

Set 1 ($n = 2$)

$$\begin{aligned}l_1 &= (1)a_{22}^{-1}a_{11}a_{22}^{-1}a_{16}^{-1}a_{23}, \\l_2 &= (1)a_{12}^{-1}a_{14}^{-1}a_{15}.\end{aligned}$$

Set 2 ($n = 3$)

$$\begin{aligned}l_1 &= (1)a_{22}^{-1}a_{23}, \\l_2 &= (1)a_{31}^{-1}a_{32}, \\l_3 &= (1)a_{11}a_{12}^{-1}.\end{aligned}$$

Set 3 ($n = 3$)

$$\begin{aligned}l_1 &= (a_{11})a_{21}^{-1}a_{31}^{-1}a_{21}a_{16}^{-1}a_{22}, \\l_2 &= (1)a_{36}a_{15}a_{37}^{-1}a_{34}^{-1}, \\l_3 &= (a_{31}^{-3})a_{13}^{-1}a_{36}a_{38}a_{16}a_{14}^{-1}a_{33}a_{24}^{-1}.\end{aligned}$$

Set 4 ($n = 3$)

$$\begin{aligned}l_1 &= (a_{11})a_{14}^{-1}a_{25}a_{31}, \\l_2 &= (a_{21})a_{14}^{-1}a_{13}a_{25}^{-1}a_{32}a_{12}, \\l_3 &= (1)a_{13}a_{24}.\end{aligned}$$

Set 5 ($n = 3$)

$$\begin{aligned}l_1 &= (a_{11})a_{32}a_{14}^{-1}a_{25}, \\l_2 &= (a_{21})a_{11}a_{12}^{-1}a_{25}^{-1}a_{32}a_{13}, \\l_3 &= (1)a_{11}a_{24}.\end{aligned}$$

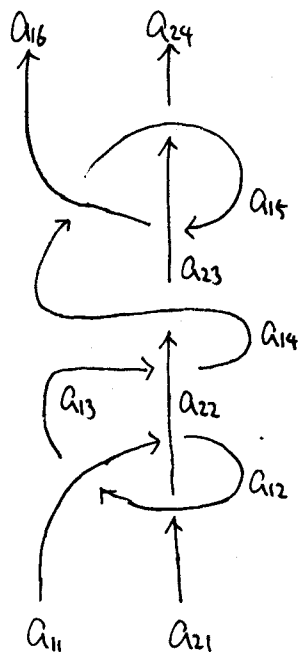
Set 6 ($n = 5$)

$$\begin{aligned}l_1 &= (1)a_{51}^{-1}a_{42}^{-1}, \\l_2 &= (1)a_{51}^{-1}a_{42}^{-1}a_{34}^{-1}, \\l_3 &= (1)a_{51}^{-1}a_{42}^{-1}a_{44}a_{24}^{-1}, \\l_4 &= (1)a_{51}^{-1}a_{13}^{-1}a_{23}^{-1}, \\l_5 &= (1)a_{12}^{-1}a_{22}^{-1}a_{32}^{-1}a_{42}^{-1}.\end{aligned}$$

Set 7 ($n = 5$)

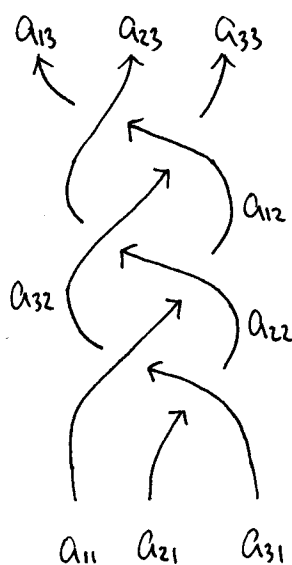
$$\begin{aligned}l_1 &= (1)a_{51}^{-1}a_{4,11}^{-1}, \\l_2 &= (1)a_{42}^{-1}a_{4,16}a_{51}^{-1}a_{4,11}^{-1}a_{34}^{-1}a_{4,14}^{-1}a_{44}, \\l_3 &= (1)a_{51}^{-1}a_{4,11}^{-1}a_{4,13}a_{26}^{-1}, \\l_4 &= (a_{41}^{-2})a_{31}a_{11}a_{13}^{-1}a_{27}a_{13}a_{11}^{-1}a_{22}^{-1}a_{4,16}a_{31}^{-1}a_{51}^{-1}a_{13}^{-1}a_{25}^{-1}a_{35}a_{13}a_{11}^{-1}a_{22}a_{11}a_{13}^{-1}a_{27}^{-1}a_{44}a_{35}^{-1}, \\l_5 &= (1)a_{12}^{-1}a_{24}^{-1}a_{32}^{-1}a_{4,11}^{-1}.\end{aligned}$$

Set 1 ($n=2$)



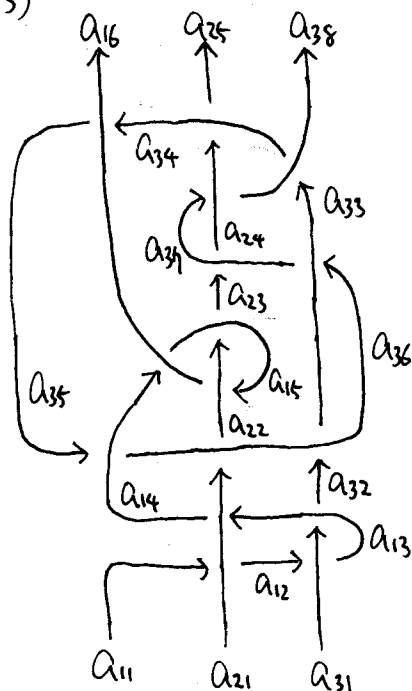
$$\begin{cases} l_1 = (1) a_{22}^{-1} a_{11} a_{22}^{-1} a_{16}^{-1} a_{23}, \\ l_2 = (1) a_{12}^{-1} a_{14}^{-1} a_{15}. \end{cases}$$

Set 2. ($n=3$)



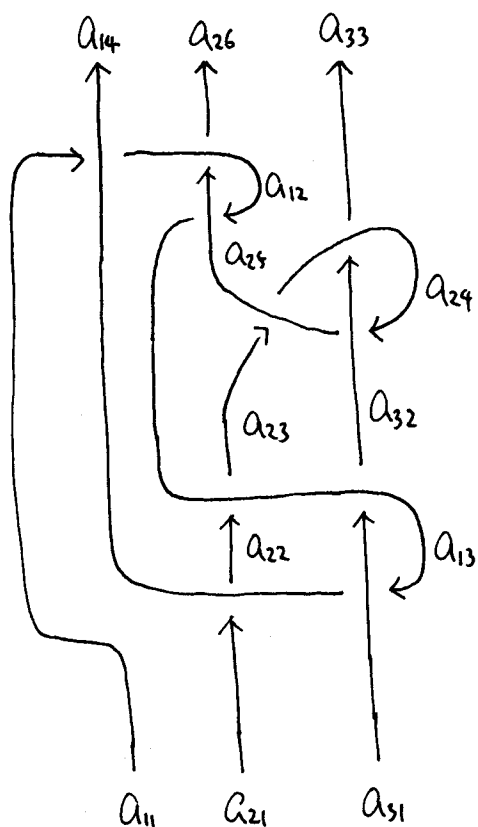
$$\begin{cases} l_1 = (1) a_{22}^{-1} a_{23}, \\ l_2 = (1) a_{31}^{-1} a_{32}, \\ l_3 = (1) a_{11} a_{12}^{-1}. \end{cases}$$

Set 3. ($n=3$)



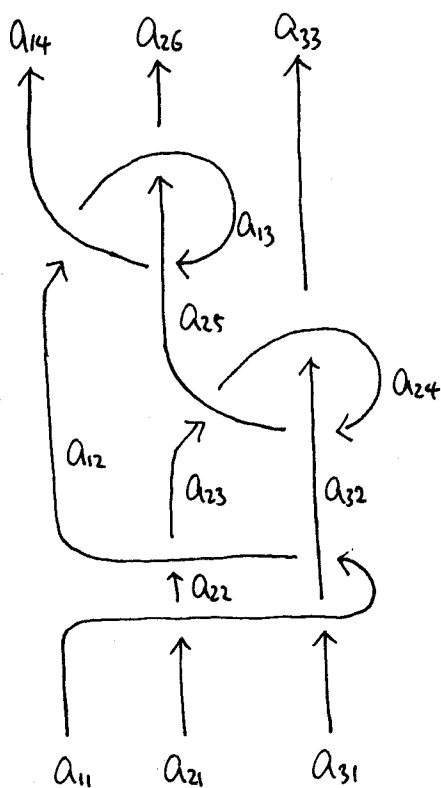
$$\begin{cases} l_1 = (a_{11}) a_{21}^{-1} a_{31}^{-1} a_{21} a_{16}^{-1} a_{22}, \\ l_2 = (1) a_{36} a_{15} a_{35}^{-1} a_{34}^{-1}, \\ l_3 = (a_{31}^{-3}) a_{13}^{-1} a_{36} a_{38} a_{16} a_{14}^{-1} a_{33} a_{24}^{-1}. \end{cases}$$

Set 4. (n=3)



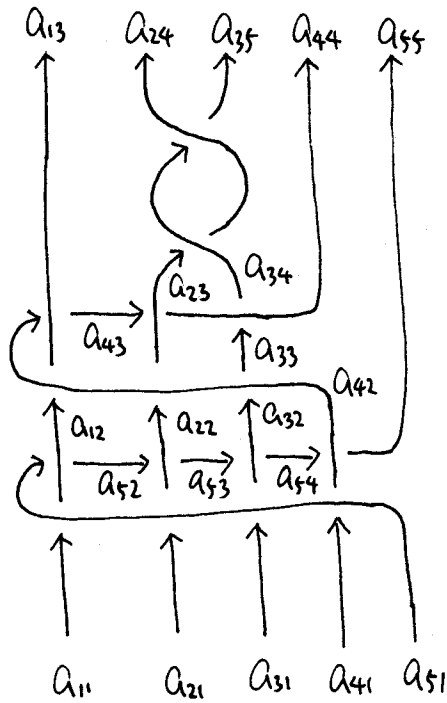
$$\left\{ \begin{array}{l} l_1 = (a_{11}) a_{14}^{-1} a_{25} a_{31}, \\ l_2 = (a_{21}) a_{14}^{-1} a_{13} a_{25}^{-1} a_{32} a_{12}, \\ l_3 = (1) a_{13} a_{24}. \end{array} \right.$$

Set 5. (n=3)



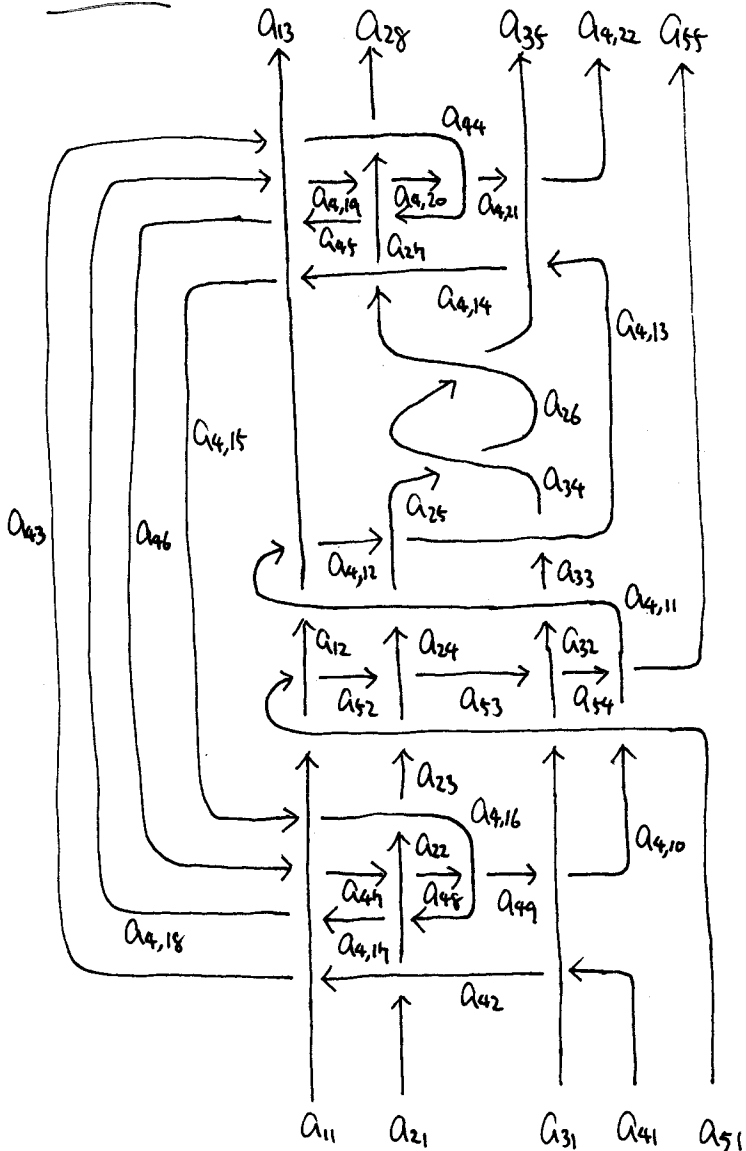
$$\left\{ \begin{array}{l} l_1 = (a_{11}) a_{32} a_{14}^{-1} a_{25}, \\ l_2 = (a_{21}) a_{11} a_{12}^{-1} a_{25}^{-1} a_{32} a_{13}, \\ l_3 = (1) a_{11} a_{24}. \end{array} \right.$$

Set 6. (n=5)



$$\left\{ \begin{aligned} l_1 &= (1) a_{51}^{-1} a_{42}^{-1}, \\ l_2 &= (1) a_{51}^{-1} a_{42}^{-1} a_{34}^{-1}, \\ l_3 &= (1) a_{51}^{-1} a_{42}^{-1} a_{44} a_{24}^{-1}, \\ l_4 &= (1) a_{51}^{-1} a_{13}^{-1} a_{23}, \\ l_5 &= (1) a_{12}^{-1} a_{22}^{-1} a_{32}^{-1} a_{42}^{-1}. \end{aligned} \right.$$

Set 7. (n=5)



$$\left\{ \begin{aligned} l_1 &= (1) a_{51}^{-1} a_{4,11}^{-1}, \\ l_2 &= (1) a_{42}^{-1} a_{4,16} a_{51}^{-1} a_{4,11}^{-1} a_{34}^{-1} a_{4,14}^{-1} a_{44}, \\ l_3 &= (1) a_{51}^{-1} a_{4,11}^{-1} a_{4,13} a_{26}^{-1}, \\ l_4 &= (a_{41}^{-2}) a_{31} a_{11} a_{13}^{-1} a_{27} a_{13} a_{11}^{-1} a_{22}^{-1} a_{4,16} a_{31}^{-1} \\ &\quad \cdot a_{51}^{-1} a_{13}^{-1} a_{25}^{-1} a_{35} a_{13} a_{11}^{-1} a_{22} a_{11} a_{13}^{-1} a_{24}^{-1} a_{44} a_{35}^{-1}, \\ l_5 &= (1) a_{12}^{-1} a_{24}^{-1} a_{32}^{-1} a_{4,11}^{-1}. \end{aligned} \right.$$