}+X_{24}X_{46}X_{63}X_{32}-X_{35}X_{57}X_{76}X_{63}-X_{46}X_{69}X_{95}X_{54}$
- (IX) $X_{2,10}X_{10,1}X_{12}^2-X_{18}X_{8,10}X_{10,1}-X_{2,10}X_{10,7}X_{72}+X_{36}X_{68}X_{8,10}X_{10,7}X_{75}X_{53}-X_{24}X_{41}X_{12}^2+X_{12}^1X_{23}X_{31}-X_{12}^1X_{29}X_{91}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}+X_{18}X_{89}X_{91}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}+X_{29}X_{97}X_{72}-X_{46}X_{68}X_{89}X_{97}X_{75}X_{54}$
- (X) $-X_{19}X_{9,10}X_{10,1}-X_{2,10}X_{10,9}X_{92}-X_{7,10}X_{10,8}X_{87}+X_{7,10}X_{10,9}X_{97}+X_{89}X_{9,10}X_{10,8}+X_{14}X_{42}X_{2,10}X_{10,1}-X_{14}X_{43}X_{31}-X_{23}X_{34}X_{42}+X_{34}X_{46}X_{63}+X_{35}X_{54}X_{43}-X_{35}X_{56}X_{63}+X_{19}X_{92}X_{23}X_{31}+X_{56}X_{68}X_{87}X_{75}-X_{46}X_{68}X_{89}X_{97}X_{75}X_{54}$
- (XI) $X_{56}^1X_{68}X_{8,10}X_{10,7}X_{75}-X_{18}X_{8,10}X_{10,1}-X_{2,10}X_{10,7}X_{72}+X_{14}X_{42}X_{2,10}X_{10,1}-X_{35}X_{56}^1X_{63}+X_{45}X_{56}^2X_{64}-X_{68}X_{89}X_{97}X_{75}X_{56}^2+X_{13}X_{35}X_{51}-X_{14}X_{45}X_{51}+X_{18}X_{89}X_{91}+X_{26}X_{63}X_{32}-X_{26}X_{64}X_{42}+X_{29}X_{97}X_{72}-X_{13}X_{32}X_{29}X_{91}$
- (XII) $X_{14}X_{4,10}X_{10,1}-X_{19}X_{9,10}X_{10,1}-X_{24}X_{4,10}X_{10,2}-X_{7,10}X_{10,8}X_{87}+X_{89}X_{9,10}X_{10,8}+X_{29}X_{97}X_{7,10}X_{10,2}-X_{14}X_{43}X_{31}+X_{19}X_{93}X_{31}-X_{29}X_{93}X_{32}+X_{35}X_{54}X_{43}-X_{35}X_{56}X_{63}+X_{24}X_{46}X_{63}X_{32}+X_{56}X_{68}X_{87}X_{75}-X_{46}X_{68}X_{89}X_{97}X_{75}X_{54}$
- (XIII) $X_{28}X_{8,10}X_{10,1}X_{12}^2-X_{12}^1X_{29}X_{9,10}X_{10,1}-X_{68}X_{8,10}X_{10,6}+X_{69}X_{9,10}X_{10,6}-X_{24}X_{41}X_{12}^2+X_{12}^1X_{23}X_{31}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}-X_{28}X_{87}X_{72}+X_{29}X_{97}X_{72}+X_{36}X_{68}X_{87}X_{75}X_{53}-X_{46}X_{69}X_{97}X_{75}X_{54}$
- (XIV) $X_{1,10}X_{10,9}X_{91}-X_{8,10}X_{10,9}X_{98}-X_{1,10}X_{10,2}X_{24}X_{41}+X_{29}X_{97}X_{78}X_{8,10}X_{10,2}+X_{12}X_{23}X_{31}-X_{12}X_{29}X_{91}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}-X_{67}X_{78}X_{86}+X_{69}X_{98}X_{86}+X_{36}X_{67}X_{75}X_{53}-X_{46}X_{69}X_{97}X_{75}X_{54}$
- (XV) $-X_{19}X_{9,10}X_{10,1}-X_{2,10}X_{10,9}X_{92}-X_{7,10}X_{10,8}X_{87}+X_{7,10}X_{10,9}X_{97}+X_{89}X_{9,10}X_{10,8}+X_{14}X_{42}X_{2,10}X_{10,1}-X_{14}X_{43}X_{31}+X_{48}X_{86}X_{64}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}+X_{19}X_{92}X_{23}X_{31}-X_{23}X_{36}X_{64}X_{42}+X_{36}X_{65}X_{54}X_{43}-X_{48}X_{89}X_{97}X_{75}X_{54}$
- (XVI) $-X_{2,10}X_{10,8}X_{82}-X_{12}X_{29}X_{9,10}X_{10,1}+X_{14}X_{42}X_{2,10}X_{10,1}+X_{69}X_{9,10}X_{10,8}X_{87}X_{76}+X_{12}X_{23}X_{31}+X_{29}X_{98}X_{82}+X_{36}X_{65}X_{53}+X_{45}X_{56}X_{64}-X_{56}X_{69}X_{95}-X_{57}X_{76}X_{65}+X_{57}X_{79}X_{95}-X_{79}X_{98}X_{87}-X_{14}X_{45}X_{53}X_{31}-X_{23}X_{36}X_{64}X_{42}$
- (XVII) $-X_{1,10}X_{10,4}X_{41}+X_{2,10}X_{10,4}X_{42}-X_{2,10}X_{10,9}X_{92}-X_{7,10}X_{10,8}X_{87}+X_{7,10}X_{10,9}X_{97}+X_{1,10}X_{10,8}X_{89}X_{91}-X_{13}X_{39}X_{91}+X_{23}X_{39}X_{92}+X_{48}X_{86}X_{64}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{23}X_{36}X_{64}X_{42}+X_{13}X_{36}X_{65}X_{54}X_{41}-X_{48}X_{89}X_{97}X_{75}X_{54}$
- (XVIII) $X_{14}X_{4,10}X_{10,1}-X_{24}X_{4,10}X_{10,2}-X_{67}X_{7,10}X_{10,6}+X_{68}X_{8,10}X_{10,6}-X_{19}X_{98}X_{8,10}X_{10,1}+X_{29}X_{97}X_{7,10}X_{10,2}-X_{14}X_{45}^1X_{53}X_{31}+X_{24}X_{45}^2X_{53}X_{32}-X_{56}X_{68}X_{84}X_{45}^2+X_{45}^1X_{56}X_{67}X_{74}+X_{19}X_{93}X_{31}-X_{29}X_{93}X_{32}-X_{49}X_{97}X_{74}+X_{49}X_{98}X_{84}$

- (XIX) $-X_{19}X_{9,10}X_{10,1}-X_{2,10}X_{10,9}X_{92}+X_{7,10}X_{10,9}X_{97}+X_{89}X_{9,10}X_{10,8}+X_{14}X_{42}X_{2,10}X_{10,1}-$
 $X_{67}X_{7,10}X_{10,8}X_{86}+X_{35}X_{54}^1X_{43}-X_{46}X_{65}X_{54}^1-X_{23}X_{35}X_{54}^2X_{42}+X_{48}X_{86}X_{65}X_{54}^2-$
 $X_{14}X_{43}X_{31}+X_{46}X_{67}X_{74}+X_{19}X_{92}X_{23}X_{31}-X_{48}X_{89}X_{97}X_{74}$
- (XX) $-X_{1,10}X_{10,2}X_{21}-X_{7,10}X_{10,8}X_{87}+X_{1,10}X_{10,8}X_{89}X_{91}+X_{29}X_{97}X_{7,10}X_{10,2}-X_{35}X_{56}^1X_{63}+$
 $X_{45}X_{56}^2X_{64}+X_{56}^1X_{68}X_{87}X_{75}-X_{68}X_{89}X_{97}X_{75}X_{56}^2+X_{13}X_{35}X_{51}+X_{14}X_{42}X_{21}-$
 $X_{14}X_{45}X_{51}+X_{26}X_{63}X_{32}-X_{26}X_{64}X_{42}-X_{13}X_{32}X_{29}X_{91}$
- (XXI) $X_{2,10}X_{10,1}X_{12}^2-X_{12}^1X_{29}X_{9,10}X_{10,1}-X_{2,10}X_{10,8}X_{82}+X_{69}X_{9,10}X_{10,8}X_{86}-X_{24}X_{41}X_{12}^2+$
 $X_{12}^1X_{23}X_{31}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}-X_{67}X_{78}X_{86}+$
 $X_{29}X_{97}X_{78}X_{82}+X_{36}X_{67}X_{75}X_{53}-X_{46}X_{69}X_{97}X_{75}X_{54}$
- (XXII) $X_{2,10}X_{10,1}X_{12}^2-X_{12}^1X_{29}X_{9,10}X_{10,1}-X_{2,10}X_{10,8}X_{82}+X_{69}X_{9,10}X_{10,8}X_{86}-X_{24}X_{45}X_{51}X_{12}^2+$
 $X_{12}^1X_{23}X_{35}X_{51}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}-X_{35}X_{57}X_{73}+X_{36}X_{67}X_{73}+X_{45}X_{57}X_{74}-$
 $X_{67}X_{78}X_{86}+X_{29}X_{97}X_{78}X_{82}-X_{46}X_{69}X_{97}X_{74}$
- (XXIII) $-X_{19}X_{9,10}X_{10,1}-X_{2,10}X_{10,9}X_{92}-X_{7,10}X_{10,8}X_{87}+X_{7,10}X_{10,9}X_{97}+X_{89}X_{9,10}X_{10,8}+$
 $X_{13}X_{34}X_{42}X_{2,10}X_{10,1}-X_{13}X_{32}X_{21}+X_{19}X_{92}X_{21}+X_{26}X_{63}X_{32}-X_{26}X_{64}X_{42}-X_{34}X_{46}X_{63}+$
 $X_{46}X_{65}X_{54}+X_{48}X_{86}X_{64}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{48}X_{89}X_{97}X_{75}X_{54}$
- (XXIV) $-X_{8,10}X_{10,9}X_{98}^1+X_{29}X_{98}^2X_{8,10}X_{10,2}-X_{1,10}X_{10,2}X_{21}+X_{1,10}X_{10,9}X_{91}-X_{79}X_{98}^2X_{87}+$
 $X_{69}X_{98}^1X_{87}X_{76}+X_{12}X_{23}X_{31}-X_{12}X_{29}X_{91}+X_{14}X_{42}X_{21}+X_{36}X_{65}X_{53}+X_{45}X_{56}X_{64}-$
 $X_{56}X_{69}X_{95}-X_{57}X_{76}X_{65}+X_{57}X_{79}X_{95}-X_{14}X_{45}X_{53}X_{31}-X_{23}X_{36}X_{64}X_{42}$
- (XXV) $X_{14}X_{4,10}X_{10,1}-X_{19}X_{9,10}X_{10,1}-X_{24}X_{4,10}X_{10,2}-X_{7,10}X_{10,8}X_{87}+X_{89}X_{9,10}X_{10,8}+$
 $X_{29}X_{97}X_{7,10}X_{10,2}-X_{14}X_{43}^1X_{31}+X_{24}X_{43}^2X_{32}-X_{36}X_{64}X_{43}^2+X_{36}X_{65}X_{54}X_{43}^1+X_{19}X_{93}X_{31}-$
 $X_{29}X_{93}X_{32}+X_{48}X_{86}X_{64}-X_{58}X_{86}X_{65}+X_{58}X_{87}X_{75}-X_{48}X_{89}X_{97}X_{75}X_{54}$
- (XXVI) $-X_{8,10}X_{10,9}X_{98}^1+X_{29}X_{98}^2X_{8,10}X_{10,2}+X_{1,10}X_{10,9}X_{91}-X_{1,10}X_{10,2}X_{24}X_{41}-X_{79}X_{98}^2X_{87}+$
 $X_{69}X_{98}^1X_{87}X_{76}+X_{12}X_{23}X_{31}-X_{12}X_{29}X_{91}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}-X_{23}X_{36}X_{62}+$
 $X_{24}X_{46}X_{62}+X_{36}X_{65}X_{53}-X_{57}X_{76}X_{65}+X_{57}X_{79}X_{95}-X_{46}X_{69}X_{95}X_{54}$
- (XXVII) $-X_{19}X_{9,10}^1X_{10,1}+X_{29}X_{9,10}^2X_{10,2}-X_{79}X_{9,10}^2X_{10,7}+X_{78}X_{89}X_{9,10}^1X_{10,7}+X_{14}X_{4,10}X_{10,1}-$
 $X_{24}X_{4,10}X_{10,2}-X_{14}X_{43}^1X_{31}+X_{24}X_{43}^2X_{32}-X_{36}X_{64}X_{43}^2+X_{36}X_{65}X_{54}X_{43}^1+X_{19}X_{93}X_{31}-$
 $X_{29}X_{93}X_{32}+X_{48}X_{86}X_{64}+X_{57}X_{79}X_{95}-X_{48}X_{89}X_{95}X_{54}-X_{57}X_{78}X_{86}X_{65}$
- (XXVIII) $X_{2,10}X_{10,1}X_{12}^2-X_{12}^1X_{29}X_{9,10}X_{10,1}-X_{2,10}X_{10,8}X_{82}+X_{69}X_{9,10}X_{10,8}X_{87}X_{76}-X_{24}X_{41}X_{12}^2+$
 $X_{12}^1X_{23}X_{31}-X_{15}X_{53}X_{31}+X_{15}X_{54}X_{41}-X_{23}X_{36}X_{62}+X_{24}X_{46}X_{62}+X_{29}X_{98}X_{82}+$
 $X_{36}X_{65}X_{53}-X_{57}X_{76}X_{65}+X_{57}X_{79}X_{95}-X_{79}X_{98}X_{87}-X_{46}X_{69}X_{95}X_{54}$
- (XXIX) $-X_{1,10}X_{10,4}X_{41}+X_{1,10}X_{10,9}X_{91}+X_{2,10}X_{10,4}X_{42}-X_{8,10}X_{10,9}X_{98}-X_{2,10}X_{10,7}X_{79}X_{92}+$
 $X_{68}X_{8,10}X_{10,7}X_{76}+X_{13}X_{34}^1X_{41}-X_{23}X_{34}^2X_{42}+X_{53}X_{34}^2X_{45}^2-X_{34}^1X_{45}^1X_{53}+X_{45}^1X_{56}X_{64}-$
 $X_{56}X_{68}X_{84}X_{45}^2-X_{13}X_{39}X_{91}+X_{23}X_{39}X_{92}-X_{47}X_{76}X_{64}+X_{47}X_{79}X_{98}X_{84}$
- (XXX) $-X_{1,10}X_{10,4}X_{41}+X_{2,10}X_{10,4}X_{42}+X_{6,10}X_{10,7}X_{76}-X_{6,10}X_{10,8}X_{86}+X_{1,10}X_{10,8}X_{89}X_{91}-$
 $X_{2,10}X_{10,7}X_{79}X_{92}+X_{13}X_{34}^1X_{41}-X_{23}X_{34}^2X_{42}-X_{47}X_{76}X_{64}^2+X_{48}X_{86}X_{64}^1+X_{53}X_{34}^2X_{45}^2-$
 $X_{56}X_{64}^1X_{45}^2-X_{34}^1X_{45}^1X_{53}+X_{45}^1X_{56}X_{64}^2-X_{13}X_{39}X_{91}+X_{23}X_{39}X_{92}+X_{47}X_{79}X_{94}-$
 $X_{48}X_{89}X_{94}$

$$\begin{aligned}
(\text{XXXI}) \quad & -X_{1,10}X_{10,2}X_{21}^1 - X_{7,10}X_{10,8}X_{87}^1 + X_{1,10}X_{10,8}X_{81} + X_{27}X_{7,10}X_{10,2} - X_{13}X_{32}X_{21}^2 + \\
& X_{14}X_{42}X_{21}^1 + X_{19}X_{92}X_{21}^2 - X_{35}X_{56}^1X_{63} + X_{45}X_{56}^2X_{64} + X_{79}X_{98}X_{87}^2 - X_{68}X_{87}^2X_{75}X_{56}^2 + \\
& X_{56}^1X_{68}X_{87}^1X_{75} + X_{13}X_{35}X_{51} - X_{14}X_{45}X_{51} - X_{19}X_{98}X_{81} + X_{26}X_{63}X_{32} - X_{26}X_{64}X_{42} - \\
& X_{27}X_{79}X_{92} \\
(\text{XXXII}) \quad & X_{1,10}X_{10,9}^2X_{91} - X_{2,10}X_{10,9}^1X_{92} + X_{6,10}X_{10,9}^1X_{97}X_{76} - X_{6,10}X_{10,9}^2X_{98}X_{86} - X_{1,10}X_{10,4}X_{41} + \\
& X_{2,10}X_{10,4}X_{42} + X_{13}X_{34}^1X_{41} - X_{23}X_{34}^2X_{42} + X_{53}X_{34}^2X_{45}^2 - X_{58}X_{84}X_{45}^2 - X_{34}^1X_{45}^1X_{53} + \\
& X_{45}^1X_{57}X_{74} - X_{13}X_{39}X_{91} + X_{23}X_{39}X_{92} - X_{49}X_{97}X_{74} + X_{49}X_{98}X_{84} - X_{57}X_{76}X_{65} + \\
& X_{58}X_{86}X_{65} \\
(\text{XXXIII}) \quad & X_{1,10}X_{10,9}^2X_{91} - X_{2,10}X_{10,9}^1X_{92} + X_{7,10}X_{10,9}^1X_{97} - X_{8,10}X_{10,9}^2X_{98} - X_{1,10}X_{10,4}X_{41} + \\
& X_{2,10}X_{10,4}X_{42} - X_{67}X_{7,10}X_{10,6} + X_{68}X_{8,10}X_{10,6} + X_{13}X_{34}^1X_{41} - X_{23}X_{34}^2X_{42} + X_{53}X_{34}^2X_{45}^2 - \\
& X_{34}^1X_{45}^1X_{53} - X_{56}X_{68}X_{84}X_{45}^2 + X_{45}^1X_{56}X_{67}X_{74} - X_{13}X_{39}X_{91} + X_{23}X_{39}X_{92} - X_{49}X_{97}X_{74} + \\
& X_{49}X_{98}X_{84}
\end{aligned}$$

1.39 $L^{5,6,1}$

$$(\text{I}) \quad -X_{12}X_{2,11}X_{11,1} - X_{1,10}X_{10,2}X_{21} + X_{89}X_{9,10}X_{10,8} + X_{8,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} + \\
X_{2,11}X_{11,10}X_{10,2} - X_{8,11}X_{11,10}X_{10,8} - X_{9,10}X_{10,11}X_{11,9} + X_{12}X_{23}X_{31} + X_{14}X_{42}X_{21} - \\
X_{14}X_{43}X_{31} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} - X_{57}X_{76}X_{65} + X_{67}X_{79}X_{96} + X_{68}X_{87}X_{76} - \\
X_{68}X_{89}X_{96} - X_{79}X_{98}X_{87} - X_{23}X_{35}X_{54}X_{42} + X_{36}X_{65}X_{54}X_{43}$$

1.40 $K^{2,5,1,4}$

$$\begin{aligned}
(\text{I}) \quad & -X_{1,10}X_{10,9}X_{91} + X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} + X_{12}X_{2,11}X_{11,9}X_{91} - X_{13}X_{32}X_{2,11}X_{11,1} - \\
& X_{57}X_{7,10}X_{10,8}X_{85} + X_{1,10}X_{10,11}X_{11,1} - X_{9,10}X_{10,11}X_{11,9} - X_{12}X_{24}X_{41} + X_{13}X_{34}X_{41} + \\
& X_{24}X_{43}X_{32} - X_{34}X_{46}X_{63} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54} - X_{68}X_{89}X_{97}X_{76} \\
(\text{II}) \quad & -X_{13}X_{3,11}X_{11,1} - X_{1,10}X_{10,9}X_{91} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} + \\
& X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{1,10}X_{10,11}X_{11,1} - X_{9,10}X_{10,11}X_{11,9} - \\
& X_{34}X_{46}X_{63} + X_{13}X_{34}X_{42}X_{21} - X_{23}X_{35}X_{54}X_{42} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54} - \\
& X_{68}X_{89}X_{97}X_{76} \\
(\text{III}) \quad & -X_{13}X_{3,11}X_{11,1} - X_{1,10}X_{10,9}X_{91} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} + \\
& X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} - X_{45}X_{57}X_{7,10}X_{10,8}X_{84} + X_{1,10}X_{10,11}X_{11,1} - X_{9,10}X_{10,11}X_{11,9} - \\
& X_{23}X_{35}X_{52} + X_{24}X_{45}X_{52} - X_{24}X_{46}X_{62} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} - X_{78}X_{89}X_{97} + \\
& X_{13}X_{36}X_{62}X_{21} + X_{46}X_{67}X_{78}X_{84} \\
(\text{IV}) \quad & -X_{13}X_{3,11}X_{11,1} - X_{1,10}X_{10,9}X_{91} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} + \\
& X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} - X_{57}X_{7,10}X_{10,8}X_{86}X_{65} + X_{1,10}X_{10,11}X_{11,1} - X_{9,10}X_{10,11}X_{11,9} + \\
& X_{13}X_{32}X_{21} - X_{23}X_{35}X_{52} - X_{24}X_{43}X_{32} - X_{46}X_{67}X_{74} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} + \\
& X_{24}X_{46}X_{65}X_{52} + X_{35}X_{57}X_{74}X_{43} \\
(\text{V}) \quad & -X_{13}X_{3,11}X_{11,1} - X_{1,10}X_{10,9}X_{91} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} - \\
& X_{57}X_{7,10}X_{10,5} + X_{58}X_{8,10}X_{10,5} + X_{7,10}X_{10,9}X_{97} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - \\
& X_{34}X_{46}X_{63} + X_{46}X_{65}X_{54} - X_{58}X_{86}X_{65} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86} + X_{13}X_{34}X_{42}X_{21} - \\
& X_{23}X_{35}X_{54}X_{42} + X_{35}X_{57}X_{76}X_{63}
\end{aligned}$$

$$(VI) \quad X_{1,11}X_{11,2}X_{21} - X_{29}X_{9,11}X_{11,2} + X_{7,10}X_{10,9}X_{97} - X_{1,11}X_{11,10}X_{10,9}X_{91} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{89}X_{9,11}X_{11,10}X_{10,8} - X_{12}X_{24}X_{41} + X_{12}X_{29}X_{91} - X_{13}X_{32}X_{21} + X_{24}X_{43}X_{32} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} + X_{13}X_{36}X_{64}X_{41}$$

$$(VII) \quad -X_{13}X_{3,11}X_{11,1} - X_{1,10}X_{10,9}X_{91} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} - X_{7,10}X_{10,8}X_{87} + X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} + X_{1,10}X_{10,11}X_{11,1} - X_{9,10}X_{10,11}X_{11,9} - X_{23}X_{34}^2X_{42} + X_{45}X_{53}X_{34}^2 - X_{34}^1X_{46}X_{63} + X_{13}X_{34}^1X_{42}X_{21} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} + X_{58}X_{87}X_{75} - X_{68}X_{89}X_{97}X_{76}$$

1.41 $K^{4,4,2,4}$

$$(I) \quad X_{12}X_{2,11}X_{11,9}X_{91} - X_{14}X_{42}X_{2,11}X_{11,1} - X_{1,10}X_{10,7}X_{79}X_{91} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - X_{12}X_{23}X_{31} + X_{14}X_{45}X_{53}X_{31} + X_{23}X_{36}X_{64}X_{42} - X_{36}X_{67}X_{75}X_{53} - X_{45}X_{58}X_{86}X_{64} + X_{67}X_{79}X_{98}X_{86}$$

$$(II) \quad X_{1,11}X_{11,2}X_{21} - X_{29}X_{9,11}X_{11,2} - X_{8,10}X_{10,9}X_{98} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{1,11}X_{11,10}X_{10,7}X_{79}X_{91} + X_{9,11}X_{11,10}X_{10,9} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{45}X_{53}X_{31} + X_{23}X_{36}X_{64}X_{42} - X_{36}X_{67}X_{75}X_{53} - X_{45}X_{58}X_{86}X_{64} + X_{67}X_{79}X_{98}X_{86}$$

$$(III) \quad X_{1,11}X_{11,2}X_{21} - X_{7,10}X_{10,8}X_{87} - X_{1,11}X_{11,7}X_{79}X_{91} - X_{29}X_{9,10}X_{10,11}X_{11,2} + X_{67}X_{79}X_{9,10}X_{10,8}X_{86} + X_{7,10}X_{10,11}X_{11,7} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{58}X_{87}X_{75} + X_{14}X_{45}X_{53}X_{31} + X_{23}X_{36}X_{64}X_{42} - X_{36}X_{67}X_{75}X_{53} - X_{45}X_{58}X_{86}X_{64}$$

$$(IV) \quad X_{17}X_{7,10}X_{10,1} - X_{29}X_{9,11}X_{11,2} - X_{14}X_{42}X_{2,10}X_{10,1} - X_{7,10}X_{10,11}X_{11,8}X_{87} + X_{67}X_{79}X_{9,11}X_{11,8}X_{86} + X_{2,10}X_{10,11}X_{11,2} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{17}X_{79}X_{91} + X_{58}X_{87}X_{75} + X_{14}X_{45}X_{53}X_{31} + X_{23}X_{36}X_{64}X_{42} - X_{36}X_{67}X_{75}X_{53} - X_{45}X_{58}X_{86}X_{64}$$

$$(V) \quad X_{17}X_{7,10}X_{10,1} - X_{29}X_{9,11}X_{11,2} - X_{14}X_{42}X_{2,10}X_{10,1} - X_{57}X_{7,10}X_{10,11}X_{11,8}X_{85} + X_{67}X_{79}X_{9,11}X_{11,8}X_{86} + X_{2,10}X_{10,11}X_{11,2} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{14}X_{43}X_{31} - X_{17}X_{79}X_{91} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} + X_{23}X_{36}X_{64}X_{42}$$

$$(VI) \quad -X_{19}X_{9,11}X_{11,1} - X_{7,10}X_{10,8}X_{87} - X_{12}X_{2,11}X_{11,10}X_{10,1} + X_{13}X_{32}X_{2,11}X_{11,1} + X_{19}X_{97}X_{7,10}X_{10,1} + X_{89}X_{9,11}X_{11,10}X_{10,8} + X_{12}X_{24}X_{41} + X_{35}X_{56}X_{63} + X_{46}X_{65}X_{54} - X_{56}X_{67}X_{75} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} - X_{13}X_{35}X_{54}X_{41} - X_{24}X_{46}X_{63}X_{32}$$

$$(VII) \quad -X_{14}X_{4,11}X_{11,1} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{24}X_{4,11}X_{11,2} + X_{78}X_{8,10}X_{10,7} - X_{1,10}X_{10,7}X_{79}X_{91} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - X_{35}X_{54}X_{43} - X_{57}X_{78}X_{85} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} + X_{14}X_{43}X_{32}X_{21} - X_{24}X_{46}X_{63}X_{32} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$$

$$(VIII) \quad X_{17}X_{7,10}X_{10,1} - X_{23}X_{3,11}X_{11,2} + X_{24}X_{4,11}X_{11,2} - X_{7,10}X_{10,8}X_{87} - X_{8,11}X_{11,9}X_{98} + X_{13}X_{3,11}X_{11,9}X_{91} - X_{14}X_{4,11}X_{11,10}X_{10,1} + X_{8,11}X_{11,10}X_{10,8} - X_{13}X_{35}X_{51} + X_{14}X_{45}X_{51} - X_{17}X_{79}X_{91} - X_{56}X_{67}X_{75} + X_{58}X_{87}X_{75} + X_{23}X_{35}X_{56}X_{62} + X_{67}X_{79}X_{98}X_{86} - X_{24}X_{45}X_{58}X_{86}X_{62}$$

$$(IX) \quad X_{1,11}X_{11,2}X_{21} - X_{57}X_{7,10}X_{10,5} + X_{58}X_{8,10}X_{10,5} - X_{68}X_{8,10}X_{10,6} - X_{1,11}X_{11,7}X_{79}X_{91} - X_{29}X_{9,10}X_{10,11}X_{11,2} + X_{67}X_{79}X_{9,10}X_{10,6} + X_{7,10}X_{10,11}X_{11,7} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} - X_{35}X_{58}X_{84}X_{43} + X_{23}X_{36}X_{68}X_{84}X_{42}$$

- (X) $X_{1,11}X_{11,2}X_{21} - X_{1,11}X_{11,7}X_{79}X_{91} - X_{29}X_{9,10}X_{10,11}X_{11,2} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{67}X_{79}X_{9,10}X_{10,8}X_{86} + X_{7,10}X_{10,11}X_{11,7} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} + X_{23}X_{36}X_{64}X_{42}$
- (XI) $X_{78}X_{8,10}X_{10,7} + X_{12}X_{2,11}X_{11,9}X_{91} - X_{14}X_{42}X_{2,11}X_{11,1} - X_{1,10}X_{10,7}X_{79}X_{91} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - X_{12}X_{23}X_{31} + X_{14}X_{43}X_{31} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} - X_{57}X_{78}X_{85} + X_{23}X_{36}X_{64}X_{42} + X_{67}X_{79}X_{98}X_{86}$
- (XII) $X_{17}X_{7,10}X_{10,1} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} - X_{7,10}X_{10,8}X_{87} - X_{8,11}X_{11,9}X_{98} - X_{14}X_{4,11}X_{11,10}X_{10,1} + X_{23}X_{34}X_{4,11}X_{11,2} + X_{8,11}X_{11,10}X_{10,8} - X_{17}X_{79}X_{91} - X_{23}X_{35}X_{52} + X_{35}X_{56}X_{63} - X_{56}X_{67}X_{75} + X_{58}X_{87}X_{75} + X_{14}X_{45}X_{52}X_{21} + X_{67}X_{79}X_{98}X_{86} - X_{34}X_{45}X_{58}X_{86}X_{63}$
- (XIII) $X_{12}X_{2,11}X_{11,9}X_{91} - X_{14}X_{42}X_{2,11}X_{11,1} - X_{1,10}X_{10,7}X_{79}X_{91} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - X_{12}X_{23}X_{31} + X_{23}X_{34}X_{42} - X_{34}X_{46}X_{63} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} + X_{14}X_{45}X_{53}X_{31}$
- (XIV) $-X_{7,10}X_{10,8}X_{87} + X_{1,11}X_{11,2}X_{24}X_{41} - X_{1,11}X_{11,7}X_{79}X_{91} - X_{29}X_{9,10}X_{10,11}X_{11,2} + X_{67}X_{79}X_{9,10}X_{10,8}X_{86} + X_{7,10}X_{10,11}X_{11,7} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - X_{36}X_{67}X_{75}X_{53}$
- (XV) $-X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{23}X_{3,11}X_{11,2} - X_{3,11}X_{11,4}X_{43} - X_{1,10}X_{10,7}X_{79}X_{91} + X_{1,10}X_{10,11}X_{11,4}X_{41} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{8,10}X_{10,11}X_{11,9}X_{98} - X_{23}X_{35}^1X_{52} + X_{43}X_{35}^2X_{54} + X_{35}^1X_{56}X_{63} - X_{58}X_{86}X_{63}X_{35}^2 + X_{15}X_{52}X_{21} - X_{15}X_{54}X_{41} - X_{56}X_{67}X_{75} + X_{67}X_{79}X_{98}X_{86}$
- (XVI) $X_{1,11}X_{11,2}X_{21} - X_{29}X_{9,11}X_{11,2} + X_{78}X_{8,10}X_{10,7} - X_{8,10}X_{10,9}X_{98} - X_{1,11}X_{11,10}X_{10,7}X_{79}X_{91} + X_{9,11}X_{11,10}X_{10,9} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} + X_{23}X_{34}X_{42} - X_{34}X_{46}X_{63} - X_{35}X_{54}X_{43} - X_{57}X_{78}X_{85} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} + X_{35}X_{57}X_{76}X_{63} + X_{46}X_{68}X_{85}X_{54}$
- (XVII) $X_{1,11}X_{11,2}X_{21} - X_{29}X_{9,11}X_{11,2} - X_{8,10}X_{10,9}X_{98} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{1,11}X_{11,10}X_{10,7}X_{79}X_{91} + X_{9,11}X_{11,10}X_{10,9} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{23}X_{34}X_{42} - X_{34}X_{46}X_{63} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} + X_{14}X_{45}X_{53}X_{31}$
- (XVIII) $X_{1,11}X_{11,2}X_{21} - X_{29}X_{9,11}X_{11,2} + X_{78}X_{8,10}X_{10,7} - X_{8,10}X_{10,9}X_{98} - X_{1,11}X_{11,10}X_{10,7}X_{79}X_{91} + X_{9,11}X_{11,10}X_{10,9} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{14}X_{42}X_{21} + X_{14}X_{43}X_{31} - X_{35}X_{54}X_{43} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} - X_{57}X_{78}X_{85} + X_{23}X_{36}X_{64}X_{42} + X_{67}X_{79}X_{98}X_{86}$
- (XIX) $X_{12}^1X_{2,11}X_{11,1} - X_{2,11}X_{11,10}X_{10,1}X_{12}^2 - X_{19}X_{9,11}X_{11,1} - X_{7,10}X_{10,8}X_{87} + X_{19}X_{97}X_{7,10}X_{10,1} + X_{89}X_{9,11}X_{11,10}X_{10,8} + X_{24}X_{41}X_{12}^2 - X_{12}^1X_{23}X_{31} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} - X_{36}X_{67}X_{75}X_{53}$

$$\begin{aligned}
(\text{XX}) \quad & -X_{14}X_{4,11}X_{11,1} - X_{1,11}X_{11,2}X_{21} + X_{1,11}X_{11,9}X_{91} + X_{24}X_{4,11}X_{11,2} + X_{78}X_{8,10}X_{10,7} - \\
& X_{1,10}X_{10,7}X_{79}X_{91} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} - X_{24}X_{43}^1X_{32} - X_{35}X_{54}X_{43}^2 + \\
& X_{36}X_{64}X_{43}^1 + X_{14}X_{43}^2X_{32}X_{21} + X_{35}X_{57}X_{73} - X_{36}X_{67}X_{73} + X_{48}X_{85}X_{54} - X_{48}X_{86}X_{64} - \\
& X_{57}X_{78}X_{85} + X_{67}X_{79}X_{98}X_{86} \\
(\text{XXI}) \quad & X_{12}X_{2,11}X_{11,1}^2 - X_{19}X_{9,11}X_{11,1}^2 - X_{14}X_{42}X_{2,11}X_{11,1}^1 - X_{1,10}X_{10,7}X_{71} + X_{89}X_{9,11}X_{11,8} + \\
& X_{58}X_{8,10}X_{10,7}X_{75} + X_{1,10}X_{10,11}X_{11,1}^1 - X_{8,10}X_{10,11}X_{11,8} - X_{12}X_{23}X_{31} + X_{19}X_{97}X_{71} + \\
& X_{23}X_{34}X_{42} - X_{34}X_{46}X_{63} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} + \\
& X_{14}X_{45}X_{53}X_{31} - X_{68}X_{89}X_{97}X_{76} \\
(\text{XXII}) \quad & -X_{2,10}X_{10,1}X_{12}^2 + X_{17}X_{7,10}X_{10,1} - X_{29}X_{9,11}X_{11,2} - X_{7,10}X_{10,11}X_{11,8}X_{87} + X_{67}X_{79}X_{9,11}X_{11,8}X_{86} + \\
& X_{2,10}X_{10,11}X_{11,2} + X_{24}X_{41}X_{12}^2 - X_{12}^1X_{23}X_{31} + X_{12}^1X_{29}X_{91} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} - \\
& X_{17}X_{79}X_{91} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - X_{58}X_{86}X_{65} + X_{58}X_{87}X_{75} - \\
& X_{36}X_{67}X_{75}X_{53} \\
(\text{XXIII}) \quad & X_{79}X_{9,11}X_{11,8}X_{87}^1 - X_{7,10}X_{10,11}X_{11,8}X_{87}^2 + X_{17}X_{7,10}X_{10,1} - X_{29}X_{9,11}X_{11,2} - X_{14}X_{42}X_{2,10}X_{10,1} + \\
& X_{2,10}X_{10,11}X_{11,2} + X_{58}X_{87}^2X_{75} - X_{68}X_{87}^1X_{76} - X_{12}X_{23}X_{31} + X_{12}X_{29}X_{91} - X_{17}X_{79}X_{91} + \\
& X_{23}X_{34}X_{42} - X_{34}X_{46}X_{63} - X_{37}X_{75}X_{53} + X_{37}X_{76}X_{63} - X_{45}X_{58}X_{84} + X_{46}X_{68}X_{84} + \\
& X_{14}X_{45}X_{53}X_{31} \\
(\text{XXIV}) \quad & -X_{19}X_{9,11}X_{11,1}^1 - X_{2,11}X_{11,1}^2X_{12}^2 + X_{12}^1X_{2,11}X_{11,1}^1 - X_{1,10}X_{10,7}X_{71} + X_{89}X_{9,11}X_{11,8} + \\
& X_{58}X_{8,10}X_{10,7}X_{75} + X_{1,10}X_{10,11}X_{11,1}^2 - X_{8,10}X_{10,11}X_{11,8} + X_{24}X_{41}X_{12}^2 - X_{12}^1X_{23}X_{31} + \\
& X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + X_{19}X_{97}X_{71} + X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} + X_{46}X_{65}X_{54} - \\
& X_{58}X_{86}X_{65} + X_{67}X_{78}X_{86} - X_{78}X_{89}X_{97} - X_{36}X_{67}X_{75}X_{53} \\
(\text{XXV}) \quad & -X_{2,11}X_{11,1}X_{12}^2 + X_{12}^1X_{2,11}X_{11,9}X_{91} - X_{1,10}X_{10,9}X_{91} - X_{57}X_{7,10}X_{10,5} + X_{58}X_{8,10}X_{10,5} + \\
& X_{7,10}X_{10,9}X_{97} - X_{8,10}X_{10,11}X_{11,9}X_{98} + X_{1,10}X_{10,11}X_{11,1} + X_{24}X_{41}X_{12}^2 - X_{36}X_{65}^2X_{53} + \\
& X_{46}X_{65}^1X_{54} + X_{57}X_{76}X_{65}^2 - X_{58}X_{86}X_{65}^1 - X_{12}^1X_{23}X_{31} + X_{15}X_{53}X_{31} - X_{15}X_{54}X_{41} + \\
& X_{23}X_{36}X_{62} - X_{24}X_{46}X_{62} - X_{69}X_{97}X_{76} + X_{69}X_{98}X_{86}
\end{aligned}$$

1.42 $\mathbb{C}^3/(\mathbb{Z}_2 \times \mathbb{Z}_6) (1, 0, 1)(1, 0, 5)$

$$\begin{aligned}
(\text{I}) \quad & X_{12}X_{2,10}X_{10,1} - X_{19}X_{9,10}X_{10,1} - X_{2,10}X_{10,9}X_{92} - X_{34}X_{4,10}X_{10,3} + X_{39}X_{9,10}X_{10,3} + \\
& X_{4,10}X_{10,9}X_{94} - X_{56}X_{6,11}X_{11,5} - X_{5,12}X_{12,6}X_{65} + X_{78}X_{8,11}X_{11,7} + X_{7,12}X_{12,8}X_{87} + \\
& X_{5,12}X_{12,11}X_{11,5} + X_{6,11}X_{11,12}X_{12,6} - X_{7,12}X_{12,11}X_{11,7} - X_{8,11}X_{11,12}X_{12,8} - X_{12}X_{25}X_{51} - \\
& X_{16}X_{62}X_{21} + X_{16}X_{65}X_{51} + X_{19}X_{92}X_{21} + X_{25}X_{56}X_{62} + X_{34}X_{48}X_{83} + X_{37}X_{74}X_{43} - \\
& X_{37}X_{78}X_{83} - X_{39}X_{94}X_{43} - X_{48}X_{87}X_{74}
\end{aligned}$$

1.43 $\text{SPP}/(\mathbb{Z}_2 \times \mathbb{Z}_2) (1, 0, 0, 1)(0, 1, 1, 0)$

$$\begin{aligned}
(\text{I}) \quad & X_{7,10}X_{10,8}X_{87} - X_{14}X_{42}X_{2,11}X_{11,1} - X_{1,12}X_{12,2}X_{23}X_{31} - X_{7,10}X_{10,11}X_{11,9}X_{97} - X_{89}X_{9,12}X_{12,10}X_{10,8} + \\
& X_{1,12}X_{12,10}X_{10,11}X_{11,1} + X_{2,11}X_{11,9}X_{9,12}X_{12,2} - X_{35}X_{56}X_{63} - X_{46}X_{65}X_{54} + X_{56}X_{67}X_{75} + \\
& X_{58}X_{86}X_{65} - X_{58}X_{87}X_{75} - X_{67}X_{78}X_{86} + X_{78}X_{89}X_{97} + X_{14}X_{46}X_{63}X_{31} + X_{23}X_{35}X_{54}X_{42} \\
(\text{II}) \quad & -X_{12}X_{2,11}X_{11,1} - X_{1,12}X_{12,2}X_{21} + X_{7,10}X_{10,8}X_{87} - X_{7,10}X_{10,11}X_{11,9}X_{97} - X_{89}X_{9,12}X_{12,10}X_{10,8} + \\
& X_{1,12}X_{12,10}X_{10,11}X_{11,1} + X_{2,11}X_{11,9}X_{9,12}X_{12,2} + X_{12}X_{24}X_{41} + X_{13}X_{32}X_{21} - X_{58}X_{87}X_{75} - \\
& X_{67}X_{78}X_{86} + X_{78}X_{89}X_{97} - X_{13}X_{36}X_{64}X_{41} - X_{24}X_{45}X_{53}X_{32} + X_{36}X_{67}X_{75}X_{53} + \\
& X_{45}X_{58}X_{86}X_{64}
\end{aligned}$$

- (III) $-X_{12}X_{2,11}X_{11,1}+X_{7,10}X_{10,8}X_{87}-X_{1,12}X_{12,2}X_{23}X_{31}-X_{7,10}X_{10,11}X_{11,9}X_{97}-X_{89}X_{9,12}X_{12,10}X_{10,8}+$
 $X_{1,12}X_{12,10}X_{10,11}X_{11,1}+X_{2,11}X_{11,9}X_{9,12}X_{12,2}+X_{12}X_{24}X_{41}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}+$
 $X_{23}X_{35}X_{52}-X_{24}X_{45}X_{52}-X_{35}X_{56}X_{63}+X_{56}X_{67}X_{75}-X_{58}X_{87}X_{75}-X_{67}X_{78}X_{86}+$
 $X_{78}X_{89}X_{97}+X_{45}X_{58}X_{86}X_{64}$
- (IV) $X_{7,10}X_{10,8}X_{87}+X_{13}X_{32}X_{2,12}X_{12,1}+X_{1,11}X_{11,2}X_{24}X_{41}-X_{7,10}X_{10,11}X_{11,9}X_{97}-X_{89}X_{9,12}X_{12,10}X_{10,8}-$
 $X_{1,11}X_{11,12}X_{12,1}-X_{2,12}X_{12,11}X_{11,2}+X_{9,12}X_{12,11}X_{11,9}+X_{10,11}X_{11,12}X_{12,10}-X_{13}X_{34}X_{41}-$
 $X_{24}X_{43}X_{32}+X_{34}X_{46}X_{63}+X_{35}X_{54}X_{43}-X_{35}X_{56}X_{63}-X_{46}X_{65}X_{54}+X_{56}X_{67}X_{75}+$
 $X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}-X_{67}X_{78}X_{86}+X_{78}X_{89}X_{97}$
- (V) $-X_{29}X_{9,11}X_{11,2}+X_{29}X_{9,12}X_{12,2}+X_{7,10}X_{10,8}X_{87}-X_{7,10}X_{10,9}X_{97}+X_{1,11}X_{11,2}X_{24}X_{41}-$
 $X_{1,12}X_{12,2}X_{23}X_{31}-X_{89}X_{9,12}X_{12,10}X_{10,8}-X_{1,11}X_{11,10}X_{10,1}+X_{1,12}X_{12,10}X_{10,1}+$
 $X_{9,11}X_{11,10}X_{10,9}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}+X_{23}X_{35}X_{52}-X_{24}X_{45}X_{52}-X_{35}X_{56}X_{63}+$
 $X_{56}X_{67}X_{75}-X_{58}X_{87}X_{75}-X_{67}X_{78}X_{86}+X_{78}X_{89}X_{97}+X_{45}X_{58}X_{86}X_{64}$
- (VI) $X_{13}X_{3,12}X_{12,1}+X_{1,11}X_{11,4}X_{41}-X_{23}X_{3,12}X_{12,2}-X_{2,11}X_{11,4}X_{42}+X_{7,10}X_{10,8}X_{87}-$
 $X_{7,10}X_{10,11}X_{11,9}X_{97}-X_{89}X_{9,12}X_{12,10}X_{10,8}-X_{1,11}X_{11,12}X_{12,1}+X_{10,11}X_{11,12}X_{12,10}+$
 $X_{2,11}X_{11,9}X_{9,12}X_{12,2}-X_{13}X_{34}X_{41}+X_{34}X_{46}X_{63}-X_{35}X_{56}X_{63}-X_{46}X_{65}X_{54}+X_{56}X_{67}X_{75}+$
 $X_{58}X_{86}X_{65}-X_{58}X_{87}X_{75}-X_{67}X_{78}X_{86}+X_{78}X_{89}X_{97}+X_{23}X_{35}X_{54}X_{42}$
- (VII) $-X_{12}X_{2,11}X_{11,1}-X_{7,11}X_{11,9}X_{97}-X_{89}X_{9,12}X_{12,8}-X_{1,12}X_{12,2}X_{23}X_{31}-X_{58}X_{8,10}X_{10,7}X_{75}+$
 $X_{1,12}X_{12,11}X_{11,1}+X_{7,11}X_{11,10}X_{10,7}+X_{8,10}X_{10,12}X_{12,8}-X_{10,12}X_{12,11}X_{11,10}+X_{2,11}X_{11,9}X_{9,12}X_{12,2}+$
 $X_{12}X_{24}X_{41}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}+X_{23}X_{35}X_{52}-X_{24}X_{45}X_{52}-X_{35}X_{56}X_{63}+$
 $X_{56}X_{67}X_{75}-X_{67}X_{78}X_{86}+X_{78}X_{89}X_{97}+X_{45}X_{58}X_{86}X_{64}$
- (VIII) $X_{2,12}X_{12,1}X_{12}^2-X_{12}^1X_{2,11}X_{11,1}+X_{2,11}X_{11,9}X_{92}-X_{2,12}X_{12,9}X_{92}+X_{7,10}X_{10,8}X_{87}-$
 $X_{89}X_{9,10}X_{10,8}-X_{7,10}X_{10,11}X_{11,9}X_{97}+X_{1,10}X_{10,11}X_{11,1}-X_{1,10}X_{10,12}X_{12,1}+X_{9,10}X_{10,12}X_{12,9}-$
 $X_{23}X_{31}X_{12}^2+X_{12}^1X_{24}X_{41}+X_{16}X_{63}X_{31}-X_{16}X_{64}X_{41}+X_{23}X_{35}X_{52}-X_{24}X_{45}X_{52}-$
 $X_{35}X_{56}X_{63}+X_{56}X_{67}X_{75}-X_{58}X_{87}X_{75}-X_{67}X_{78}X_{86}+X_{78}X_{89}X_{97}+X_{45}X_{58}X_{86}X_{64}$

1.44 $L^{1,5,1}/\mathbb{Z}_2$ $(1, 0, 0, 1)$

- (I) $X_{7,10}X_{10,8}X_{87}-X_{7,10}X_{10,9}X_{97}-X_{89}X_{9,10}X_{10,8}+X_{14}X_{42}X_{2,11}X_{11,1}+X_{1,12}X_{12,2}X_{23}X_{31}+$
 $X_{9,10}X_{10,12}X_{12,9}+X_{9,11}X_{11,10}X_{10,9}-X_{1,12}X_{12,9}X_{9,11}X_{11,1}-X_{2,11}X_{11,10}X_{10,12}X_{12,2}-$
 $X_{14}X_{43}X_{31}-X_{23}X_{34}X_{42}+X_{34}X_{46}X_{63}+X_{35}X_{54}X_{43}-X_{35}X_{56}X_{63}-X_{46}X_{65}X_{54}+$
 $X_{56}X_{68}X_{85}+X_{57}X_{76}X_{65}-X_{57}X_{78}X_{85}-X_{68}X_{87}X_{76}+X_{78}X_{89}X_{97}$
- (II) $-X_{13}X_{3,12}X_{12,1}-X_{1,11}X_{11,4}X_{41}+X_{23}X_{3,12}X_{12,2}+X_{2,11}X_{11,4}X_{42}+X_{7,10}X_{10,8}X_{87}-$
 $X_{7,10}X_{10,9}X_{97}-X_{89}X_{9,10}X_{10,8}+X_{1,11}X_{11,12}X_{12,1}+X_{9,10}X_{10,12}X_{12,9}+X_{9,11}X_{11,10}X_{10,9}-$
 $X_{9,11}X_{11,12}X_{12,9}-X_{2,11}X_{11,10}X_{10,12}X_{12,2}-X_{23}X_{34}X_{42}+X_{34}X_{46}X_{63}-X_{35}X_{56}X_{63}-$
 $X_{46}X_{65}X_{54}+X_{56}X_{68}X_{85}+X_{57}X_{76}X_{65}-X_{57}X_{78}X_{85}-X_{68}X_{87}X_{76}+X_{78}X_{89}X_{97}+$
 $X_{13}X_{35}X_{54}X_{41}$

1.45 $\mathcal{C}/(\mathbb{Z}_3 \times \mathbb{Z}_2)$ $(1, 0, 0, 2)(0, 1, 1, 0)$

- (I) $-X_{13}X_{34}X_{4,12}X_{12,1}-X_{1,11}X_{11,4}X_{42}X_{21}+X_{58}X_{8,10}X_{10,7}X_{75}-X_{79}X_{9,11}X_{11,10}X_{10,7}-$
 $X_{8,10}X_{10,12}X_{12,9}X_{98}+X_{1,11}X_{11,10}X_{10,12}X_{12,1}+X_{4,12}X_{12,9}X_{9,11}X_{11,4}+X_{13}X_{35}X_{52}X_{21}+$
 $X_{26}X_{63}X_{34}X_{42}-X_{26}X_{67}X_{75}X_{52}-X_{35}X_{58}X_{86}X_{63}+X_{67}X_{79}X_{98}X_{86}$

- (II) $X_{12}X_{24}X_{4,11}X_{11,1} + X_{1,12}X_{12,4}X_{43}X_{31} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{79}X_{9,11}X_{11,10}X_{10,7} -$
 $X_{8,10}X_{10,12}X_{12,9}X_{98} - X_{1,12}X_{12,11}X_{11,1} - X_{4,11}X_{11,12}X_{12,4} + X_{9,11}X_{11,12}X_{12,9} + X_{10,12}X_{12,11}X_{11,10} -$
 $X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} - X_{24}X_{43}X_{32} + X_{26}X_{63}X_{32} - X_{26}X_{67}X_{75}X_{52} - X_{35}X_{58}X_{86}X_{63} +$
 $X_{67}X_{79}X_{98}X_{86}$
- (III) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} + X_{58}X_{8,10}X_{10,7}X_{75} -$
 $X_{79}X_{9,11}X_{11,10}X_{10,7} - X_{8,10}X_{10,12}X_{12,9}X_{98} - X_{1,12}X_{12,11}X_{11,1} + X_{10,12}X_{12,11}X_{11,10} +$
 $X_{4,12}X_{12,9}X_{9,11}X_{11,4} - X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} + X_{26}X_{63}X_{34}X_{42} - X_{26}X_{67}X_{75}X_{52} -$
 $X_{35}X_{58}X_{86}X_{63} + X_{67}X_{79}X_{98}X_{86}$
- (IV) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} - X_{79}X_{9,11}X_{11,7} -$
 $X_{8,12}X_{12,9}X_{98} - X_{57}X_{7,10}X_{10,8}X_{85} + X_{7,10}X_{10,11}X_{11,7} + X_{8,12}X_{12,10}X_{10,8} - X_{1,12}X_{12,10}X_{10,11}X_{11,1} +$
 $X_{4,12}X_{12,9}X_{9,11}X_{11,4} + X_{25}X_{57}X_{72} - X_{26}X_{67}X_{72} + X_{38}X_{85}X_{53} - X_{38}X_{86}X_{63} - X_{12}X_{25}X_{53}X_{31} +$
 $X_{26}X_{63}X_{34}X_{42} + X_{67}X_{79}X_{98}X_{86}$
- (V) $X_{12}X_{24}X_{4,11}X_{11,1} + X_{1,12}X_{12,4}X_{43}X_{31} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{79}X_{9,11}X_{11,10}X_{10,7} -$
 $X_{8,10}X_{10,12}X_{12,9}X_{98} - X_{1,12}X_{12,11}X_{11,1} - X_{4,11}X_{11,12}X_{12,4} + X_{9,11}X_{11,12}X_{12,9} + X_{10,12}X_{12,11}X_{11,10} -$
 $X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} - X_{27}X_{75}X_{52} + X_{27}X_{76}X_{62} - X_{35}X_{58}X_{83} + X_{36}X_{68}X_{83} -$
 $X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87} - X_{24}X_{43}X_{36}X_{62}$
- (VI) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} + X_{78}X_{8,10}X_{10,7} -$
 $X_{79}X_{9,11}X_{11,10}X_{10,7} - X_{8,10}X_{10,12}X_{12,9}X_{98} - X_{1,12}X_{12,11}X_{11,1} + X_{10,12}X_{12,11}X_{11,10} +$
 $X_{4,12}X_{12,9}X_{9,11}X_{11,4} + X_{25}X_{57}X_{72} - X_{26}X_{67}X_{72} + X_{38}X_{85}X_{53} - X_{38}X_{86}X_{63} - X_{57}X_{78}X_{85} -$
 $X_{12}X_{25}X_{53}X_{31} + X_{26}X_{63}X_{34}X_{42} + X_{67}X_{79}X_{98}X_{86}$
- (VII) $X_{7,10}X_{10,9}X_{97} + X_{89}X_{9,10}X_{10,8} + X_{12}X_{24}X_{4,11}X_{11,1} + X_{1,12}X_{12,4}X_{43}X_{31} - X_{57}X_{7,10}X_{10,8}X_{85} -$
 $X_{1,12}X_{12,11}X_{11,1} - X_{4,11}X_{11,12}X_{12,4} - X_{9,10}X_{10,12}X_{12,9} - X_{9,11}X_{11,10}X_{10,9} + X_{9,11}X_{11,12}X_{12,9} +$
 $X_{10,12}X_{12,11}X_{11,10} - X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} - X_{24}X_{43}X_{32} + X_{26}X_{63}X_{32} - X_{26}X_{65}X_{52} -$
 $X_{35}X_{56}X_{63} + X_{56}X_{68}X_{85} + X_{57}X_{76}X_{65} - X_{68}X_{89}X_{97}X_{76}$
- (VIII) $X_{5,10}X_{10,7}X_{75} - X_{5,10}X_{10,8}X_{85} + X_{89}X_{9,10}X_{10,8} + X_{12}X_{24}X_{4,11}X_{11,1} + X_{1,12}X_{12,4}X_{43}X_{31} -$
 $X_{79}X_{9,11}X_{11,10}X_{10,7} - X_{1,12}X_{12,11}X_{11,1} - X_{4,11}X_{11,12}X_{12,4} - X_{9,10}X_{10,12}X_{12,9} + X_{9,11}X_{11,12}X_{12,9} +$
 $X_{10,12}X_{12,11}X_{11,10} - X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} - X_{24}X_{43}X_{32} + X_{26}X_{63}X_{32} - X_{35}X_{56}X_{63} +$
 $X_{56}X_{68}X_{85} + X_{67}X_{79}X_{96} - X_{68}X_{89}X_{96} - X_{26}X_{67}X_{75}X_{52}$
- (IX) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} + X_{5,10}X_{10,7}X_{75} -$
 $X_{5,10}X_{10,8}X_{85} + X_{89}X_{9,10}X_{10,8} - X_{79}X_{9,11}X_{11,10}X_{10,7} - X_{1,12}X_{12,11}X_{11,1} - X_{9,10}X_{10,12}X_{12,9} +$
 $X_{10,12}X_{12,11}X_{11,10} + X_{4,12}X_{12,9}X_{9,11}X_{11,4} - X_{12}X_{23}X_{31} + X_{23}X_{35}X_{52} - X_{35}X_{56}X_{63} +$
 $X_{56}X_{68}X_{85} + X_{67}X_{79}X_{96} - X_{68}X_{89}X_{96} + X_{26}X_{63}X_{34}X_{42} - X_{26}X_{67}X_{75}X_{52}$
- (X) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} + X_{58}X_{8,10}X_{10,7}X_{75} -$
 $X_{79}X_{9,11}X_{11,10}X_{10,7} - X_{8,10}X_{10,12}X_{12,9}X_{98} - X_{1,12}X_{12,11}X_{11,1} + X_{10,12}X_{12,11}X_{11,10} +$
 $X_{4,12}X_{12,9}X_{9,11}X_{11,4} - X_{12}X_{23}^1X_{31} + X_{34}X_{42}X_{23}^2 - X_{36}X_{62}X_{23}^2 + X_{23}^1X_{35}X_{52} - X_{27}X_{75}X_{52} +$
 $X_{27}X_{76}X_{62} - X_{35}X_{58}X_{83} + X_{36}X_{68}X_{83} - X_{68}X_{87}X_{76} + X_{79}X_{98}X_{87}$
- (XI) $X_{12}X_{2,11}X_{11,1} + X_{1,12}X_{12,3}X_{31} - X_{2,11}X_{11,4}X_{42} - X_{34}X_{4,12}X_{12,3} + X_{7,11}X_{11,9}X_{97} +$
 $X_{89}X_{9,12}X_{12,8} + X_{58}X_{8,10}X_{10,7}X_{75} - X_{1,12}X_{12,11}^1X_{11,1} + X_{4,12}X_{12,11}^2X_{11,4} - X_{9,12}X_{12,11}^2X_{11,9} +$

$$\begin{aligned}
& X_{10,12}X_{12,11}^1X_{11,10}-X_{7,11}X_{11,10}X_{10,7}-X_{8,10}X_{10,12}X_{12,8}-X_{12}X_{23}^1X_{31}+X_{34}X_{42}X_{23}^2- \\
& X_{36}X_{62}X_{23}^2+X_{23}^1X_{35}X_{52}-X_{27}X_{75}X_{52}+X_{27}X_{76}X_{62}-X_{35}X_{58}X_{83}+X_{36}X_{68}X_{83}- \\
& X_{68}X_{89}X_{97}X_{76}
\end{aligned}$$

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