

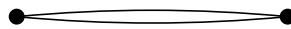
Affine moment invariants of 2D images with order ≤ 12

This file contains all 85 independent invariants from geometric moments with respect to 2D affine transformation with order ≤ 12 .

$$I_1 = m_{20}m_{02} - m_{11}^2$$

Generating graph:

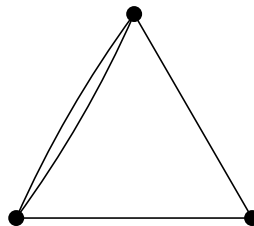
$$\begin{array}{cc} 1 & 1 \\ 2 & 2 \end{array}$$



$$I_2 = m_{20}m_{21}m_{03} - m_{20}m_{12}^2 - m_{11}m_{30}m_{03} + m_{11}m_{21}m_{12} + m_{02}m_{30}m_{12} - m_{02}m_{21}^2$$

Generating graph:

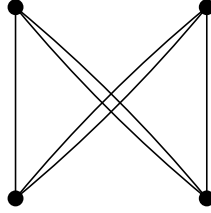
$$\begin{array}{cccc} 1 & 1 & 1 & 2 \\ 2 & 2 & 3 & 3 \end{array}$$



$$I_3 = -m_{30}^2 m_{03}^2 + 6m_{30} m_{21} m_{12} m_{03} - 4m_{30} m_{12}^3 - 4m_{21}^3 m_{03} + 3m_{21}^2 m_{12}^2$$

Generating graph:

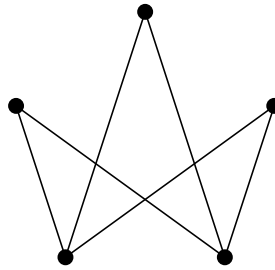
$$\begin{array}{cccccc} 1 & 1 & 1 & 2 & 2 & 3 \\ 2 & 3 & 3 & 4 & 4 & 4 \end{array}$$



$$\begin{aligned} I_4 = & -m_{20}^3 m_{03}^2 + 6m_{20}^2 m_{11} m_{12} m_{03} - 3m_{20}^2 m_{02} m_{12}^2 - 6m_{20} m_{11}^2 m_{21} m_{03} - 6m_{20} m_{11}^2 m_{12}^2 \\ & + 12m_{20} m_{11} m_{02} m_{21} m_{12} - 3m_{20} m_{02}^2 m_{21}^2 + 2m_{11}^3 m_{30} m_{03} + 6m_{11}^3 m_{21} m_{12} - 6m_{11}^2 m_{02} m_{30} m_{12} \\ & - 6m_{11}^2 m_{02} m_{21}^2 + 6m_{11} m_{02}^2 m_{30} m_{21} - m_{02}^3 m_{30}^2 \end{aligned}$$

Generating graph:

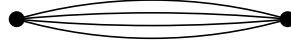
$$\begin{array}{cccccc} 1 & 1 & 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 & 5 & 5 \end{array}$$



$$I_5 = m_{40} m_{04} - 4m_{31} m_{13} + 3m_{22}^2$$

Generating graph:

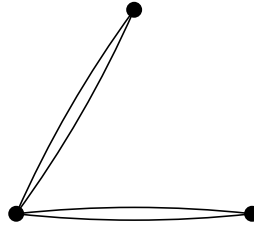
$$\begin{array}{cccc} 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 \end{array}$$



$$I_6 = m_{20}^2 m_{04} - 4m_{20} m_{11} m_{13} + 2m_{20} m_{02} m_{22} + 4m_{11}^2 m_{22} - 4m_{11} m_{02} m_{31} + m_{02}^2 m_{40}$$

Generating graph:

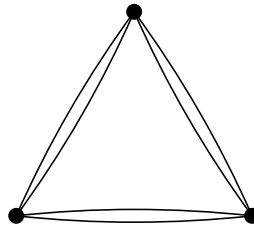
$$\begin{array}{cccc} 1 & 1 & 1 & 1 \\ 2 & 2 & 3 & 3 \end{array}$$



$$I_7 = m_{40} m_{22} m_{04} - m_{40} m_{13}^2 - m_{31}^2 m_{04} + 2m_{31} m_{22} m_{13} - m_{22}^3$$

Generating graph:

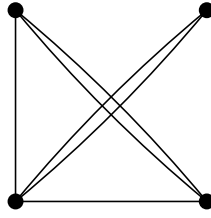
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 2 & 2 \\ 2 & 2 & 3 & 3 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_8 = & m_{20}m_{30}m_{12}m_{04} - m_{20}m_{30}m_{03}m_{13} - m_{20}m_{21}^2m_{04} + m_{20}m_{21}m_{12}m_{13} + m_{20}m_{21}m_{03}m_{22} \\
& - m_{20}m_{12}^2m_{22} - 2m_{11}m_{30}m_{12}m_{13} + 2m_{11}m_{30}m_{03}m_{22} + 2m_{11}m_{21}^2m_{13} - 2m_{11}m_{21}m_{12}m_{22} \\
& - 2m_{11}m_{21}m_{03}m_{31} + 2m_{11}m_{12}^2m_{31} + m_{02}m_{30}m_{12}m_{22} - m_{02}m_{30}m_{03}m_{31} - m_{02}m_{21}^2m_{22} \\
& + m_{02}m_{21}m_{12}m_{31} + m_{02}m_{21}m_{03}m_{40} - m_{02}m_{12}^2m_{40}
\end{aligned}$$

Generating graph:

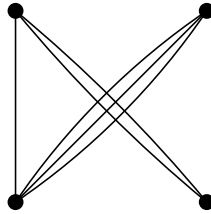
$$\begin{array}{cccccc}
1 & 1 & 1 & 1 & 2 & 2 \\
2 & 3 & 3 & 4 & 4 & 4
\end{array}$$



$$\begin{aligned}
I_9 = & m_{20}m_{30}m_{12}m_{04} - m_{20}m_{30}m_{03}m_{13} - 3m_{20}m_{21}m_{12}m_{13} + 3m_{20}m_{21}m_{03}m_{22} + 3m_{20}m_{12}^2m_{22} \\
& - 4m_{20}m_{12}m_{03}m_{31} + m_{20}m_{03}^2m_{40} - 2m_{11}m_{30}m_{21}m_{04} + 2m_{11}m_{30}m_{12}m_{13} + 6m_{11}m_{21}^2m_{13} \\
& - 12m_{11}m_{21}m_{12}m_{22} + 2m_{11}m_{21}m_{03}m_{31} + 6m_{11}m_{12}^2m_{31} - 2m_{11}m_{12}m_{03}m_{40} + m_{02}m_{30}^2m_{04} \\
& - 4m_{02}m_{30}m_{21}m_{13} + 3m_{02}m_{30}m_{12}m_{22} - m_{02}m_{30}m_{03}m_{31} + 3m_{02}m_{21}^2m_{22} - 3m_{02}m_{21}m_{12}m_{31} \\
& + m_{02}m_{21}m_{03}m_{40}
\end{aligned}$$

Generating graph:

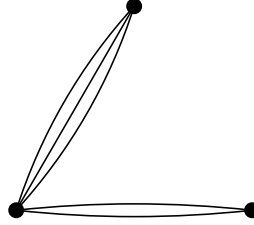
$$\begin{array}{cccccc}
1 & 1 & 1 & 1 & 2 & 2 \\
2 & 3 & 3 & 3 & 4 & 4
\end{array}$$



$$I_{10} = -m_{20}m_{30}m_{05} + 3m_{20}m_{21}m_{14} - 3m_{20}m_{12}m_{23} + m_{20}m_{03}m_{32} + 2m_{11}m_{30}m_{14} - 6m_{11}m_{21}m_{23} \\ + 6m_{11}m_{12}m_{32} - 2m_{11}m_{03}m_{41} - m_{02}m_{30}m_{23} + 3m_{02}m_{21}m_{32} - 3m_{02}m_{12}m_{41} + m_{02}m_{03}m_{50}$$

Generating graph:

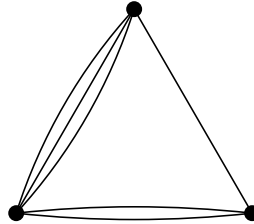
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 3 & 3 \end{array}$$



$$I_{11} = m_{30}m_{31}m_{05} - 3m_{30}m_{22}m_{14} + 3m_{30}m_{13}m_{23} - m_{30}m_{04}m_{32} - m_{21}m_{40}m_{05} + m_{21}m_{31}m_{14} \\ + 3m_{21}m_{22}m_{23} - 5m_{21}m_{13}m_{32} + 2m_{21}m_{04}m_{41} + 2m_{12}m_{40}m_{14} - 5m_{12}m_{31}m_{23} \\ + 3m_{12}m_{22}m_{32} + m_{12}m_{13}m_{41} - m_{12}m_{04}m_{50} - m_{03}m_{40}m_{23} + 3m_{03}m_{31}m_{32} - 3m_{03}m_{22}m_{41} \\ + m_{03}m_{13}m_{50}$$

Generating graph:

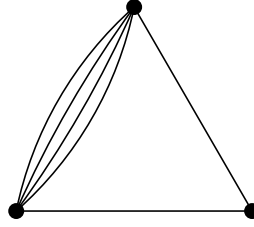
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 1 & 2 \\ 2 & 2 & 2 & 3 & 3 & 3 \end{array}$$



$$I_{12} = m_{20}m_{41}m_{05} - 4m_{20}m_{32}m_{14} + 3m_{20}m_{23}^2 - m_{11}m_{50}m_{05} + 3m_{11}m_{41}m_{14} - 2m_{11}m_{32}m_{23} \\ + m_{02}m_{50}m_{14} - 4m_{02}m_{41}m_{23} + 3m_{02}m_{32}^2$$

Generating graph:

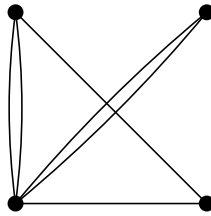
1 1 1 1 1 2
2 2 2 2 3 3



$$\begin{aligned}
 I_{13} = & m_{20}^2 m_{21} m_{05} - 2m_{20}^2 m_{12} m_{14} + m_{20}^2 m_{03} m_{23} - m_{20} m_{11} m_{30} m_{05} - m_{20} m_{11} m_{21} m_{14} \\
 & + 5m_{20} m_{11} m_{12} m_{23} - 3m_{20} m_{11} m_{03} m_{32} + m_{20} m_{02} m_{30} m_{14} - m_{20} m_{02} m_{21} m_{23} - m_{20} m_{02} m_{12} m_{32} \\
 & + m_{20} m_{02} m_{03} m_{41} + 2m_{11}^2 m_{30} m_{14} - 2m_{11}^2 m_{21} m_{23} - 2m_{11}^2 m_{12} m_{32} + 2m_{11}^2 m_{03} m_{41} \\
 & - 3m_{11} m_{02} m_{30} m_{23} + 5m_{11} m_{02} m_{21} m_{32} - m_{11} m_{02} m_{12} m_{41} - m_{11} m_{02} m_{03} m_{50} + m_{02}^2 m_{30} m_{32} \\
 & - 2m_{02}^2 m_{21} m_{41} + m_{02}^2 m_{12} m_{50}
 \end{aligned}$$

Generating graph:

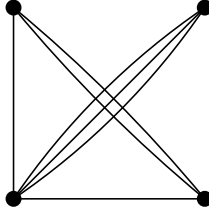
1 1 1 1 1 2
2 2 3 3 4 4



$$\begin{aligned}
 I_{14} = & -m_{30}^2 m_{12} m_{05} + m_{30}^2 m_{03} m_{14} + m_{30} m_{21}^2 m_{05} + 2m_{30} m_{21} m_{12} m_{14} - 4m_{30} m_{21} m_{03} m_{23} \\
 & - 2m_{30} m_{12}^2 m_{23} + 4m_{30} m_{12} m_{03} m_{32} - m_{30} m_{03}^2 m_{41} - 3m_{21}^3 m_{14} + 6m_{21}^2 m_{12} m_{23} + 2m_{21}^2 m_{03} m_{32} \\
 & - 6m_{21} m_{12}^2 m_{32} - 2m_{21} m_{12} m_{03} m_{41} + m_{21} m_{03}^2 m_{50} + 3m_{12}^3 m_{41} - m_{12}^2 m_{03} m_{50}
 \end{aligned}$$

Generating graph:

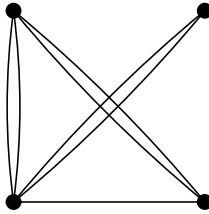
1 1 1 1 1 2 2
2 3 3 3 4 4 4



$$\begin{aligned}
I_{15} = & -m_{20}m_{30}m_{22}m_{05} + 2m_{20}m_{30}m_{13}m_{14} - m_{20}m_{30}m_{04}m_{23} + 2m_{20}m_{21}m_{31}m_{05} - 3m_{20}m_{21}m_{22}m_{14} \\
& + m_{20}m_{21}m_{04}m_{32} - m_{20}m_{12}m_{40}m_{05} + 3m_{20}m_{12}m_{22}m_{23} - 2m_{20}m_{12}m_{13}m_{32} + m_{20}m_{03}m_{40}m_{14} \\
& - 2m_{20}m_{03}m_{31}m_{23} + m_{20}m_{03}m_{22}m_{32} + 2m_{11}m_{30}m_{22}m_{14} - 4m_{11}m_{30}m_{13}m_{23} \\
& + 2m_{11}m_{30}m_{04}m_{32} - 4m_{11}m_{21}m_{31}m_{14} + 6m_{11}m_{21}m_{22}m_{23} - 2m_{11}m_{21}m_{04}m_{41} \\
& + 2m_{11}m_{12}m_{40}m_{14} - 6m_{11}m_{12}m_{22}m_{32} + 4m_{11}m_{12}m_{13}m_{41} - 2m_{11}m_{03}m_{40}m_{23} \\
& + 4m_{11}m_{03}m_{31}m_{32} - 2m_{11}m_{03}m_{22}m_{41} - m_{02}m_{30}m_{22}m_{23} + 2m_{02}m_{30}m_{13}m_{32} - m_{02}m_{30}m_{04}m_{41} \\
& + 2m_{02}m_{21}m_{31}m_{23} - 3m_{02}m_{21}m_{22}m_{32} + m_{02}m_{21}m_{04}m_{50} - m_{02}m_{12}m_{40}m_{23} + 3m_{02}m_{12}m_{22}m_{41} \\
& - 2m_{02}m_{12}m_{13}m_{50} + m_{02}m_{03}m_{40}m_{32} - 2m_{02}m_{03}m_{31}m_{41} + m_{02}m_{03}m_{22}m_{50}
\end{aligned}$$

Generating graph:

$$\begin{array}{cccccc}
1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 3 & 3 & 4 & 4 & 4
\end{array}$$



$$I_{16} = m_{60}m_{06} - 6m_{51}m_{15} + 15m_{42}m_{24} - 10m_{33}^2$$

Generating graph:

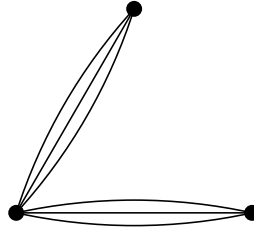
$$\begin{array}{cccccc}
1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2
\end{array}$$



$$I_{17} = m_{30}^2 m_{06} - 6m_{30} m_{21} m_{15} + 6m_{30} m_{12} m_{24} - 2m_{30} m_{03} m_{33} + 9m_{21}^2 m_{24} - 18m_{21} m_{12} m_{33} \\ + 6m_{21} m_{03} m_{42} + 9m_{12}^2 m_{42} - 6m_{12} m_{03} m_{51} + m_{03}^2 m_{60}$$

Generating graph:

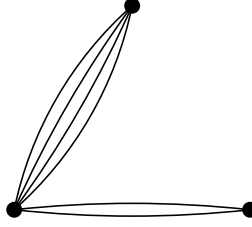
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 3 & 3 & 3 \end{array}$$



$$I_{18} = m_{20} m_{40} m_{06} - 4m_{20} m_{31} m_{15} + 6m_{20} m_{22} m_{24} - 4m_{20} m_{13} m_{33} + m_{20} m_{04} m_{42} - 2m_{11} m_{40} m_{15} \\ + 8m_{11} m_{31} m_{24} - 12m_{11} m_{22} m_{33} + 8m_{11} m_{13} m_{42} - 2m_{11} m_{04} m_{51} + m_{02} m_{40} m_{24} - 4m_{02} m_{31} m_{33} \\ + 6m_{02} m_{22} m_{42} - 4m_{02} m_{13} m_{51} + m_{02} m_{04} m_{60}$$

Generating graph:

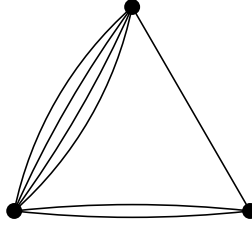
$$\begin{array}{cccccc} 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_{19} = & -m_{30}m_{41}m_{06} + 4m_{30}m_{32}m_{15} - 6m_{30}m_{23}m_{24} + 4m_{30}m_{14}m_{33} - m_{30}m_{05}m_{42} + m_{21}m_{50}m_{06} \\
& -2m_{21}m_{41}m_{15} - 2m_{21}m_{32}m_{24} + 8m_{21}m_{23}m_{33} - 7m_{21}m_{14}m_{42} + 2m_{21}m_{05}m_{51} \\
& -2m_{12}m_{50}m_{15} + 7m_{12}m_{41}m_{24} - 8m_{12}m_{32}m_{33} + 2m_{12}m_{23}m_{42} + 2m_{12}m_{14}m_{51} - m_{12}m_{05}m_{60} \\
& + m_{03}m_{50}m_{24} - 4m_{03}m_{41}m_{33} + 6m_{03}m_{32}m_{42} - 4m_{03}m_{23}m_{51} + m_{03}m_{14}m_{60}
\end{aligned}$$

Generating graph:

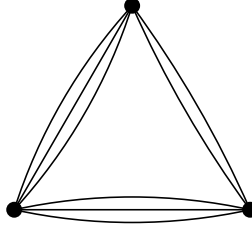
$$\begin{array}{ccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{20} = & m_{50}m_{32}m_{06} - 3m_{50}m_{23}m_{15} + 3m_{50}m_{14}m_{24} - m_{50}m_{05}m_{33} - m_{41}^2m_{06} + 3m_{41}m_{32}m_{15} \\
& + 3m_{41}m_{23}m_{24} - 7m_{41}m_{14}m_{33} + 3m_{41}m_{05}m_{42} - 6m_{32}^2m_{24} + 8m_{32}m_{23}m_{33} + 3m_{32}m_{14}m_{42} \\
& - 3m_{32}m_{05}m_{51} - 6m_{23}^2m_{42} + 3m_{23}m_{14}m_{51} + m_{23}m_{05}m_{60} - m_{14}^2m_{60}
\end{aligned}$$

Generating graph:

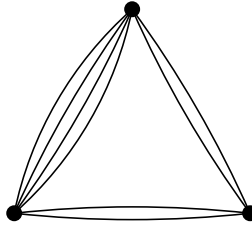
$$\begin{array}{ccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
 I_{21} = & m_{40}m_{42}m_{06} - 4m_{40}m_{33}m_{15} + 3m_{40}m_{24}^2 - 2m_{31}m_{51}m_{06} + 6m_{31}m_{42}m_{15} - 4m_{31}m_{33}m_{24} \\
 & + m_{22}m_{60}m_{06} - 9m_{22}m_{42}m_{24} + 8m_{22}m_{33}^2 - 2m_{13}m_{60}m_{15} + 6m_{13}m_{51}m_{24} - 4m_{13}m_{42}m_{33} \\
 & + m_{04}m_{60}m_{24} - 4m_{04}m_{51}m_{33} + 3m_{04}m_{42}^2
 \end{aligned}$$

Generating graph:

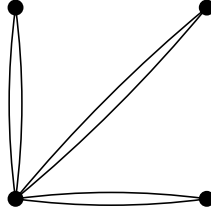
$$\begin{array}{cccccccc}
 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
 \end{array}$$



$$\begin{aligned}
 I_{22} = & m_{20}^3m_{06} - 6m_{20}^2m_{11}m_{15} + 3m_{20}^2m_{02}m_{24} + 12m_{20}m_{11}^2m_{24} - 12m_{20}m_{11}m_{02}m_{33} + 3m_{20}m_{02}^2m_{42} \\
 & - 8m_{11}^3m_{33} + 12m_{11}^2m_{02}m_{42} - 6m_{11}m_{02}^2m_{51} + m_{02}^3m_{60}
 \end{aligned}$$

Generating graph:

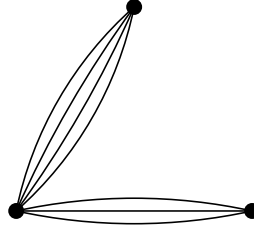
$$\begin{array}{cccccccc}
 1 & 1 & 1 & 1 & 1 & 1 & & \\
 2 & 2 & 3 & 3 & 4 & 4 & &
 \end{array}$$



$$\begin{aligned}
I_{23} = & -m_{30}m_{40}m_{07} + 4m_{30}m_{31}m_{16} - 6m_{30}m_{22}m_{25} + 4m_{30}m_{13}m_{34} - m_{30}m_{04}m_{43} + 3m_{21}m_{40}m_{16} \\
& -12m_{21}m_{31}m_{25} + 18m_{21}m_{22}m_{34} - 12m_{21}m_{13}m_{43} + 3m_{21}m_{04}m_{52} - 3m_{12}m_{40}m_{25} \\
& +12m_{12}m_{31}m_{34} - 18m_{12}m_{22}m_{43} + 12m_{12}m_{13}m_{52} - 3m_{12}m_{04}m_{61} + m_{03}m_{40}m_{34} \\
& -4m_{03}m_{31}m_{43} + 6m_{03}m_{22}m_{52} - 4m_{03}m_{13}m_{61} + m_{03}m_{04}m_{70}
\end{aligned}$$

Generating graph:

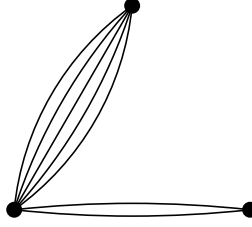
$$\begin{array}{ccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{24} = & -m_{20}m_{50}m_{07} + 5m_{20}m_{41}m_{16} - 10m_{20}m_{32}m_{25} + 10m_{20}m_{23}m_{34} - 5m_{20}m_{14}m_{43} + m_{20}m_{05}m_{52} \\
& +2m_{11}m_{50}m_{16} - 10m_{11}m_{41}m_{25} + 20m_{11}m_{32}m_{34} - 20m_{11}m_{23}m_{43} + 10m_{11}m_{14}m_{52} \\
& -2m_{11}m_{05}m_{61} - m_{02}m_{50}m_{25} + 5m_{02}m_{41}m_{34} - 10m_{02}m_{32}m_{43} + 10m_{02}m_{23}m_{52} \\
& -5m_{02}m_{14}m_{61} + m_{02}m_{05}m_{70}
\end{aligned}$$

Generating graph:

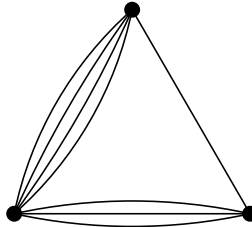
$$\begin{array}{ccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{25} = & m_{40}m_{41}m_{07} - 4m_{40}m_{32}m_{16} + 6m_{40}m_{23}m_{25} - 4m_{40}m_{14}m_{34} + m_{40}m_{05}m_{43} - m_{31}m_{50}m_{07} \\
& + m_{31}m_{41}m_{16} + 6m_{31}m_{32}m_{25} - 14m_{31}m_{23}m_{34} + 11m_{31}m_{14}m_{43} - 3m_{31}m_{05}m_{52} \\
& + 3m_{22}m_{50}m_{16} - 9m_{22}m_{41}m_{25} + 6m_{22}m_{32}m_{34} + 6m_{22}m_{23}m_{43} - 9m_{22}m_{14}m_{52} \\
& + 3m_{22}m_{05}m_{61} - 3m_{13}m_{50}m_{25} + 11m_{13}m_{41}m_{34} - 14m_{13}m_{32}m_{43} + 6m_{13}m_{23}m_{52} \\
& + m_{13}m_{14}m_{61} - m_{13}m_{05}m_{70} + m_{04}m_{50}m_{34} - 4m_{04}m_{41}m_{43} + 6m_{04}m_{32}m_{52} - 4m_{04}m_{23}m_{61} \\
& + m_{04}m_{14}m_{70}
\end{aligned}$$

Generating graph:

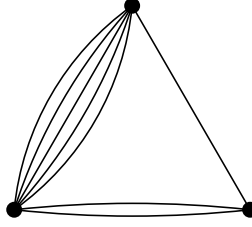
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{26} = & m_{30}m_{51}m_{07} - 5m_{30}m_{42}m_{16} + 10m_{30}m_{33}m_{25} - 10m_{30}m_{24}m_{34} + 5m_{30}m_{15}m_{43} - m_{30}m_{06}m_{52} \\
& - m_{21}m_{60}m_{07} + 3m_{21}m_{51}m_{16} - 10m_{21}m_{33}m_{34} + 15m_{21}m_{24}m_{43} - 9m_{21}m_{15}m_{52} \\
& + 2m_{21}m_{06}m_{61} + 2m_{12}m_{60}m_{16} - 9m_{12}m_{51}m_{25} + 15m_{12}m_{42}m_{34} - 10m_{12}m_{33}m_{43} \\
& + 3m_{12}m_{15}m_{61} - m_{12}m_{06}m_{70} - m_{03}m_{60}m_{25} + 5m_{03}m_{51}m_{34} - 10m_{03}m_{42}m_{43} + 10m_{03}m_{33}m_{52} \\
& - 5m_{03}m_{24}m_{61} + m_{03}m_{15}m_{70}
\end{aligned}$$

Generating graph:

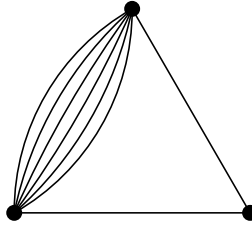
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$I_{27} = m_{20}m_{61}m_{07} - 6m_{20}m_{52}m_{16} + 15m_{20}m_{43}m_{25} - 10m_{20}m_{34}^2 - m_{11}m_{70}m_{07} + 5m_{11}m_{61}m_{16} \\ - 9m_{11}m_{52}m_{25} + 5m_{11}m_{43}m_{34} + m_{02}m_{70}m_{16} - 6m_{02}m_{61}m_{25} + 15m_{02}m_{52}m_{34} - 10m_{02}m_{43}^2$$

Generating graph:

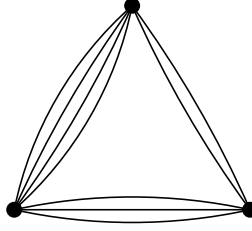
$$\begin{array}{cccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\ 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 \end{array}$$



$$I_{28} = -m_{50}m_{42}m_{07} + 4m_{50}m_{33}m_{16} - 6m_{50}m_{24}m_{25} + 4m_{50}m_{15}m_{34} - m_{50}m_{06}m_{43} + 2m_{41}m_{51}m_{07} \\ - 5m_{41}m_{42}m_{16} + 10m_{41}m_{24}m_{34} - 10m_{41}m_{15}m_{43} + 3m_{41}m_{06}m_{52} - m_{32}m_{60}m_{07} \\ - 2m_{32}m_{51}m_{16} + 15m_{32}m_{42}m_{25} - 20m_{32}m_{33}m_{34} + 5m_{32}m_{24}m_{43} + 6m_{32}m_{15}m_{52} \\ - 3m_{32}m_{06}m_{61} + 3m_{23}m_{60}m_{16} - 6m_{23}m_{51}m_{25} - 5m_{23}m_{42}m_{34} + 20m_{23}m_{33}m_{43} \\ - 15m_{23}m_{24}m_{52} + 2m_{23}m_{15}m_{61} + m_{23}m_{06}m_{70} - 3m_{14}m_{60}m_{25} + 10m_{14}m_{51}m_{34} \\ - 10m_{14}m_{42}m_{43} + 5m_{14}m_{24}m_{61} - 2m_{14}m_{15}m_{70} + m_{05}m_{60}m_{34} - 4m_{05}m_{51}m_{43} + 6m_{05}m_{42}m_{52} \\ - 4m_{05}m_{33}m_{61} + m_{05}m_{24}m_{70}$$

Generating graph:

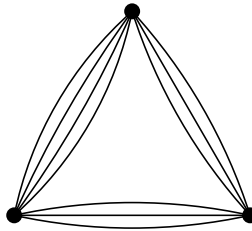
$$\begin{array}{cccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\ 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_{29} = & m_{60}m_{43}m_{07} - 4m_{60}m_{34}m_{16} + 3m_{60}m_{25}^2 - 3m_{51}m_{52}m_{07} + 9m_{51}m_{43}m_{16} - 6m_{51}m_{34}m_{25} \\
& + 3m_{42}m_{61}m_{07} - 3m_{42}m_{52}m_{16} - 15m_{42}m_{43}m_{25} + 15m_{42}m_{34}^2 - m_{33}m_{70}m_{07} - 5m_{33}m_{61}m_{16} \\
& + 21m_{33}m_{52}m_{25} - 15m_{33}m_{43}m_{34} + 3m_{24}m_{70}m_{16} - 3m_{24}m_{61}m_{25} - 15m_{24}m_{52}m_{34} \\
& + 15m_{24}m_{43}^2 - 3m_{15}m_{70}m_{25} + 9m_{15}m_{61}m_{34} - 6m_{15}m_{52}m_{43} + m_{06}m_{70}m_{34} - 4m_{06}m_{61}m_{43} \\
& + 3m_{06}m_{52}^2
\end{aligned}$$

Generating graph:

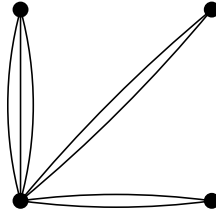
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 & 2 \\
2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{30} = & -m_{20}^2m_{30}m_{07} + 3m_{20}^2m_{21}m_{16} - 3m_{20}^2m_{12}m_{25} + m_{20}^2m_{03}m_{34} + 4m_{20}m_{11}m_{30}m_{16} \\
& - 12m_{20}m_{11}m_{21}m_{25} + 12m_{20}m_{11}m_{12}m_{34} - 4m_{20}m_{11}m_{03}m_{43} - 2m_{20}m_{02}m_{30}m_{25} \\
& + 6m_{20}m_{02}m_{21}m_{34} - 6m_{20}m_{02}m_{12}m_{43} + 2m_{20}m_{02}m_{03}m_{52} - 4m_{11}^2m_{30}m_{25} + 12m_{11}^2m_{21}m_{34} \\
& - 12m_{11}^2m_{12}m_{43} + 4m_{11}^2m_{03}m_{52} + 4m_{11}m_{02}m_{30}m_{34} - 12m_{11}m_{02}m_{21}m_{43} \\
& + 12m_{11}m_{02}m_{12}m_{52} - 4m_{11}m_{02}m_{03}m_{61} - m_{02}^2m_{30}m_{43} + 3m_{02}^2m_{21}m_{52} - 3m_{02}^2m_{12}m_{61} \\
& + m_{02}^2m_{03}m_{70}
\end{aligned}$$

Generating graph:

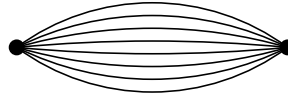
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 3 & 3 & 4 & 4 & 4
\end{array}$$



$$I_{31} = m_{80}m_{08} - 8m_{71}m_{17} + 28m_{62}m_{26} - 56m_{53}m_{35} + 35m_{44}^2$$

Generating graph:

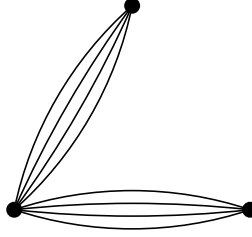
$$\begin{array}{cccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 \end{array}$$



$$\begin{aligned} I_{32} = & m_{40}^2m_{08} - 8m_{40}m_{31}m_{17} + 12m_{40}m_{22}m_{26} - 8m_{40}m_{13}m_{35} + 2m_{40}m_{04}m_{44} + 16m_{31}^2m_{26} \\ & - 48m_{31}m_{22}m_{35} + 32m_{31}m_{13}m_{44} - 8m_{31}m_{04}m_{53} + 36m_{22}^2m_{44} - 48m_{22}m_{13}m_{53} \\ & + 12m_{22}m_{04}m_{62} + 16m_{13}^2m_{62} - 8m_{13}m_{04}m_{71} + m_{04}^2m_{80} \end{aligned}$$

Generating graph:

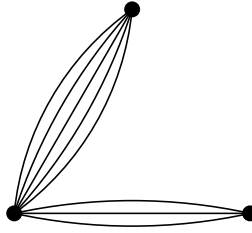
$$\begin{array}{cccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_{33} = & m_{30}m_{50}m_{08} - 5m_{30}m_{41}m_{17} + 10m_{30}m_{32}m_{26} - 10m_{30}m_{23}m_{35} + 5m_{30}m_{14}m_{44} - m_{30}m_{05}m_{53} \\
& - 3m_{21}m_{50}m_{17} + 15m_{21}m_{41}m_{26} - 30m_{21}m_{32}m_{35} + 30m_{21}m_{23}m_{44} - 15m_{21}m_{14}m_{53} \\
& + 3m_{21}m_{05}m_{62} + 3m_{12}m_{50}m_{26} - 15m_{12}m_{41}m_{35} + 30m_{12}m_{32}m_{44} - 30m_{12}m_{23}m_{53} \\
& + 15m_{12}m_{14}m_{62} - 3m_{12}m_{05}m_{71} - m_{03}m_{50}m_{35} + 5m_{03}m_{41}m_{44} - 10m_{03}m_{32}m_{53} \\
& + 10m_{03}m_{23}m_{62} - 5m_{03}m_{14}m_{71} + m_{03}m_{05}m_{80}
\end{aligned}$$

Generating graph:

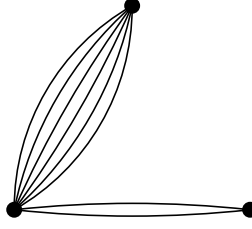
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{34} = & m_{20}m_{60}m_{08} - 6m_{20}m_{51}m_{17} + 15m_{20}m_{42}m_{26} - 20m_{20}m_{33}m_{35} + 15m_{20}m_{24}m_{44} \\
& - 6m_{20}m_{15}m_{53} + m_{20}m_{06}m_{62} - 2m_{11}m_{60}m_{17} + 12m_{11}m_{51}m_{26} - 30m_{11}m_{42}m_{35} \\
& + 40m_{11}m_{33}m_{44} - 30m_{11}m_{24}m_{53} + 12m_{11}m_{15}m_{62} - 2m_{11}m_{06}m_{71} + m_{02}m_{60}m_{26} \\
& - 6m_{02}m_{51}m_{35} + 15m_{02}m_{42}m_{44} - 20m_{02}m_{33}m_{53} + 15m_{02}m_{24}m_{62} - 6m_{02}m_{15}m_{71} \\
& + m_{02}m_{06}m_{80}
\end{aligned}$$

Generating graph:

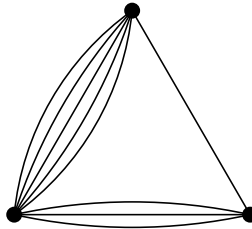
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{35} = & -m_{40}m_{51}m_{08} + 5m_{40}m_{42}m_{17} - 10m_{40}m_{33}m_{26} + 10m_{40}m_{24}m_{35} - 5m_{40}m_{15}m_{44} + m_{40}m_{06}m_{53} \\
& + m_{31}m_{60}m_{08} - 2m_{31}m_{51}m_{17} - 5m_{31}m_{42}m_{26} + 20m_{31}m_{33}m_{35} - 25m_{31}m_{24}m_{44} \\
& + 14m_{31}m_{15}m_{53} - 3m_{31}m_{06}m_{62} - 3m_{22}m_{60}m_{17} + 12m_{22}m_{51}m_{26} - 15m_{22}m_{42}m_{35} \\
& + 15m_{22}m_{24}m_{53} - 12m_{22}m_{15}m_{62} + 3m_{22}m_{06}m_{71} + 3m_{13}m_{60}m_{26} - 14m_{13}m_{51}m_{35} \\
& + 25m_{13}m_{42}m_{44} - 20m_{13}m_{33}m_{53} + 5m_{13}m_{24}m_{62} + 2m_{13}m_{15}m_{71} - m_{13}m_{06}m_{80} - m_{04}m_{60}m_{35} \\
& + 5m_{04}m_{51}m_{44} - 10m_{04}m_{42}m_{53} + 10m_{04}m_{33}m_{62} - 5m_{04}m_{24}m_{71} + m_{04}m_{15}m_{80}
\end{aligned}$$

Generating graph:

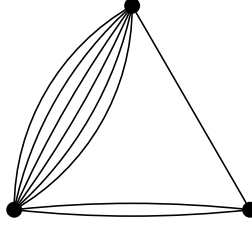
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{36} = & -m_{30}m_{61}m_{08} + 6m_{30}m_{52}m_{17} - 15m_{30}m_{43}m_{26} + 20m_{30}m_{34}m_{35} - 15m_{30}m_{25}m_{44} \\
& + 6m_{30}m_{16}m_{53} - m_{30}m_{07}m_{62} + m_{21}m_{70}m_{08} - 4m_{21}m_{61}m_{17} + 3m_{21}m_{52}m_{26} + 10m_{21}m_{43}m_{35} \\
& - 25m_{21}m_{34}m_{44} + 24m_{21}m_{25}m_{53} - 11m_{21}m_{16}m_{62} + 2m_{21}m_{07}m_{71} - 2m_{12}m_{70}m_{17} \\
& + 11m_{12}m_{61}m_{26} - 24m_{12}m_{52}m_{35} + 25m_{12}m_{43}m_{44} - 10m_{12}m_{34}m_{53} - 3m_{12}m_{25}m_{62} \\
& + 4m_{12}m_{16}m_{71} - m_{12}m_{07}m_{80} + m_{03}m_{70}m_{26} - 6m_{03}m_{61}m_{35} + 15m_{03}m_{52}m_{44} - 20m_{03}m_{43}m_{53} \\
& + 15m_{03}m_{34}m_{62} - 6m_{03}m_{25}m_{71} + m_{03}m_{16}m_{80}
\end{aligned}$$

Generating graph:

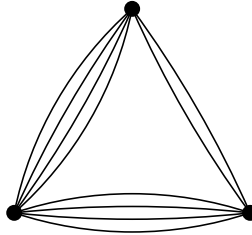
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{37} = & m_{60}m_{42}m_{08} - 4m_{60}m_{33}m_{17} + 6m_{60}m_{24}m_{26} - 4m_{60}m_{15}m_{35} + m_{60}m_{06}m_{44} - m_{51}^2m_{08} \\
& + 4m_{51}m_{42}m_{17} + 4m_{51}m_{33}m_{26} - 16m_{51}m_{24}m_{35} + 14m_{51}m_{15}m_{44} - 4m_{51}m_{06}m_{53} \\
& - 10m_{42}^2m_{26} + 20m_{42}m_{33}m_{35} + 5m_{42}m_{24}m_{44} - 16m_{42}m_{15}m_{53} + 6m_{42}m_{06}m_{62} - 20m_{33}^2m_{44} \\
& + 20m_{33}m_{24}m_{53} + 4m_{33}m_{15}m_{62} - 4m_{33}m_{06}m_{71} - 10m_{24}^2m_{62} + 4m_{24}m_{15}m_{71} + m_{24}m_{06}m_{80} \\
& - m_{15}^2m_{80}
\end{aligned}$$

Generating graph:

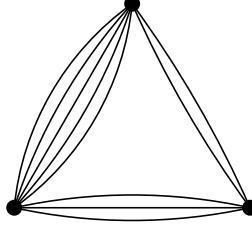
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{38} = & m_{50}m_{52}m_{08} - 5m_{50}m_{43}m_{17} + 10m_{50}m_{34}m_{26} - 10m_{50}m_{25}m_{35} + 5m_{50}m_{16}m_{44} - m_{50}m_{07}m_{53} \\
& - 2m_{41}m_{61}m_{08} + 7m_{41}m_{52}m_{17} - 5m_{41}m_{43}m_{26} - 10m_{41}m_{34}m_{35} + 20m_{41}m_{25}m_{44} \\
& - 13m_{41}m_{16}m_{53} + 3m_{41}m_{07}m_{62} + m_{32}m_{70}m_{08} + m_{32}m_{61}m_{17} - 17m_{32}m_{52}m_{26} + 35m_{32}m_{43}m_{35} \\
& - 25m_{32}m_{34}m_{44} - m_{32}m_{25}m_{53} + 9m_{32}m_{16}m_{62} - 3m_{32}m_{07}m_{71} - 3m_{23}m_{70}m_{17} + 9m_{23}m_{61}m_{26} \\
& - m_{23}m_{52}m_{35} - 25m_{23}m_{43}m_{44} + 35m_{23}m_{34}m_{53} - 17m_{23}m_{25}m_{62} + m_{23}m_{16}m_{71} + m_{23}m_{07}m_{80} \\
& + 3m_{14}m_{70}m_{26} - 13m_{14}m_{61}m_{35} + 20m_{14}m_{52}m_{44} - 10m_{14}m_{43}m_{53} - 5m_{14}m_{34}m_{62} \\
& + 7m_{14}m_{25}m_{71} - 2m_{14}m_{16}m_{80} - m_{05}m_{70}m_{35} + 5m_{05}m_{61}m_{44} - 10m_{05}m_{52}m_{53} \\
& + 10m_{05}m_{43}m_{62} - 5m_{05}m_{34}m_{71} + m_{05}m_{25}m_{80}
\end{aligned}$$

Generating graph:

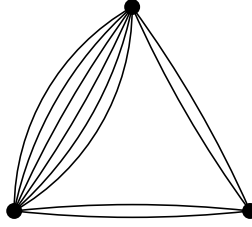
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{39} = & m_{40}m_{62}m_{08} - 6m_{40}m_{53}m_{17} + 15m_{40}m_{44}m_{26} - 10m_{40}m_{35}^2 - 2m_{31}m_{71}m_{08} + 10m_{31}m_{62}m_{17} \\
& - 18m_{31}m_{53}m_{26} + 10m_{31}m_{44}m_{35} + m_{22}m_{80}m_{08} - 2m_{22}m_{71}m_{17} - 8m_{22}m_{62}m_{26} \\
& + 34m_{22}m_{53}m_{35} - 25m_{22}m_{44}^2 - 2m_{13}m_{80}m_{17} + 10m_{13}m_{71}m_{26} - 18m_{13}m_{62}m_{35} \\
& + 10m_{13}m_{53}m_{44} + m_{04}m_{80}m_{26} - 6m_{04}m_{71}m_{35} + 15m_{04}m_{62}m_{44} - 10m_{04}m_{53}^2
\end{aligned}$$

Generating graph:

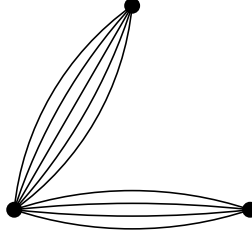
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{40} = & -m_{40}m_{50}m_{09} + 5m_{40}m_{41}m_{18} - 10m_{40}m_{32}m_{27} + 10m_{40}m_{23}m_{36} - 5m_{40}m_{14}m_{45} + m_{40}m_{05}m_{54} \\
& + 4m_{31}m_{50}m_{18} - 20m_{31}m_{41}m_{27} + 40m_{31}m_{32}m_{36} - 40m_{31}m_{23}m_{45} + 20m_{31}m_{14}m_{54} \\
& - 4m_{31}m_{05}m_{63} - 6m_{22}m_{50}m_{27} + 30m_{22}m_{41}m_{36} - 60m_{22}m_{32}m_{45} + 60m_{22}m_{23}m_{54} \\
& - 30m_{22}m_{14}m_{63} + 6m_{22}m_{05}m_{72} + 4m_{13}m_{50}m_{36} - 20m_{13}m_{41}m_{45} + 40m_{13}m_{32}m_{54} \\
& - 40m_{13}m_{23}m_{63} + 20m_{13}m_{14}m_{72} - 4m_{13}m_{05}m_{81} - m_{04}m_{50}m_{45} + 5m_{04}m_{41}m_{54} \\
& - 10m_{04}m_{32}m_{63} + 10m_{04}m_{23}m_{72} - 5m_{04}m_{14}m_{81} + m_{04}m_{05}m_{90}
\end{aligned}$$

Generating graph:

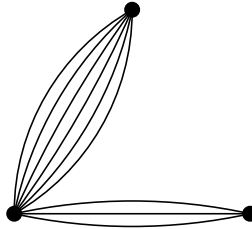
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{41} = & -m_{30}m_{60}m_{09} + 6m_{30}m_{51}m_{18} - 15m_{30}m_{42}m_{27} + 20m_{30}m_{33}m_{36} - 15m_{30}m_{24}m_{45} \\
& + 6m_{30}m_{15}m_{54} - m_{30}m_{06}m_{63} + 3m_{21}m_{60}m_{18} - 18m_{21}m_{51}m_{27} + 45m_{21}m_{42}m_{36} \\
& - 60m_{21}m_{33}m_{45} + 45m_{21}m_{24}m_{54} - 18m_{21}m_{15}m_{63} + 3m_{21}m_{06}m_{72} - 3m_{12}m_{60}m_{27} \\
& + 18m_{12}m_{51}m_{36} - 45m_{12}m_{42}m_{45} + 60m_{12}m_{33}m_{54} - 45m_{12}m_{24}m_{63} + 18m_{12}m_{15}m_{72} \\
& - 3m_{12}m_{06}m_{81} + m_{03}m_{60}m_{36} - 6m_{03}m_{51}m_{45} + 15m_{03}m_{42}m_{54} - 20m_{03}m_{33}m_{63} \\
& + 15m_{03}m_{24}m_{72} - 6m_{03}m_{15}m_{81} + m_{03}m_{06}m_{90}
\end{aligned}$$

Generating graph:

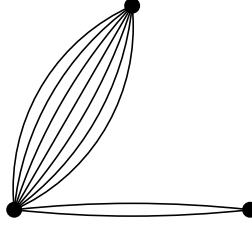
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{42} = & -m_{20}m_{70}m_{09} + 7m_{20}m_{61}m_{18} - 21m_{20}m_{52}m_{27} + 35m_{20}m_{43}m_{36} - 35m_{20}m_{34}m_{45} \\
& + 21m_{20}m_{25}m_{54} - 7m_{20}m_{16}m_{63} + m_{20}m_{07}m_{72} + 2m_{11}m_{70}m_{18} - 14m_{11}m_{61}m_{27} \\
& + 42m_{11}m_{52}m_{36} - 70m_{11}m_{43}m_{45} + 70m_{11}m_{34}m_{54} - 42m_{11}m_{25}m_{63} + 14m_{11}m_{16}m_{72} \\
& - 2m_{11}m_{07}m_{81} - m_{02}m_{70}m_{27} + 7m_{02}m_{61}m_{36} - 21m_{02}m_{52}m_{45} + 35m_{02}m_{43}m_{54} \\
& - 35m_{02}m_{34}m_{63} + 21m_{02}m_{25}m_{72} - 7m_{02}m_{16}m_{81} + m_{02}m_{07}m_{90}
\end{aligned}$$

Generating graph:

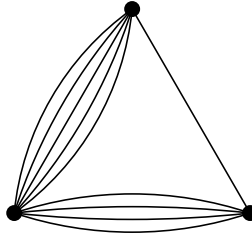
$$\begin{array}{cccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 3
\end{array}$$



$$\begin{aligned}
I_{43} = & m_{50}m_{51}m_{09} - 5m_{50}m_{42}m_{18} + 10m_{50}m_{33}m_{27} - 10m_{50}m_{24}m_{36} + 5m_{50}m_{15}m_{45} - m_{50}m_{06}m_{54} \\
& - m_{41}m_{60}m_{09} + m_{41}m_{51}m_{18} + 10m_{41}m_{42}m_{27} - 30m_{41}m_{33}m_{36} + 35m_{41}m_{24}m_{45} \\
& - 19m_{41}m_{15}m_{54} + 4m_{41}m_{06}m_{63} + 4m_{32}m_{60}m_{18} - 14m_{32}m_{51}m_{27} + 10m_{32}m_{42}m_{36} \\
& + 20m_{32}m_{33}m_{45} - 40m_{32}m_{24}m_{54} + 26m_{32}m_{15}m_{63} - 6m_{32}m_{06}m_{72} - 6m_{23}m_{60}m_{27} \\
& + 26m_{23}m_{51}m_{36} - 40m_{23}m_{42}m_{45} + 20m_{23}m_{33}m_{54} + 10m_{23}m_{24}m_{63} - 14m_{23}m_{15}m_{72} \\
& + 4m_{23}m_{06}m_{81} + 4m_{14}m_{60}m_{36} - 19m_{14}m_{51}m_{45} + 35m_{14}m_{42}m_{54} - 30m_{14}m_{33}m_{63} \\
& + 10m_{14}m_{24}m_{72} + m_{14}m_{15}m_{81} - m_{14}m_{06}m_{90} - m_{05}m_{60}m_{45} + 5m_{05}m_{51}m_{54} - 10m_{05}m_{42}m_{63} \\
& + 10m_{05}m_{33}m_{72} - 5m_{05}m_{24}m_{81} + m_{05}m_{15}m_{90}
\end{aligned}$$

Generating graph:

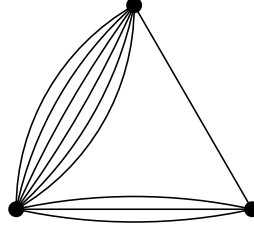
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{44} = & m_{40}m_{61}m_{09} - 6m_{40}m_{52}m_{18} + 15m_{40}m_{43}m_{27} - 20m_{40}m_{34}m_{36} + 15m_{40}m_{25}m_{45} \\
& - 6m_{40}m_{16}m_{54} + m_{40}m_{07}m_{63} - m_{31}m_{70}m_{09} + 3m_{31}m_{61}m_{18} + 3m_{31}m_{52}m_{27} - 25m_{31}m_{43}m_{36} \\
& + 45m_{31}m_{34}m_{45} - 39m_{31}m_{25}m_{54} + 17m_{31}m_{16}m_{63} - 3m_{31}m_{07}m_{72} + 3m_{22}m_{70}m_{18} \\
& - 15m_{22}m_{61}m_{27} + 27m_{22}m_{52}m_{36} - 15m_{22}m_{43}m_{45} - 15m_{22}m_{34}m_{54} + 27m_{22}m_{25}m_{63} \\
& - 15m_{22}m_{16}m_{72} + 3m_{22}m_{07}m_{81} - 3m_{13}m_{70}m_{27} + 17m_{13}m_{61}m_{36} - 39m_{13}m_{52}m_{45} \\
& + 45m_{13}m_{43}m_{54} - 25m_{13}m_{34}m_{63} + 3m_{13}m_{25}m_{72} + 3m_{13}m_{16}m_{81} - m_{13}m_{07}m_{90} + m_{04}m_{70}m_{36} \\
& - 6m_{04}m_{61}m_{45} + 15m_{04}m_{52}m_{54} - 20m_{04}m_{43}m_{63} + 15m_{04}m_{34}m_{72} - 6m_{04}m_{25}m_{81} \\
& + m_{04}m_{16}m_{90}
\end{aligned}$$

Generating graph:

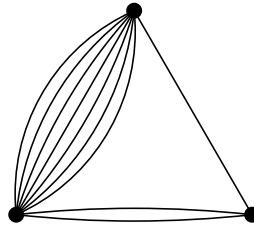
1	1	1	1	1	1	1	1	1	1	2
2	2	2	2	2	2	2	3	3	3	3



$$\begin{aligned}
 I_{45} = & m_{30}m_{71}m_{09} - 7m_{30}m_{62}m_{18} + 21m_{30}m_{53}m_{27} - 35m_{30}m_{44}m_{36} + 35m_{30}m_{35}m_{45} \\
 & - 21m_{30}m_{26}m_{54} + 7m_{30}m_{17}m_{63} - m_{30}m_{08}m_{72} - m_{21}m_{80}m_{09} + 5m_{21}m_{71}m_{18} - 7m_{21}m_{62}m_{27} \\
 & - 7m_{21}m_{53}m_{36} + 35m_{21}m_{44}m_{45} - 49m_{21}m_{35}m_{54} + 35m_{21}m_{26}m_{63} - 13m_{21}m_{17}m_{72} \\
 & + 2m_{21}m_{08}m_{81} + 2m_{12}m_{80}m_{18} - 13m_{12}m_{71}m_{27} + 35m_{12}m_{62}m_{36} - 49m_{12}m_{53}m_{45} \\
 & + 35m_{12}m_{44}m_{54} - 7m_{12}m_{35}m_{63} - 7m_{12}m_{26}m_{72} + 5m_{12}m_{17}m_{81} - m_{12}m_{08}m_{90} - m_{03}m_{80}m_{27} \\
 & + 7m_{03}m_{71}m_{36} - 21m_{03}m_{62}m_{45} + 35m_{03}m_{53}m_{54} - 35m_{03}m_{44}m_{63} + 21m_{03}m_{35}m_{72} \\
 & - 7m_{03}m_{26}m_{81} + m_{03}m_{17}m_{90}
 \end{aligned}$$

Generating graph:

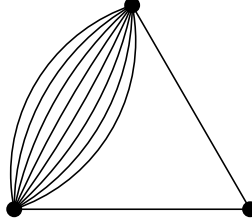
1	1	1	1	1	1	1	1	1	1	2
2	2	2	2	2	2	2	2	3	3	3



$$\begin{aligned}
 I_{46} = & m_{20}m_{81}m_{09} - 8m_{20}m_{72}m_{18} + 28m_{20}m_{63}m_{27} - 56m_{20}m_{54}m_{36} + 35m_{20}m_{45}^2 - m_{11}m_{90}m_{09} \\
 & + 7m_{11}m_{81}m_{18} - 20m_{11}m_{72}m_{27} + 28m_{11}m_{63}m_{36} - 14m_{11}m_{54}m_{45} + m_{02}m_{90}m_{18} \\
 & - 8m_{02}m_{81}m_{27} + 28m_{02}m_{72}m_{36} - 56m_{02}m_{63}m_{45} + 35m_{02}m_{54}^2
 \end{aligned}$$

Generating graph:

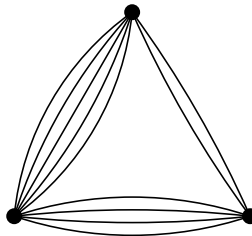
1	1	1	1	1	1	1	1	1	1	2
2	2	2	2	2	2	2	2	2	2	3 3



$$\begin{aligned}
 I_{47} = & -m_{60}m_{52}m_{09} + 5m_{60}m_{43}m_{18} - 10m_{60}m_{34}m_{27} + 10m_{60}m_{25}m_{36} - 5m_{60}m_{16}m_{45} + m_{60}m_{07}m_{54} \\
 & + 2m_{51}m_{61}m_{09} - 6m_{51}m_{52}m_{18} + 20m_{51}m_{34}m_{36} - 30m_{51}m_{25}m_{45} + 18m_{51}m_{16}m_{54} \\
 & - 4m_{51}m_{07}m_{63} - m_{42}m_{70}m_{09} - 3m_{42}m_{61}m_{18} + 24m_{42}m_{52}m_{27} - 40m_{42}m_{43}m_{36} \\
 & + 15m_{42}m_{34}m_{45} + 21m_{42}m_{25}m_{54} - 22m_{42}m_{16}m_{63} + 6m_{42}m_{07}m_{72} + 4m_{33}m_{70}m_{18} \\
 & - 8m_{33}m_{61}m_{27} - 16m_{33}m_{52}m_{36} + 60m_{33}m_{43}m_{45} - 60m_{33}m_{34}m_{54} + 16m_{33}m_{25}m_{63} \\
 & + 8m_{33}m_{16}m_{72} - 4m_{33}m_{07}m_{81} - 6m_{24}m_{70}m_{27} + 22m_{24}m_{61}m_{36} - 21m_{24}m_{52}m_{45} \\
 & - 15m_{24}m_{43}m_{54} + 40m_{24}m_{34}m_{63} - 24m_{24}m_{25}m_{72} + 3m_{24}m_{16}m_{81} + m_{24}m_{07}m_{90} \\
 & + 4m_{15}m_{70}m_{36} - 18m_{15}m_{61}m_{45} + 30m_{15}m_{52}m_{54} - 20m_{15}m_{43}m_{63} + 6m_{15}m_{25}m_{81} \\
 & - 2m_{15}m_{16}m_{90} - m_{06}m_{70}m_{45} + 5m_{06}m_{61}m_{54} - 10m_{06}m_{52}m_{63} + 10m_{06}m_{43}m_{72} \\
 & - 5m_{06}m_{34}m_{81} + m_{06}m_{25}m_{90}
 \end{aligned}$$

Generating graph:

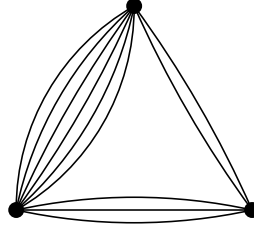
1	1	1	1	1	1	1	1	1	1	2 2
2	2	2	2	2	3	3	3	3	3	3



$$\begin{aligned}
I_{48} = & -m_{50}m_{62}m_{09} + 6m_{50}m_{53}m_{18} - 15m_{50}m_{44}m_{27} + 20m_{50}m_{35}m_{36} - 15m_{50}m_{26}m_{45} \\
& + 6m_{50}m_{17}m_{54} - m_{50}m_{08}m_{63} + 2m_{41}m_{71}m_{09} - 9m_{41}m_{62}m_{18} + 12m_{41}m_{53}m_{27} + 5m_{41}m_{44}m_{36} \\
& - 30m_{41}m_{35}m_{45} + 33m_{41}m_{26}m_{54} - 16m_{41}m_{17}m_{63} + 3m_{41}m_{08}m_{72} - m_{32}m_{80}m_{09} \\
& + 18m_{32}m_{62}m_{27} - 52m_{32}m_{53}m_{36} + 60m_{32}m_{44}m_{45} - 24m_{32}m_{35}m_{54} - 10m_{32}m_{26}m_{63} \\
& + 12m_{32}m_{17}m_{72} - 3m_{32}m_{08}m_{81} + 3m_{23}m_{80}m_{18} - 12m_{23}m_{71}m_{27} + 10m_{23}m_{62}m_{36} \\
& + 24m_{23}m_{53}m_{45} - 60m_{23}m_{44}m_{54} + 52m_{23}m_{35}m_{63} - 18m_{23}m_{26}m_{72} + m_{23}m_{08}m_{90} \\
& - 3m_{14}m_{80}m_{27} + 16m_{14}m_{71}m_{36} - 33m_{14}m_{62}m_{45} + 30m_{14}m_{53}m_{54} - 5m_{14}m_{44}m_{63} \\
& - 12m_{14}m_{35}m_{72} + 9m_{14}m_{26}m_{81} - 2m_{14}m_{17}m_{90} + m_{05}m_{80}m_{36} - 6m_{05}m_{71}m_{45} \\
& + 15m_{05}m_{62}m_{54} - 20m_{05}m_{53}m_{63} + 15m_{05}m_{44}m_{72} - 6m_{05}m_{35}m_{81} + m_{05}m_{26}m_{90}
\end{aligned}$$

Generating graph:

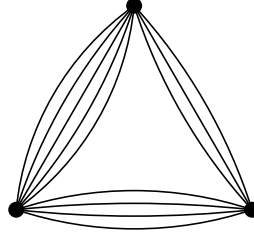
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{49} = & m_{70}m_{53}m_{09} - 5m_{70}m_{44}m_{18} + 10m_{70}m_{35}m_{27} - 10m_{70}m_{26}m_{36} + 5m_{70}m_{17}m_{45} - m_{70}m_{08}m_{54} \\
& - 3m_{61}m_{62}m_{09} + 11m_{61}m_{53}m_{18} - 10m_{61}m_{44}m_{27} - 10m_{61}m_{35}m_{36} + 25m_{61}m_{26}m_{45} \\
& - 17m_{61}m_{17}m_{54} + 4m_{61}m_{08}m_{63} + 3m_{52}m_{71}m_{09} - 3m_{52}m_{62}m_{18} - 24m_{52}m_{53}m_{27} \\
& + 60m_{52}m_{44}m_{36} - 45m_{52}m_{35}m_{45} - 3m_{52}m_{26}m_{54} + 18m_{52}m_{17}m_{63} - 6m_{52}m_{08}m_{72} \\
& - m_{43}m_{80}m_{09} - 7m_{43}m_{71}m_{18} + 32m_{43}m_{62}m_{27} - 24m_{43}m_{53}m_{36} - 45m_{43}m_{44}m_{45} \\
& + 81m_{43}m_{35}m_{54} - 38m_{43}m_{26}m_{63} - 2m_{43}m_{17}m_{72} + 4m_{43}m_{08}m_{81} + 4m_{34}m_{80}m_{18} \\
& - 2m_{34}m_{71}m_{27} - 38m_{34}m_{62}m_{36} + 81m_{34}m_{53}m_{45} - 45m_{34}m_{44}m_{54} - 24m_{34}m_{35}m_{63} \\
& + 32m_{34}m_{26}m_{72} - 7m_{34}m_{17}m_{81} - m_{34}m_{08}m_{90} - 6m_{25}m_{80}m_{27} + 18m_{25}m_{71}m_{36} \\
& - 3m_{25}m_{62}m_{45} - 45m_{25}m_{53}m_{54} + 60m_{25}m_{44}m_{63} - 24m_{25}m_{35}m_{72} - 3m_{25}m_{26}m_{81} \\
& + 3m_{25}m_{17}m_{90} + 4m_{16}m_{80}m_{36} - 17m_{16}m_{71}m_{45} + 25m_{16}m_{62}m_{54} - 10m_{16}m_{53}m_{63} \\
& - 10m_{16}m_{44}m_{72} + 11m_{16}m_{35}m_{81} - 3m_{16}m_{26}m_{90} - m_{07}m_{80}m_{45} + 5m_{07}m_{71}m_{54} \\
& - 10m_{07}m_{62}m_{63} + 10m_{07}m_{53}m_{72} - 5m_{07}m_{44}m_{81} + m_{07}m_{35}m_{90}
\end{aligned}$$

Generating graph:

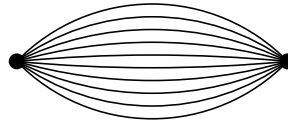
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$I_{50} = m_{10,0}m_{0,10} - 10m_{91}m_{19} + 45m_{82}m_{28} - 120m_{73}m_{37} + 210m_{64}m_{46} - 126m_{55}^2$$

Generating graph:

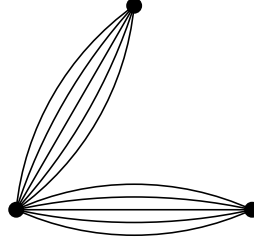
$$\begin{array}{cccccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 \end{array}$$



$$\begin{aligned} I_{51} = & m_{50}^2m_{0,10} - 10m_{50}m_{41}m_{19} + 20m_{50}m_{32}m_{28} - 20m_{50}m_{23}m_{37} + 10m_{50}m_{14}m_{46} - 2m_{50}m_{05}m_{55} \\ & + 25m_{41}^2m_{28} - 100m_{41}m_{32}m_{37} + 100m_{41}m_{23}m_{46} - 50m_{41}m_{14}m_{55} + 10m_{41}m_{05}m_{64} \\ & + 100m_{32}^2m_{46} - 200m_{32}m_{23}m_{55} + 100m_{32}m_{14}m_{64} - 20m_{32}m_{05}m_{73} + 100m_{23}^2m_{64} \\ & - 100m_{23}m_{14}m_{73} + 20m_{23}m_{05}m_{82} + 25m_{14}^2m_{82} - 10m_{14}m_{05}m_{91} + m_{05}^2m_{10,0} \end{aligned}$$

Generating graph:

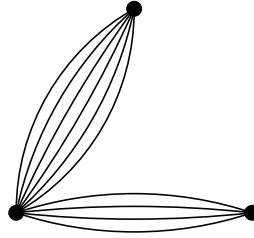
$$\begin{array}{cccccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_{52} = & m_{40}m_{60}m_{0,10} - 6m_{40}m_{51}m_{19} + 15m_{40}m_{42}m_{28} - 20m_{40}m_{33}m_{37} + 15m_{40}m_{24}m_{46} \\
& - 6m_{40}m_{15}m_{55} + m_{40}m_{06}m_{64} - 4m_{31}m_{60}m_{19} + 24m_{31}m_{51}m_{28} - 60m_{31}m_{42}m_{37} \\
& + 80m_{31}m_{33}m_{46} - 60m_{31}m_{24}m_{55} + 24m_{31}m_{15}m_{64} - 4m_{31}m_{06}m_{73} + 6m_{22}m_{60}m_{28} \\
& - 36m_{22}m_{51}m_{37} + 90m_{22}m_{42}m_{46} - 120m_{22}m_{33}m_{55} + 90m_{22}m_{24}m_{64} - 36m_{22}m_{15}m_{73} \\
& + 6m_{22}m_{06}m_{82} - 4m_{13}m_{60}m_{37} + 24m_{13}m_{51}m_{46} - 60m_{13}m_{42}m_{55} + 80m_{13}m_{33}m_{64} \\
& - 60m_{13}m_{24}m_{73} + 24m_{13}m_{15}m_{82} - 4m_{13}m_{06}m_{91} + m_{04}m_{60}m_{46} - 6m_{04}m_{51}m_{55} \\
& + 15m_{04}m_{42}m_{64} - 20m_{04}m_{33}m_{73} + 15m_{04}m_{24}m_{82} - 6m_{04}m_{15}m_{91} + m_{04}m_{06}m_{10,0}
\end{aligned}$$

Generating graph:

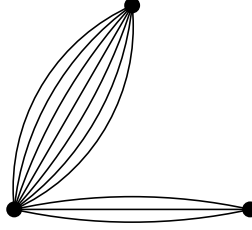
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{53} = & m_{30}m_{70}m_{0,10} - 7m_{30}m_{61}m_{19} + 21m_{30}m_{52}m_{28} - 35m_{30}m_{43}m_{37} + 35m_{30}m_{34}m_{46} \\
& - 21m_{30}m_{25}m_{55} + 7m_{30}m_{16}m_{64} - m_{30}m_{07}m_{73} - 3m_{21}m_{70}m_{19} + 21m_{21}m_{61}m_{28} \\
& - 63m_{21}m_{52}m_{37} + 105m_{21}m_{43}m_{46} - 105m_{21}m_{34}m_{55} + 63m_{21}m_{25}m_{64} - 21m_{21}m_{16}m_{73} \\
& + 3m_{21}m_{07}m_{82} + 3m_{12}m_{70}m_{28} - 21m_{12}m_{61}m_{37} + 63m_{12}m_{52}m_{46} - 105m_{12}m_{43}m_{55} \\
& + 105m_{12}m_{34}m_{64} - 63m_{12}m_{25}m_{73} + 21m_{12}m_{16}m_{82} - 3m_{12}m_{07}m_{91} - m_{03}m_{70}m_{37} \\
& + 7m_{03}m_{61}m_{46} - 21m_{03}m_{52}m_{55} + 35m_{03}m_{43}m_{64} - 35m_{03}m_{34}m_{73} + 21m_{03}m_{25}m_{82} \\
& - 7m_{03}m_{16}m_{91} + m_{03}m_{07}m_{10,0}
\end{aligned}$$

Generating graph:

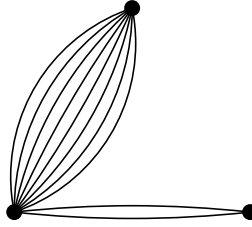
1 1 1 1 1 1 1 1 1 1
2 2 2 2 2 2 2 3 3 3



$$\begin{aligned}
I_{54} = & m_{20}m_{80}m_{0,10} - 8m_{20}m_{71}m_{19} + 28m_{20}m_{62}m_{28} - 56m_{20}m_{53}m_{37} + 70m_{20}m_{44}m_{46} \\
& - 56m_{20}m_{35}m_{55} + 28m_{20}m_{26}m_{64} - 8m_{20}m_{17}m_{73} + m_{20}m_{08}m_{82} - 2m_{11}m_{80}m_{19} \\
& + 16m_{11}m_{71}m_{28} - 56m_{11}m_{62}m_{37} + 112m_{11}m_{53}m_{46} - 140m_{11}m_{44}m_{55} + 112m_{11}m_{35}m_{64} \\
& - 56m_{11}m_{26}m_{73} + 16m_{11}m_{17}m_{82} - 2m_{11}m_{08}m_{91} + m_{02}m_{80}m_{28} - 8m_{02}m_{71}m_{37} \\
& + 28m_{02}m_{62}m_{46} - 56m_{02}m_{53}m_{55} + 70m_{02}m_{44}m_{64} - 56m_{02}m_{35}m_{73} + 28m_{02}m_{26}m_{82} \\
& - 8m_{02}m_{17}m_{91} + m_{02}m_{08}m_{10,0}
\end{aligned}$$

Generating graph:

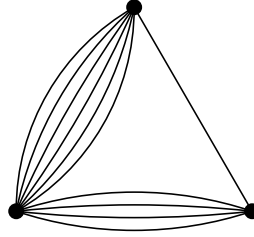
1 1 1 1 1 1 1 1 1 1
2 2 2 2 2 2 2 2 3 3



$$\begin{aligned}
I_{55} = & -m_{50}m_{61}m_{0,10} + 6m_{50}m_{52}m_{19} - 15m_{50}m_{43}m_{28} + 20m_{50}m_{34}m_{37} - 15m_{50}m_{25}m_{46} \\
& + 6m_{50}m_{16}m_{55} - m_{50}m_{07}m_{64} + m_{41}m_{70}m_{0,10} - 2m_{41}m_{61}m_{19} - 9m_{41}m_{52}m_{28} + 40m_{41}m_{43}m_{37} \\
& - 65m_{41}m_{34}m_{46} + 54m_{41}m_{25}m_{55} - 23m_{41}m_{16}m_{64} + 4m_{41}m_{07}m_{73} - 4m_{32}m_{70}m_{19} \\
& + 18m_{32}m_{61}m_{28} - 24m_{32}m_{52}m_{37} - 10m_{32}m_{43}m_{46} + 60m_{32}m_{34}m_{55} - 66m_{32}m_{25}m_{64} \\
& + 32m_{32}m_{16}m_{73} - 6m_{32}m_{07}m_{82} + 6m_{23}m_{70}m_{28} - 32m_{23}m_{61}m_{37} + 66m_{23}m_{52}m_{46} \\
& - 60m_{23}m_{43}m_{55} + 10m_{23}m_{34}m_{64} + 24m_{23}m_{25}m_{73} - 18m_{23}m_{16}m_{82} + 4m_{23}m_{07}m_{91} \\
& - 4m_{14}m_{70}m_{37} + 23m_{14}m_{61}m_{46} - 54m_{14}m_{52}m_{55} + 65m_{14}m_{43}m_{64} - 40m_{14}m_{34}m_{73} \\
& + 9m_{14}m_{25}m_{82} + 2m_{14}m_{16}m_{91} - m_{14}m_{07}m_{10,0} + m_{05}m_{70}m_{46} - 6m_{05}m_{61}m_{55} + 15m_{05}m_{52}m_{64} \\
& - 20m_{05}m_{43}m_{73} + 15m_{05}m_{34}m_{82} - 6m_{05}m_{25}m_{91} + m_{05}m_{16}m_{10,0}
\end{aligned}$$

Generating graph:

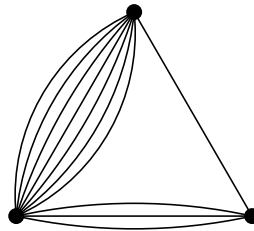
1 1 1 1 1 1 1 1 1 1 2
 2 2 2 2 2 2 3 3 3 3 3



$$\begin{aligned}
 I_{56} = & -m_{40}m_{71}m_{0,10} + 7m_{40}m_{62}m_{19} - 21m_{40}m_{53}m_{28} + 35m_{40}m_{44}m_{37} - 35m_{40}m_{35}m_{46} \\
 & + 21m_{40}m_{26}m_{55} - 7m_{40}m_{17}m_{64} + m_{40}m_{08}m_{73} + m_{31}m_{80}m_{0,10} - 4m_{31}m_{71}m_{19} \\
 & + 28m_{31}m_{53}m_{37} - 70m_{31}m_{44}m_{46} + 84m_{31}m_{35}m_{55} - 56m_{31}m_{26}m_{64} + 20m_{31}m_{17}m_{73} \\
 & - 3m_{31}m_{08}m_{82} - 3m_{22}m_{80}m_{19} + 18m_{22}m_{71}m_{28} - 42m_{22}m_{62}m_{37} + 42m_{22}m_{53}m_{46} \\
 & - 42m_{22}m_{35}m_{64} + 42m_{22}m_{26}m_{73} - 18m_{22}m_{17}m_{82} + 3m_{22}m_{08}m_{91} + 3m_{13}m_{80}m_{28} \\
 & - 20m_{13}m_{71}m_{37} + 56m_{13}m_{62}m_{46} - 84m_{13}m_{53}m_{55} + 70m_{13}m_{44}m_{64} - 28m_{13}m_{35}m_{73} \\
 & + 4m_{13}m_{17}m_{91} - m_{13}m_{08}m_{10,0} - m_{04}m_{80}m_{37} + 7m_{04}m_{71}m_{46} - 21m_{04}m_{62}m_{55} \\
 & + 35m_{04}m_{53}m_{64} - 35m_{04}m_{44}m_{73} + 21m_{04}m_{35}m_{82} - 7m_{04}m_{26}m_{91} + m_{04}m_{17}m_{10,0}
 \end{aligned}$$

Generating graph:

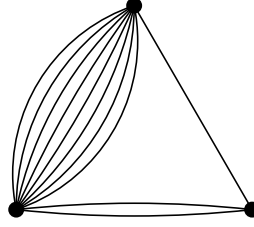
1 1 1 1 1 1 1 1 1 1 2
 2 2 2 2 2 2 2 3 3 3 3



$$\begin{aligned}
I_{57} = & -m_{30}m_{81}m_{0,10} + 8m_{30}m_{72}m_{19} - 28m_{30}m_{63}m_{28} + 56m_{30}m_{54}m_{37} - 70m_{30}m_{45}m_{46} \\
& + 56m_{30}m_{36}m_{55} - 28m_{30}m_{27}m_{64} + 8m_{30}m_{18}m_{73} - m_{30}m_{09}m_{82} + m_{21}m_{90}m_{0,10} \\
& - 6m_{21}m_{81}m_{19} + 12m_{21}m_{72}m_{28} - 42m_{21}m_{54}m_{46} + 84m_{21}m_{45}m_{55} - 84m_{21}m_{36}m_{64} \\
& + 48m_{21}m_{27}m_{73} - 15m_{21}m_{18}m_{82} + 2m_{21}m_{09}m_{91} - 2m_{12}m_{90}m_{19} + 15m_{12}m_{81}m_{28} \\
& - 48m_{12}m_{72}m_{37} + 84m_{12}m_{63}m_{46} - 84m_{12}m_{54}m_{55} + 42m_{12}m_{45}m_{64} - 12m_{12}m_{27}m_{82} \\
& + 6m_{12}m_{18}m_{91} - m_{12}m_{09}m_{10,0} + m_{03}m_{90}m_{28} - 8m_{03}m_{81}m_{37} + 28m_{03}m_{72}m_{46} \\
& - 56m_{03}m_{63}m_{55} + 70m_{03}m_{54}m_{64} - 56m_{03}m_{45}m_{73} + 28m_{03}m_{36}m_{82} - 8m_{03}m_{27}m_{91} \\
& + m_{03}m_{18}m_{10,0}
\end{aligned}$$

Generating graph:

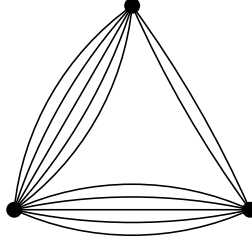
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{58} = & m_{70}m_{52}m_{0,10} - 5m_{70}m_{43}m_{19} + 10m_{70}m_{34}m_{28} - 10m_{70}m_{25}m_{37} + 5m_{70}m_{16}m_{46} - m_{70}m_{07}m_{55} \\
& - m_{61}^2 m_{0,10} + 5m_{61}m_{52}m_{19} + 5m_{61}m_{43}m_{28} - 30m_{61}m_{34}m_{37} + 40m_{61}m_{25}m_{46} \\
& - 23m_{61}m_{16}m_{55} + 5m_{61}m_{07}m_{64} - 15m_{52}^2 m_{28} + 40m_{52}m_{43}m_{37} + 5m_{52}m_{34}m_{46} \\
& - 51m_{52}m_{25}m_{55} + 40m_{52}m_{16}m_{64} - 10m_{52}m_{07}m_{73} - 50m_{43}^2 m_{46} + 75m_{43}m_{34}m_{55} \\
& + 5m_{43}m_{25}m_{64} - 30m_{43}m_{16}m_{73} + 10m_{43}m_{07}m_{82} - 50m_{34}^2 m_{64} + 40m_{34}m_{25}m_{73} \\
& + 5m_{34}m_{16}m_{82} - 5m_{34}m_{07}m_{91} - 15m_{25}^2 m_{82} + 5m_{25}m_{16}m_{91} + m_{25}m_{07}m_{10,0} - m_{16}^2 m_{10,0}
\end{aligned}$$

Generating graph:

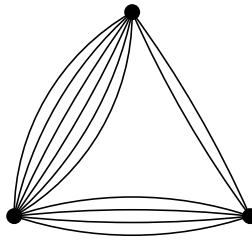
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{59} = & m_{60}m_{62}m_{0,10} - 6m_{60}m_{53}m_{19} + 15m_{60}m_{44}m_{28} - 20m_{60}m_{35}m_{37} + 15m_{60}m_{26}m_{46} \\
& - 6m_{60}m_{17}m_{55} + m_{60}m_{08}m_{64} - 2m_{51}m_{71}m_{0,10} + 8m_{51}m_{62}m_{19} - 6m_{51}m_{53}m_{28} \\
& - 20m_{51}m_{44}m_{37} + 50m_{51}m_{35}m_{46} - 48m_{51}m_{26}m_{55} + 22m_{51}m_{17}m_{64} - 4m_{51}m_{08}m_{73} \\
& + m_{42}m_{80}m_{0,10} + 2m_{42}m_{71}m_{19} - 27m_{42}m_{62}m_{28} + 64m_{42}m_{53}m_{37} - 55m_{42}m_{44}m_{46} \\
& - 6m_{42}m_{35}m_{55} + 43m_{42}m_{26}m_{64} - 28m_{42}m_{17}m_{73} + 6m_{42}m_{08}m_{82} - 4m_{33}m_{80}m_{19} \\
& + 12m_{33}m_{71}m_{28} + 8m_{33}m_{62}m_{37} - 76m_{33}m_{53}m_{46} + 120m_{33}m_{44}m_{55} - 76m_{33}m_{35}m_{64} \\
& + 8m_{33}m_{26}m_{73} + 12m_{33}m_{17}m_{82} - 4m_{33}m_{08}m_{91} + 6m_{24}m_{80}m_{28} - 28m_{24}m_{71}m_{37} \\
& + 43m_{24}m_{62}m_{46} - 6m_{24}m_{53}m_{55} - 55m_{24}m_{44}m_{64} + 64m_{24}m_{35}m_{73} - 27m_{24}m_{26}m_{82} \\
& + 2m_{24}m_{17}m_{91} + m_{24}m_{08}m_{10,0} - 4m_{15}m_{80}m_{37} + 22m_{15}m_{71}m_{46} - 48m_{15}m_{62}m_{55} \\
& + 50m_{15}m_{53}m_{64} - 20m_{15}m_{44}m_{73} - 6m_{15}m_{35}m_{82} + 8m_{15}m_{26}m_{91} - 2m_{15}m_{17}m_{10,0} \\
& + m_{06}m_{80}m_{46} - 6m_{06}m_{71}m_{55} + 15m_{06}m_{62}m_{64} - 20m_{06}m_{53}m_{73} + 15m_{06}m_{44}m_{82} \\
& - 6m_{06}m_{35}m_{91} + m_{06}m_{26}m_{10,0}
\end{aligned}$$

Generating graph:

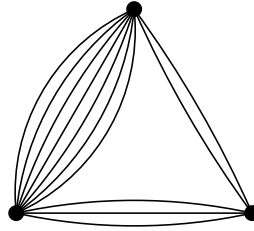
1	1	1	1	1	1	1	1	1	1	2	2
2	2	2	2	2	2	3	3	3	3	3	3



$$\begin{aligned}
I_{60} = & m_{50}m_{72}m_{0,10} - 7m_{50}m_{63}m_{19} + 21m_{50}m_{54}m_{28} - 35m_{50}m_{45}m_{37} + 35m_{50}m_{36}m_{46} \\
& - 21m_{50}m_{27}m_{55} + 7m_{50}m_{18}m_{64} - m_{50}m_{09}m_{73} - 2m_{41}m_{81}m_{0,10} + 11m_{41}m_{72}m_{19} \\
& - 21m_{41}m_{63}m_{28} + 7m_{41}m_{54}m_{37} + 35m_{41}m_{45}m_{46} - 63m_{41}m_{36}m_{55} + 49m_{41}m_{27}m_{64} \\
& - 19m_{41}m_{18}m_{73} + 3m_{41}m_{09}m_{82} + m_{32}m_{90}m_{0,10} - m_{32}m_{81}m_{19} - 18m_{32}m_{72}m_{28} \\
& + 70m_{32}m_{63}m_{37} - 112m_{32}m_{54}m_{46} + 84m_{32}m_{45}m_{55} - 14m_{32}m_{36}m_{64} - 22m_{32}m_{27}m_{73} \\
& + 15m_{32}m_{18}m_{82} - 3m_{32}m_{09}m_{91} - 3m_{23}m_{90}m_{19} + 15m_{23}m_{81}m_{28} - 22m_{23}m_{72}m_{37} \\
& - 14m_{23}m_{63}m_{46} + 84m_{23}m_{54}m_{55} - 112m_{23}m_{45}m_{64} + 70m_{23}m_{36}m_{73} - 18m_{23}m_{27}m_{82} \\
& - m_{23}m_{18}m_{91} + m_{23}m_{09}m_{10,0} + 3m_{14}m_{90}m_{28} - 19m_{14}m_{81}m_{37} + 49m_{14}m_{72}m_{46} \\
& - 63m_{14}m_{63}m_{55} + 35m_{14}m_{54}m_{64} + 7m_{14}m_{45}m_{73} - 21m_{14}m_{36}m_{82} + 11m_{14}m_{27}m_{91} \\
& - 2m_{14}m_{18}m_{10,0} - m_{05}m_{90}m_{37} + 7m_{05}m_{81}m_{46} - 21m_{05}m_{72}m_{55} + 35m_{05}m_{63}m_{64} \\
& - 35m_{05}m_{54}m_{73} + 21m_{05}m_{45}m_{82} - 7m_{05}m_{36}m_{91} + m_{05}m_{27}m_{10,0}
\end{aligned}$$

Generating graph:

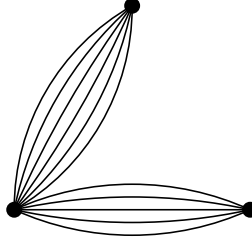
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{61} = & -m_{50}m_{60}m_{0,11} + 6m_{50}m_{51}m_{1,10} - 15m_{50}m_{42}m_{29} + 20m_{50}m_{33}m_{38} - 15m_{50}m_{24}m_{47} \\
& + 6m_{50}m_{15}m_{56} - m_{50}m_{06}m_{65} + 5m_{41}m_{60}m_{1,10} - 30m_{41}m_{51}m_{29} + 75m_{41}m_{42}m_{38} \\
& - 100m_{41}m_{33}m_{47} + 75m_{41}m_{24}m_{56} - 30m_{41}m_{15}m_{65} + 5m_{41}m_{06}m_{74} - 10m_{32}m_{60}m_{29} \\
& + 60m_{32}m_{51}m_{38} - 150m_{32}m_{42}m_{47} + 200m_{32}m_{33}m_{56} - 150m_{32}m_{24}m_{65} + 60m_{32}m_{15}m_{74} \\
& - 10m_{32}m_{06}m_{83} + 10m_{23}m_{60}m_{38} - 60m_{23}m_{51}m_{47} + 150m_{23}m_{42}m_{56} - 200m_{23}m_{33}m_{65} \\
& + 150m_{23}m_{24}m_{74} - 60m_{23}m_{15}m_{83} + 10m_{23}m_{06}m_{92} - 5m_{14}m_{60}m_{47} + 30m_{14}m_{51}m_{56} \\
& - 75m_{14}m_{42}m_{65} + 100m_{14}m_{33}m_{74} - 75m_{14}m_{24}m_{83} + 30m_{14}m_{15}m_{92} - 5m_{14}m_{06}m_{10,1} \\
& + m_{05}m_{60}m_{56} - 6m_{05}m_{51}m_{65} + 15m_{05}m_{42}m_{74} - 20m_{05}m_{33}m_{83} + 15m_{05}m_{24}m_{92} \\
& - 6m_{05}m_{15}m_{10,1} + m_{05}m_{06}m_{11,0}
\end{aligned}$$

Generating graph:

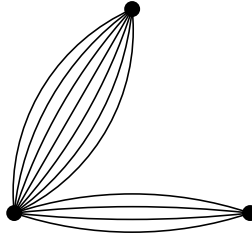
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{62} = & -m_{40}m_{70}m_{0,11} + 7m_{40}m_{61}m_{1,10} - 21m_{40}m_{52}m_{29} + 35m_{40}m_{43}m_{38} - 35m_{40}m_{34}m_{47} \\
& + 21m_{40}m_{25}m_{56} - 7m_{40}m_{16}m_{65} + m_{40}m_{07}m_{74} + 4m_{31}m_{70}m_{1,10} - 28m_{31}m_{61}m_{29} \\
& + 84m_{31}m_{52}m_{38} - 140m_{31}m_{43}m_{47} + 140m_{31}m_{34}m_{56} - 84m_{31}m_{25}m_{65} + 28m_{31}m_{16}m_{74} \\
& - 4m_{31}m_{07}m_{83} - 6m_{22}m_{70}m_{29} + 42m_{22}m_{61}m_{38} - 126m_{22}m_{52}m_{47} + 210m_{22}m_{43}m_{56} \\
& - 210m_{22}m_{34}m_{65} + 126m_{22}m_{25}m_{74} - 42m_{22}m_{16}m_{83} + 6m_{22}m_{07}m_{92} + 4m_{13}m_{70}m_{38} \\
& - 28m_{13}m_{61}m_{47} + 84m_{13}m_{52}m_{56} - 140m_{13}m_{43}m_{65} + 140m_{13}m_{34}m_{74} - 84m_{13}m_{25}m_{83} \\
& + 28m_{13}m_{16}m_{92} - 4m_{13}m_{07}m_{10,1} - m_{04}m_{70}m_{47} + 7m_{04}m_{61}m_{56} - 21m_{04}m_{52}m_{65} \\
& + 35m_{04}m_{43}m_{74} - 35m_{04}m_{34}m_{83} + 21m_{04}m_{25}m_{92} - 7m_{04}m_{16}m_{10,1} + m_{04}m_{07}m_{11,0}
\end{aligned}$$

Generating graph:

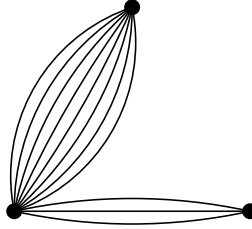
$$\begin{array}{cccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{63} = & -m_{30}m_{80}m_{0,11} + 8m_{30}m_{71}m_{1,10} - 28m_{30}m_{62}m_{29} + 56m_{30}m_{53}m_{38} - 70m_{30}m_{44}m_{47} \\
& + 56m_{30}m_{35}m_{56} - 28m_{30}m_{26}m_{65} + 8m_{30}m_{17}m_{74} - m_{30}m_{08}m_{83} + 3m_{21}m_{80}m_{1,10} \\
& - 24m_{21}m_{71}m_{29} + 84m_{21}m_{62}m_{38} - 168m_{21}m_{53}m_{47} + 210m_{21}m_{44}m_{56} - 168m_{21}m_{35}m_{65} \\
& + 84m_{21}m_{26}m_{74} - 24m_{21}m_{17}m_{83} + 3m_{21}m_{08}m_{92} - 3m_{12}m_{80}m_{29} + 24m_{12}m_{71}m_{38} \\
& - 84m_{12}m_{62}m_{47} + 168m_{12}m_{53}m_{56} - 210m_{12}m_{44}m_{65} + 168m_{12}m_{35}m_{74} - 84m_{12}m_{26}m_{83} \\
& + 24m_{12}m_{17}m_{92} - 3m_{12}m_{08}m_{10,1} + m_{03}m_{80}m_{38} - 8m_{03}m_{71}m_{47} + 28m_{03}m_{62}m_{56} \\
& - 56m_{03}m_{53}m_{65} + 70m_{03}m_{44}m_{74} - 56m_{03}m_{35}m_{83} + 28m_{03}m_{26}m_{92} - 8m_{03}m_{17}m_{10,1} \\
& + m_{03}m_{08}m_{11,0}
\end{aligned}$$

Generating graph:

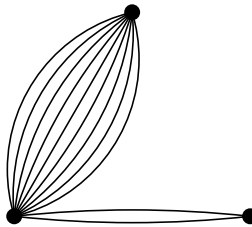
1 1 1 1 1 1 1 1 1 1 1
 2 2 2 2 2 2 2 2 3 3 3



$$\begin{aligned}
 I_{64} = & -m_{20}m_{90}m_{0,11} + 9m_{20}m_{81}m_{1,10} - 36m_{20}m_{72}m_{29} + 84m_{20}m_{63}m_{38} - 126m_{20}m_{54}m_{47} \\
 & + 126m_{20}m_{45}m_{56} - 84m_{20}m_{36}m_{65} + 36m_{20}m_{27}m_{74} - 9m_{20}m_{18}m_{83} + m_{20}m_{09}m_{92} \\
 & + 2m_{11}m_{90}m_{1,10} - 18m_{11}m_{81}m_{29} + 72m_{11}m_{72}m_{38} - 168m_{11}m_{63}m_{47} + 252m_{11}m_{54}m_{56} \\
 & - 252m_{11}m_{45}m_{65} + 168m_{11}m_{36}m_{74} - 72m_{11}m_{27}m_{83} + 18m_{11}m_{18}m_{92} - 2m_{11}m_{09}m_{10,1} \\
 & - m_{02}m_{90}m_{29} + 9m_{02}m_{81}m_{38} - 36m_{02}m_{72}m_{47} + 84m_{02}m_{63}m_{56} - 126m_{02}m_{54}m_{65} \\
 & + 126m_{02}m_{45}m_{74} - 84m_{02}m_{36}m_{83} + 36m_{02}m_{27}m_{92} - 9m_{02}m_{18}m_{10,1} + m_{02}m_{09}m_{11,0}
 \end{aligned}$$

Generating graph:

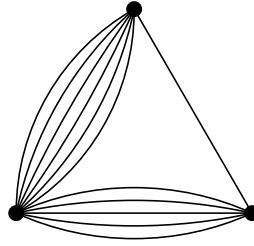
1 1 1 1 1 1 1 1 1 1 1
 2 2 2 2 2 2 2 2 2 3 3



$$\begin{aligned}
I_{65} = & m_{60}m_{61}m_{0,11} - 6m_{60}m_{52}m_{1,10} + 15m_{60}m_{43}m_{29} - 20m_{60}m_{34}m_{38} + 15m_{60}m_{25}m_{47} \\
& - 6m_{60}m_{16}m_{56} + m_{60}m_{07}m_{65} - m_{51}m_{70}m_{0,11} + m_{51}m_{61}m_{1,10} + 15m_{51}m_{52}m_{29} \\
& - 55m_{51}m_{43}m_{38} + 85m_{51}m_{34}m_{47} - 69m_{51}m_{25}m_{56} + 29m_{51}m_{16}m_{65} - 5m_{51}m_{07}m_{74} \\
& + 5m_{42}m_{70}m_{1,10} - 20m_{42}m_{61}m_{29} + 15m_{42}m_{52}m_{38} + 50m_{42}m_{43}m_{47} - 125m_{42}m_{34}m_{56} \\
& + 120m_{42}m_{25}m_{65} - 55m_{42}m_{16}m_{74} + 10m_{42}m_{07}m_{83} - 10m_{33}m_{70}m_{29} + 50m_{33}m_{61}m_{38} \\
& - 90m_{33}m_{52}m_{47} + 50m_{33}m_{43}m_{56} + 50m_{33}m_{34}m_{65} - 90m_{33}m_{25}m_{74} + 50m_{33}m_{16}m_{83} \\
& - 10m_{33}m_{07}m_{92} + 10m_{24}m_{70}m_{38} - 55m_{24}m_{61}m_{47} + 120m_{24}m_{52}m_{56} - 125m_{24}m_{43}m_{65} \\
& + 50m_{24}m_{34}m_{74} + 15m_{24}m_{25}m_{83} - 20m_{24}m_{16}m_{92} + 5m_{24}m_{07}m_{10,1} - 5m_{15}m_{70}m_{47} \\
& + 29m_{15}m_{61}m_{56} - 69m_{15}m_{52}m_{65} + 85m_{15}m_{43}m_{74} - 55m_{15}m_{34}m_{83} + 15m_{15}m_{25}m_{92} \\
& + m_{15}m_{16}m_{10,1} - m_{15}m_{07}m_{11,0} + m_{06}m_{70}m_{56} - 6m_{06}m_{61}m_{65} + 15m_{06}m_{52}m_{74} \\
& - 20m_{06}m_{43}m_{83} + 15m_{06}m_{34}m_{92} - 6m_{06}m_{25}m_{10,1} + m_{06}m_{16}m_{11,0}
\end{aligned}$$

Generating graph:

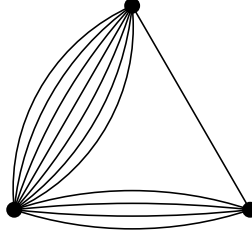
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{66} = & m_{50}m_{71}m_{0,11} - 7m_{50}m_{62}m_{1,10} + 21m_{50}m_{53}m_{29} - 35m_{50}m_{44}m_{38} + 35m_{50}m_{35}m_{47} \\
& - 21m_{50}m_{26}m_{56} + 7m_{50}m_{17}m_{65} - m_{50}m_{08}m_{74} - m_{41}m_{80}m_{0,11} + 3m_{41}m_{71}m_{1,10} \\
& + 7m_{41}m_{62}m_{29} - 49m_{41}m_{53}m_{38} + 105m_{41}m_{44}m_{47} - 119m_{41}m_{35}m_{56} + 77m_{41}m_{26}m_{65} \\
& - 27m_{41}m_{17}m_{74} + 4m_{41}m_{08}m_{83} + 4m_{32}m_{80}m_{1,10} - 22m_{32}m_{71}m_{29} + 42m_{32}m_{62}m_{38} \\
& - 14m_{32}m_{53}m_{47} - 70m_{32}m_{44}m_{56} + 126m_{32}m_{35}m_{65} - 98m_{32}m_{26}m_{74} + 38m_{32}m_{17}m_{83} \\
& - 6m_{32}m_{08}m_{92} - 6m_{23}m_{80}m_{29} + 38m_{23}m_{71}m_{38} - 98m_{23}m_{62}m_{47} + 126m_{23}m_{53}m_{56} \\
& - 70m_{23}m_{44}m_{65} - 14m_{23}m_{35}m_{74} + 42m_{23}m_{26}m_{83} - 22m_{23}m_{17}m_{92} + 4m_{23}m_{08}m_{10,1} \\
& + 4m_{14}m_{80}m_{38} - 27m_{14}m_{71}m_{47} + 77m_{14}m_{62}m_{56} - 119m_{14}m_{53}m_{65} + 105m_{14}m_{44}m_{74} \\
& - 49m_{14}m_{35}m_{83} + 7m_{14}m_{26}m_{92} + 3m_{14}m_{17}m_{10,1} - m_{14}m_{08}m_{11,0} - m_{05}m_{80}m_{47} \\
& + 7m_{05}m_{71}m_{56} - 21m_{05}m_{62}m_{65} + 35m_{05}m_{53}m_{74} - 35m_{05}m_{44}m_{83} + 21m_{05}m_{35}m_{92} \\
& - 7m_{05}m_{26}m_{10,1} + m_{05}m_{17}m_{11,0}
\end{aligned}$$

Generating graph:

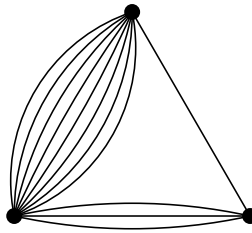
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{67} = & m_{40}m_{81}m_{0,11} - 8m_{40}m_{72}m_{1,10} + 28m_{40}m_{63}m_{29} - 56m_{40}m_{54}m_{38} + 70m_{40}m_{45}m_{47} \\
& - 56m_{40}m_{36}m_{56} + 28m_{40}m_{27}m_{65} - 8m_{40}m_{18}m_{74} + m_{40}m_{09}m_{83} - m_{31}m_{90}m_{0,11} \\
& + 5m_{31}m_{81}m_{1,10} - 4m_{31}m_{72}m_{29} - 28m_{31}m_{63}m_{38} + 98m_{31}m_{54}m_{47} - 154m_{31}m_{45}m_{56} \\
& + 140m_{31}m_{36}m_{65} - 76m_{31}m_{27}m_{74} + 23m_{31}m_{18}m_{83} - 3m_{31}m_{09}m_{92} + 3m_{22}m_{90}m_{1,10} \\
& - 21m_{22}m_{81}m_{29} + 60m_{22}m_{72}m_{38} - 84m_{22}m_{63}m_{47} + 42m_{22}m_{54}m_{56} + 42m_{22}m_{45}m_{65} \\
& - 84m_{22}m_{36}m_{74} + 60m_{22}m_{27}m_{83} - 21m_{22}m_{18}m_{92} + 3m_{22}m_{09}m_{10,1} - 3m_{13}m_{90}m_{29} \\
& + 23m_{13}m_{81}m_{38} - 76m_{13}m_{72}m_{47} + 140m_{13}m_{63}m_{56} - 154m_{13}m_{54}m_{65} + 98m_{13}m_{45}m_{74} \\
& - 28m_{13}m_{36}m_{83} - 4m_{13}m_{27}m_{92} + 5m_{13}m_{18}m_{10,1} - m_{13}m_{09}m_{11,0} + m_{04}m_{90}m_{38} \\
& - 8m_{04}m_{81}m_{47} + 28m_{04}m_{72}m_{56} - 56m_{04}m_{63}m_{65} + 70m_{04}m_{54}m_{74} - 56m_{04}m_{45}m_{83} \\
& + 28m_{04}m_{36}m_{92} - 8m_{04}m_{27}m_{10,1} + m_{04}m_{18}m_{11,0}
\end{aligned}$$

Generating graph:

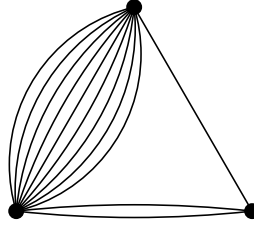
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{68} = & m_{30}m_{91}m_{0,11} - 9m_{30}m_{82}m_{1,10} + 36m_{30}m_{73}m_{29} - 84m_{30}m_{64}m_{38} + 126m_{30}m_{55}m_{47} \\
& - 126m_{30}m_{46}m_{56} + 84m_{30}m_{37}m_{65} - 36m_{30}m_{28}m_{74} + 9m_{30}m_{19}m_{83} - m_{30}m_{0,10}m_{92} \\
& - m_{21}m_{10,0}m_{0,11} + 7m_{21}m_{91}m_{1,10} - 18m_{21}m_{82}m_{29} + 12m_{21}m_{73}m_{38} + 42m_{21}m_{64}m_{47} \\
& - 126m_{21}m_{55}m_{56} + 168m_{21}m_{46}m_{65} - 132m_{21}m_{37}m_{74} + 63m_{21}m_{28}m_{83} - 17m_{21}m_{19}m_{92} \\
& + 2m_{21}m_{0,10}m_{10,1} + 2m_{12}m_{10,0}m_{1,10} - 17m_{12}m_{91}m_{29} + 63m_{12}m_{82}m_{38} - 132m_{12}m_{73}m_{47} \\
& + 168m_{12}m_{64}m_{56} - 126m_{12}m_{55}m_{65} + 42m_{12}m_{46}m_{74} + 12m_{12}m_{37}m_{83} - 18m_{12}m_{28}m_{92} \\
& + 7m_{12}m_{19}m_{10,1} - m_{12}m_{0,10}m_{11,0} - m_{03}m_{10,0}m_{29} + 9m_{03}m_{91}m_{38} - 36m_{03}m_{82}m_{47} \\
& + 84m_{03}m_{73}m_{56} - 126m_{03}m_{64}m_{65} + 126m_{03}m_{55}m_{74} - 84m_{03}m_{46}m_{83} + 36m_{03}m_{37}m_{92} \\
& - 9m_{03}m_{28}m_{10,1} + m_{03}m_{19}m_{11,0}
\end{aligned}$$

Generating graph:

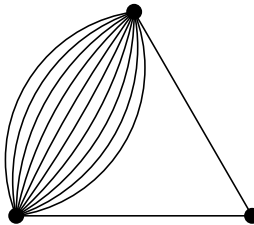
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{69} = & m_{20}m_{10,1}m_{0,11} - 10m_{20}m_{92}m_{1,10} + 45m_{20}m_{83}m_{29} - 120m_{20}m_{74}m_{38} + 210m_{20}m_{65}m_{47} \\
& - 126m_{20}m_{56}^2 - m_{11}m_{11,0}m_{0,11} + 9m_{11}m_{10,1}m_{1,10} - 35m_{11}m_{92}m_{29} + 75m_{11}m_{83}m_{38} \\
& - 90m_{11}m_{74}m_{47} + 42m_{11}m_{65}m_{56} + m_{02}m_{11,0}m_{1,10} - 10m_{02}m_{10,1}m_{29} + 45m_{02}m_{92}m_{38} \\
& - 120m_{02}m_{83}m_{47} + 210m_{02}m_{74}m_{56} - 126m_{02}m_{65}^2
\end{aligned}$$

Generating graph:

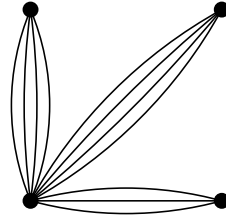
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{70} = & -m_{30}m_{40}^2m_{0,11} + 8m_{30}m_{40}m_{31}m_{1,10} - 12m_{30}m_{40}m_{22}m_{29} + 8m_{30}m_{40}m_{13}m_{38} \\
& - 2m_{30}m_{40}m_{04}m_{47} - 16m_{30}m_{31}^2m_{29} + 48m_{30}m_{31}m_{22}m_{38} - 32m_{30}m_{31}m_{13}m_{47} \\
& + 8m_{30}m_{31}m_{04}m_{56} - 36m_{30}m_{22}^2m_{47} + 48m_{30}m_{22}m_{13}m_{56} - 12m_{30}m_{22}m_{04}m_{65} \\
& - 16m_{30}m_{13}^2m_{65} + 8m_{30}m_{13}m_{04}m_{74} - m_{30}m_{04}^2m_{83} + 3m_{21}m_{40}^2m_{1,10} - 24m_{21}m_{40}m_{31}m_{29} \\
& + 36m_{21}m_{40}m_{22}m_{38} - 24m_{21}m_{40}m_{13}m_{47} + 6m_{21}m_{40}m_{04}m_{56} + 48m_{21}m_{31}^2m_{38} \\
& - 144m_{21}m_{31}m_{22}m_{47} + 96m_{21}m_{31}m_{13}m_{56} - 24m_{21}m_{31}m_{04}m_{65} + 108m_{21}m_{22}^2m_{56} \\
& - 144m_{21}m_{22}m_{13}m_{65} + 36m_{21}m_{22}m_{04}m_{74} + 48m_{21}m_{13}^2m_{74} - 24m_{21}m_{13}m_{04}m_{83} \\
& + 3m_{21}m_{04}^2m_{92} - 3m_{12}m_{40}^2m_{29} + 24m_{12}m_{40}m_{31}m_{38} - 36m_{12}m_{40}m_{22}m_{47} \\
& + 24m_{12}m_{40}m_{13}m_{56} - 6m_{12}m_{40}m_{04}m_{65} - 48m_{12}m_{31}^2m_{47} + 144m_{12}m_{31}m_{22}m_{56} \\
& - 96m_{12}m_{31}m_{13}m_{65} + 24m_{12}m_{31}m_{04}m_{74} - 108m_{12}m_{22}^2m_{65} + 144m_{12}m_{22}m_{13}m_{74} \\
& - 36m_{12}m_{22}m_{04}m_{83} - 48m_{12}m_{13}^2m_{83} + 24m_{12}m_{13}m_{04}m_{92} - 3m_{12}m_{04}^2m_{10,1} + m_{03}m_{40}^2m_{38} \\
& - 8m_{03}m_{40}m_{31}m_{47} + 12m_{03}m_{40}m_{22}m_{56} - 8m_{03}m_{40}m_{13}m_{65} + 2m_{03}m_{40}m_{04}m_{74} \\
& + 16m_{03}m_{31}^2m_{56} - 48m_{03}m_{31}m_{22}m_{65} + 32m_{03}m_{31}m_{13}m_{74} - 8m_{03}m_{31}m_{04}m_{83} \\
& + 36m_{03}m_{22}^2m_{74} - 48m_{03}m_{22}m_{13}m_{83} + 12m_{03}m_{22}m_{04}m_{92} + 16m_{03}m_{13}^2m_{92} \\
& - 8m_{03}m_{13}m_{04}m_{10,1} + m_{03}m_{04}^2m_{11,0}
\end{aligned}$$

Generating graph:

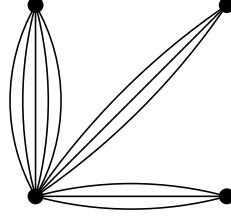
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	3	3	3	3	4	4	4



$$\begin{aligned}
I_{71} = & -m_{30}^2m_{50}m_{0,11} + 5m_{30}^2m_{41}m_{1,10} - 10m_{30}^2m_{32}m_{29} + 10m_{30}^2m_{23}m_{38} - 5m_{30}^2m_{14}m_{47} \\
& + m_{30}^2m_{05}m_{56} + 6m_{30}m_{21}m_{50}m_{1,10} - 30m_{30}m_{21}m_{41}m_{29} + 60m_{30}m_{21}m_{32}m_{38} \\
& - 60m_{30}m_{21}m_{23}m_{47} + 30m_{30}m_{21}m_{14}m_{56} - 6m_{30}m_{21}m_{05}m_{65} - 6m_{30}m_{12}m_{50}m_{29} \\
& + 30m_{30}m_{12}m_{41}m_{38} - 60m_{30}m_{12}m_{32}m_{47} + 60m_{30}m_{12}m_{23}m_{56} - 30m_{30}m_{12}m_{14}m_{65} \\
& + 6m_{30}m_{12}m_{05}m_{74} + 2m_{30}m_{03}m_{50}m_{38} - 10m_{30}m_{03}m_{41}m_{47} + 20m_{30}m_{03}m_{32}m_{56} \\
& - 20m_{30}m_{03}m_{23}m_{65} + 10m_{30}m_{03}m_{14}m_{74} - 2m_{30}m_{03}m_{05}m_{83} - 9m_{21}^2m_{50}m_{29} \\
& + 45m_{21}^2m_{41}m_{38} - 90m_{21}^2m_{32}m_{47} + 90m_{21}^2m_{23}m_{56} - 45m_{21}^2m_{14}m_{65} + 9m_{21}^2m_{05}m_{74} \\
& + 18m_{21}m_{12}m_{50}m_{38} - 90m_{21}m_{12}m_{41}m_{47} + 180m_{21}m_{12}m_{32}m_{56} - 180m_{21}m_{12}m_{23}m_{65} \\
& + 90m_{21}m_{12}m_{14}m_{74} - 18m_{21}m_{12}m_{05}m_{83} - 6m_{21}m_{03}m_{50}m_{47} + 30m_{21}m_{03}m_{41}m_{56} \\
& - 60m_{21}m_{03}m_{32}m_{65} + 60m_{21}m_{03}m_{23}m_{74} - 30m_{21}m_{03}m_{14}m_{83} + 6m_{21}m_{03}m_{05}m_{92} \\
& - 9m_{12}^2m_{50}m_{47} + 45m_{12}^2m_{41}m_{56} - 90m_{12}^2m_{32}m_{65} + 90m_{12}^2m_{23}m_{74} - 45m_{12}^2m_{14}m_{83} \\
& + 9m_{12}^2m_{05}m_{92} + 6m_{12}m_{03}m_{50}m_{56} - 30m_{12}m_{03}m_{41}m_{65} + 60m_{12}m_{03}m_{32}m_{74} \\
& - 60m_{12}m_{03}m_{23}m_{83} + 30m_{12}m_{03}m_{14}m_{92} - 6m_{12}m_{03}m_{05}m_{10,1} - m_{03}^2m_{50}m_{65} + 5m_{03}^2m_{41}m_{74} \\
& - 10m_{03}^2m_{32}m_{83} + 10m_{03}^2m_{23}m_{92} - 5m_{03}^2m_{14}m_{10,1} + m_{03}^2m_{05}m_{11,0}
\end{aligned}$$

Generating graph:

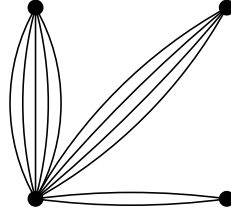
1 1 1 1 1 1 1 1 1 1
2 2 2 2 2 3 3 3 4 4 4



$$\begin{aligned}
 I_{72} = & -m_{20}m_{40}m_{50}m_{0,11} + 5m_{20}m_{40}m_{41}m_{1,10} - 10m_{20}m_{40}m_{32}m_{29} + 10m_{20}m_{40}m_{23}m_{38} \\
 & - 5m_{20}m_{40}m_{14}m_{47} + m_{20}m_{40}m_{05}m_{56} + 4m_{20}m_{31}m_{50}m_{1,10} - 20m_{20}m_{31}m_{41}m_{29} \\
 & + 40m_{20}m_{31}m_{32}m_{38} - 40m_{20}m_{31}m_{23}m_{47} + 20m_{20}m_{31}m_{14}m_{56} - 4m_{20}m_{31}m_{05}m_{65} \\
 & - 6m_{20}m_{22}m_{50}m_{29} + 30m_{20}m_{22}m_{41}m_{38} - 60m_{20}m_{22}m_{32}m_{47} + 60m_{20}m_{22}m_{23}m_{56} \\
 & - 30m_{20}m_{22}m_{14}m_{65} + 6m_{20}m_{22}m_{05}m_{74} + 4m_{20}m_{13}m_{50}m_{38} - 20m_{20}m_{13}m_{41}m_{47} \\
 & + 40m_{20}m_{13}m_{32}m_{56} - 40m_{20}m_{13}m_{23}m_{65} + 20m_{20}m_{13}m_{14}m_{74} - 4m_{20}m_{13}m_{05}m_{83} \\
 & - m_{20}m_{04}m_{50}m_{47} + 5m_{20}m_{04}m_{41}m_{56} - 10m_{20}m_{04}m_{32}m_{65} + 10m_{20}m_{04}m_{23}m_{74} \\
 & - 5m_{20}m_{04}m_{14}m_{83} + m_{20}m_{04}m_{05}m_{92} + 2m_{11}m_{40}m_{50}m_{1,10} - 10m_{11}m_{40}m_{41}m_{29} \\
 & + 20m_{11}m_{40}m_{32}m_{38} - 20m_{11}m_{40}m_{23}m_{47} + 10m_{11}m_{40}m_{14}m_{56} - 2m_{11}m_{40}m_{05}m_{65} \\
 & - 8m_{11}m_{31}m_{50}m_{29} + 40m_{11}m_{31}m_{41}m_{38} - 80m_{11}m_{31}m_{32}m_{47} + 80m_{11}m_{31}m_{23}m_{56} \\
 & - 40m_{11}m_{31}m_{14}m_{65} + 8m_{11}m_{31}m_{05}m_{74} + 12m_{11}m_{22}m_{50}m_{38} - 60m_{11}m_{22}m_{41}m_{47} \\
 & + 120m_{11}m_{22}m_{32}m_{56} - 120m_{11}m_{22}m_{23}m_{65} + 60m_{11}m_{22}m_{14}m_{74} - 12m_{11}m_{22}m_{05}m_{83} \\
 & - 8m_{11}m_{13}m_{50}m_{47} + 40m_{11}m_{13}m_{41}m_{56} - 80m_{11}m_{13}m_{32}m_{65} + 80m_{11}m_{13}m_{23}m_{74} \\
 & - 40m_{11}m_{13}m_{14}m_{83} + 8m_{11}m_{13}m_{05}m_{92} + 2m_{11}m_{04}m_{50}m_{56} - 10m_{11}m_{04}m_{41}m_{65} \\
 & + 20m_{11}m_{04}m_{32}m_{74} - 20m_{11}m_{04}m_{23}m_{83} + 10m_{11}m_{04}m_{14}m_{92} - 2m_{11}m_{04}m_{05}m_{10,1} \\
 & - m_{02}m_{40}m_{50}m_{29} + 5m_{02}m_{40}m_{41}m_{38} - 10m_{02}m_{40}m_{32}m_{47} + 10m_{02}m_{40}m_{23}m_{56} \\
 & - 5m_{02}m_{40}m_{14}m_{65} + m_{02}m_{40}m_{05}m_{74} + 4m_{02}m_{31}m_{50}m_{38} - 20m_{02}m_{31}m_{41}m_{47} \\
 & + 40m_{02}m_{31}m_{32}m_{56} - 40m_{02}m_{31}m_{23}m_{65} + 20m_{02}m_{31}m_{14}m_{74} - 4m_{02}m_{31}m_{05}m_{83} \\
 & - 6m_{02}m_{22}m_{50}m_{47} + 30m_{02}m_{22}m_{41}m_{56} - 60m_{02}m_{22}m_{32}m_{65} + 60m_{02}m_{22}m_{23}m_{74} \\
 & - 30m_{02}m_{22}m_{14}m_{83} + 6m_{02}m_{22}m_{05}m_{92} + 4m_{02}m_{13}m_{50}m_{56} - 20m_{02}m_{13}m_{41}m_{65} \\
 & + 40m_{02}m_{13}m_{32}m_{74} - 40m_{02}m_{13}m_{23}m_{83} + 20m_{02}m_{13}m_{14}m_{92} - 4m_{02}m_{13}m_{05}m_{10,1} \\
 & - m_{02}m_{04}m_{50}m_{65} + 5m_{02}m_{04}m_{41}m_{74} - 10m_{02}m_{04}m_{32}m_{83} + 10m_{02}m_{04}m_{23}m_{92} \\
 & - 5m_{02}m_{04}m_{14}m_{10,1} + m_{02}m_{04}m_{05}m_{11,0}
 \end{aligned}$$

Generating graph:

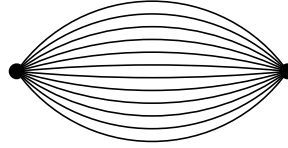
1 1 1 1 1 1 1 1 1 1
2 2 2 2 2 3 3 3 3 4 4



$$I_{73} = m_{12,0}m_{0,12} - 12m_{11,1}m_{1,11} + 66m_{10,2}m_{2,10} - 220m_{9,3}m_{3,9} + 495m_{8,4}m_{4,8} - 792m_{7,5}m_{5,7} + 462m_{6,6}^2$$

Generating graph:

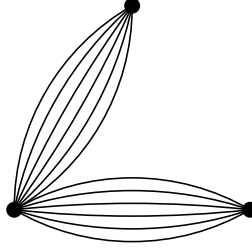
$$\begin{array}{cccccccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 \end{array}$$



$$I_{74} = m_{60}^2m_{0,12} - 12m_{60}m_{51}m_{1,11} + 30m_{60}m_{42}m_{2,10} - 40m_{60}m_{33}m_{3,9} + 30m_{60}m_{24}m_{4,8} - 12m_{60}m_{15}m_{5,7} + 2m_{60}m_{06}m_{6,6} + 36m_{51}^2m_{2,10} - 180m_{51}m_{42}m_{3,9} + 240m_{51}m_{33}m_{4,8} - 180m_{51}m_{24}m_{5,7} + 72m_{51}m_{15}m_{6,6} - 12m_{51}m_{06}m_{7,5} + 225m_{42}^2m_{4,8} - 600m_{42}m_{33}m_{5,7} + 450m_{42}m_{24}m_{6,6} - 180m_{42}m_{15}m_{7,5} + 30m_{42}m_{06}m_{8,4} + 400m_{33}^2m_{6,6} - 600m_{33}m_{24}m_{7,5} + 240m_{33}m_{15}m_{8,4} - 40m_{33}m_{06}m_{9,3} + 225m_{24}^2m_{8,4} - 180m_{24}m_{15}m_{9,3} + 30m_{24}m_{06}m_{10,2} + 36m_{15}^2m_{10,2} - 12m_{15}m_{06}m_{11,1} + m_{06}^2m_{12,0}$$

Generating graph:

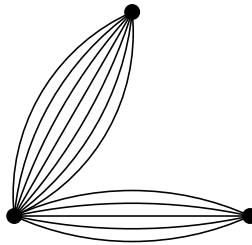
$$\begin{array}{cccccccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3 & 3 & 3 \end{array}$$



$$\begin{aligned}
I_{75} = & m_{50}m_{70}m_{0,12} - 7m_{50}m_{61}m_{1,11} + 21m_{50}m_{52}m_{2,10} - 35m_{50}m_{43}m_{39} + 35m_{50}m_{34}m_{48} \\
& - 21m_{50}m_{25}m_{57} + 7m_{50}m_{16}m_{66} - m_{50}m_{07}m_{75} - 5m_{41}m_{70}m_{1,11} + 35m_{41}m_{61}m_{2,10} \\
& - 105m_{41}m_{52}m_{39} + 175m_{41}m_{43}m_{48} - 175m_{41}m_{34}m_{57} + 105m_{41}m_{25}m_{66} - 35m_{41}m_{16}m_{75} \\
& + 5m_{41}m_{07}m_{84} + 10m_{32}m_{70}m_{2,10} - 70m_{32}m_{61}m_{39} + 210m_{32}m_{52}m_{48} - 350m_{32}m_{43}m_{57} \\
& + 350m_{32}m_{34}m_{66} - 210m_{32}m_{25}m_{75} + 70m_{32}m_{16}m_{84} - 10m_{32}m_{07}m_{93} - 10m_{23}m_{70}m_{39} \\
& + 70m_{23}m_{61}m_{48} - 210m_{23}m_{52}m_{57} + 350m_{23}m_{43}m_{66} - 350m_{23}m_{34}m_{75} + 210m_{23}m_{25}m_{84} \\
& - 70m_{23}m_{16}m_{93} + 10m_{23}m_{07}m_{10,2} + 5m_{14}m_{70}m_{48} - 35m_{14}m_{61}m_{57} + 105m_{14}m_{52}m_{66} \\
& - 175m_{14}m_{43}m_{75} + 175m_{14}m_{34}m_{84} - 105m_{14}m_{25}m_{93} + 35m_{14}m_{16}m_{10,2} \\
& - 5m_{14}m_{07}m_{11,1} - m_{05}m_{70}m_{57} + 7m_{05}m_{61}m_{66} - 21m_{05}m_{52}m_{75} + 35m_{05}m_{43}m_{84} \\
& - 35m_{05}m_{34}m_{93} + 21m_{05}m_{25}m_{10,2} - 7m_{05}m_{16}m_{11,1} + m_{05}m_{07}m_{12,0}
\end{aligned}$$

Generating graph:

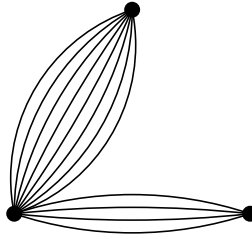
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{76} = & m_{40}m_{80}m_{0,12} - 8m_{40}m_{71}m_{1,11} + 28m_{40}m_{62}m_{2,10} - 56m_{40}m_{53}m_{39} + 70m_{40}m_{44}m_{48} \\
& - 56m_{40}m_{35}m_{57} + 28m_{40}m_{26}m_{66} - 8m_{40}m_{17}m_{75} + m_{40}m_{08}m_{84} - 4m_{31}m_{80}m_{1,11} \\
& + 32m_{31}m_{71}m_{2,10} - 112m_{31}m_{62}m_{39} + 224m_{31}m_{53}m_{48} - 280m_{31}m_{44}m_{57} \\
& + 224m_{31}m_{35}m_{66} - 112m_{31}m_{26}m_{75} + 32m_{31}m_{17}m_{84} - 4m_{31}m_{08}m_{93} + 6m_{22}m_{80}m_{2,10} \\
& - 48m_{22}m_{71}m_{39} + 168m_{22}m_{62}m_{48} - 336m_{22}m_{53}m_{57} + 420m_{22}m_{44}m_{66} - 336m_{22}m_{35}m_{75} \\
& + 168m_{22}m_{26}m_{84} - 48m_{22}m_{17}m_{93} + 6m_{22}m_{08}m_{10,2} - 4m_{13}m_{80}m_{39} + 32m_{13}m_{71}m_{48} \\
& - 112m_{13}m_{62}m_{57} + 224m_{13}m_{53}m_{66} - 280m_{13}m_{44}m_{75} + 224m_{13}m_{35}m_{84} \\
& - 112m_{13}m_{26}m_{93} + 32m_{13}m_{17}m_{10,2} - 4m_{13}m_{08}m_{11,1} + m_{04}m_{80}m_{48} - 8m_{04}m_{71}m_{57} \\
& + 28m_{04}m_{62}m_{66} - 56m_{04}m_{53}m_{75} + 70m_{04}m_{44}m_{84} - 56m_{04}m_{35}m_{93} + 28m_{04}m_{26}m_{10,2} \\
& - 8m_{04}m_{17}m_{11,1} + m_{04}m_{08}m_{12,0}
\end{aligned}$$

Generating graph:

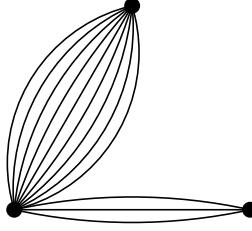
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{77} = & m_{30}m_{90}m_{0,12} - 9m_{30}m_{81}m_{1,11} + 36m_{30}m_{72}m_{2,10} - 84m_{30}m_{63}m_{39} + 126m_{30}m_{54}m_{48} \\
& - 126m_{30}m_{45}m_{57} + 84m_{30}m_{36}m_{66} - 36m_{30}m_{27}m_{75} + 9m_{30}m_{18}m_{84} - m_{30}m_{09}m_{93} \\
& - 3m_{21}m_{90}m_{1,11} + 27m_{21}m_{81}m_{2,10} - 108m_{21}m_{72}m_{39} + 252m_{21}m_{63}m_{48} \\
& - 378m_{21}m_{54}m_{57} + 378m_{21}m_{45}m_{66} - 252m_{21}m_{36}m_{75} + 108m_{21}m_{27}m_{84} - 27m_{21}m_{18}m_{93} \\
& + 3m_{21}m_{09}m_{10,2} + 3m_{12}m_{90}m_{2,10} - 27m_{12}m_{81}m_{39} + 108m_{12}m_{72}m_{48} - 252m_{12}m_{63}m_{57} \\
& + 378m_{12}m_{54}m_{66} - 378m_{12}m_{45}m_{75} + 252m_{12}m_{36}m_{84} - 108m_{12}m_{27}m_{93} \\
& + 27m_{12}m_{18}m_{10,2} - 3m_{12}m_{09}m_{11,1} - m_{03}m_{90}m_{39} + 9m_{03}m_{81}m_{48} - 36m_{03}m_{72}m_{57} \\
& + 84m_{03}m_{63}m_{66} - 126m_{03}m_{54}m_{75} + 126m_{03}m_{45}m_{84} - 84m_{03}m_{36}m_{93} + 36m_{03}m_{27}m_{10,2} \\
& - 9m_{03}m_{18}m_{11,1} + m_{03}m_{09}m_{12,0}
\end{aligned}$$

Generating graph:

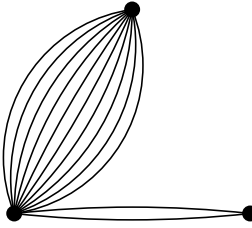
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{78} = & m_{20}m_{10,0}m_{0,12} - 10m_{20}m_{91}m_{1,11} + 45m_{20}m_{82}m_{2,10} - 120m_{20}m_{73}m_{39} + 210m_{20}m_{64}m_{48} \\
& - 252m_{20}m_{55}m_{57} + 210m_{20}m_{46}m_{66} - 120m_{20}m_{37}m_{75} + 45m_{20}m_{28}m_{84} - 10m_{20}m_{19}m_{93} \\
& + m_{20}m_{0,10}m_{10,2} - 2m_{11}m_{10,0}m_{1,11} + 20m_{11}m_{91}m_{2,10} - 90m_{11}m_{82}m_{39} + 240m_{11}m_{73}m_{48} \\
& - 420m_{11}m_{64}m_{57} + 504m_{11}m_{55}m_{66} - 420m_{11}m_{46}m_{75} + 240m_{11}m_{37}m_{84} - 90m_{11}m_{28}m_{93} \\
& + 20m_{11}m_{19}m_{10,2} - 2m_{11}m_{0,10}m_{11,1} + m_{02}m_{10,0}m_{2,10} - 10m_{02}m_{91}m_{39} + 45m_{02}m_{82}m_{48} \\
& - 120m_{02}m_{73}m_{57} + 210m_{02}m_{64}m_{66} - 252m_{02}m_{55}m_{75} + 210m_{02}m_{46}m_{84} \\
& - 120m_{02}m_{37}m_{93} + 45m_{02}m_{28}m_{10,2} - 10m_{02}m_{19}m_{11,1} + m_{02}m_{0,10}m_{12,0}
\end{aligned}$$

Generating graph:

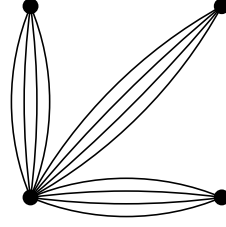
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 3 & 3
\end{array}$$



$$\begin{aligned}
I_{79} = & m_{40}^3m_{0,12} - 12m_{40}^2m_{31}m_{1,11} + 18m_{40}^2m_{22}m_{2,10} - 12m_{40}^2m_{13}m_{39} + 3m_{40}^2m_{04}m_{48} \\
& + 48m_{40}m_{31}^2m_{2,10} - 144m_{40}m_{31}m_{22}m_{39} + 96m_{40}m_{31}m_{13}m_{48} - 24m_{40}m_{31}m_{04}m_{57} \\
& + 108m_{40}m_{22}^2m_{48} - 144m_{40}m_{22}m_{13}m_{57} + 36m_{40}m_{22}m_{04}m_{66} + 48m_{40}m_{13}^2m_{66} \\
& - 24m_{40}m_{13}m_{04}m_{75} + 3m_{40}m_{04}^2m_{84} - 64m_{31}^3m_{39} + 288m_{31}^2m_{22}m_{48} - 192m_{31}^2m_{13}m_{57} \\
& + 48m_{31}^2m_{04}m_{66} - 432m_{31}m_{22}^2m_{57} + 576m_{31}m_{22}m_{13}m_{66} - 144m_{31}m_{22}m_{04}m_{75} \\
& - 192m_{31}m_{13}^2m_{75} + 96m_{31}m_{13}m_{04}m_{84} - 12m_{31}m_{04}^2m_{93} + 216m_{22}^3m_{66} - 432m_{22}^2m_{13}m_{75} \\
& + 108m_{22}^2m_{04}m_{84} + 288m_{22}m_{13}^2m_{84} - 144m_{22}m_{13}m_{04}m_{93} + 18m_{22}m_{04}^2m_{10,2} - 64m_{13}^3m_{93} \\
& + 48m_{13}^2m_{04}m_{10,2} - 12m_{13}m_{04}^2m_{11,1} + m_{04}^3m_{12,0}
\end{aligned}$$

Generating graph:

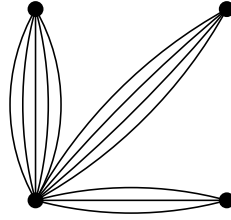
1 1 1 1 1 1 1 1 1 1 1
 2 2 2 2 3 3 3 3 4 4 4 4



$$\begin{aligned}
 I_{80} = & m_{30}m_{40}m_{50}m_{0,12} - 5m_{30}m_{40}m_{41}m_{1,11} + 10m_{30}m_{40}m_{32}m_{2,10} - 10m_{30}m_{40}m_{23}m_{39} \\
 & + 5m_{30}m_{40}m_{14}m_{48} - m_{30}m_{40}m_{05}m_{57} - 4m_{30}m_{31}m_{50}m_{1,11} + 20m_{30}m_{31}m_{41}m_{2,10} \\
 & - 40m_{30}m_{31}m_{32}m_{39} + 40m_{30}m_{31}m_{23}m_{48} - 20m_{30}m_{31}m_{14}m_{57} + 4m_{30}m_{31}m_{05}m_{66} \\
 & + 6m_{30}m_{22}m_{50}m_{2,10} - 30m_{30}m_{22}m_{41}m_{39} + 60m_{30}m_{22}m_{32}m_{48} - 60m_{30}m_{22}m_{23}m_{57} \\
 & + 30m_{30}m_{22}m_{14}m_{66} - 6m_{30}m_{22}m_{05}m_{75} - 4m_{30}m_{13}m_{50}m_{39} + 20m_{30}m_{13}m_{41}m_{48} \\
 & - 40m_{30}m_{13}m_{32}m_{57} + 40m_{30}m_{13}m_{23}m_{66} - 20m_{30}m_{13}m_{14}m_{75} + 4m_{30}m_{13}m_{05}m_{84} \\
 & + m_{30}m_{04}m_{50}m_{48} - 5m_{30}m_{04}m_{41}m_{57} + 10m_{30}m_{04}m_{32}m_{66} - 10m_{30}m_{04}m_{23}m_{75} \\
 & + 5m_{30}m_{04}m_{14}m_{84} - m_{30}m_{04}m_{05}m_{93} - 3m_{21}m_{40}m_{50}m_{1,11} + 15m_{21}m_{40}m_{41}m_{2,10} \\
 & - 30m_{21}m_{40}m_{32}m_{39} + 30m_{21}m_{40}m_{23}m_{48} - 15m_{21}m_{40}m_{14}m_{57} + 3m_{21}m_{40}m_{05}m_{66} \\
 & + 12m_{21}m_{31}m_{50}m_{2,10} - 60m_{21}m_{31}m_{41}m_{39} + 120m_{21}m_{31}m_{32}m_{48} - 120m_{21}m_{31}m_{23}m_{57} \\
 & + 60m_{21}m_{31}m_{14}m_{66} - 12m_{21}m_{31}m_{05}m_{75} - 18m_{21}m_{22}m_{50}m_{39} + 90m_{21}m_{22}m_{41}m_{48} \\
 & - 180m_{21}m_{22}m_{32}m_{57} + 180m_{21}m_{22}m_{23}m_{66} - 90m_{21}m_{22}m_{14}m_{75} + 18m_{21}m_{22}m_{05}m_{84} \\
 & + 12m_{21}m_{13}m_{50}m_{48} - 60m_{21}m_{13}m_{41}m_{57} + 120m_{21}m_{13}m_{32}m_{66} - 120m_{21}m_{13}m_{23}m_{75} \\
 & + 60m_{21}m_{13}m_{14}m_{84} - 12m_{21}m_{13}m_{05}m_{93} - 3m_{21}m_{04}m_{50}m_{57} + 15m_{21}m_{04}m_{41}m_{66} \\
 & - 30m_{21}m_{04}m_{32}m_{75} + 30m_{21}m_{04}m_{23}m_{84} - 15m_{21}m_{04}m_{14}m_{93} + 3m_{21}m_{04}m_{05}m_{10,2} \\
 & + 3m_{12}m_{40}m_{50}m_{2,10} - 15m_{12}m_{40}m_{41}m_{39} + 30m_{12}m_{40}m_{32}m_{48} - 30m_{12}m_{40}m_{23}m_{57} \\
 & + 15m_{12}m_{40}m_{14}m_{66} - 3m_{12}m_{40}m_{05}m_{75} - 12m_{12}m_{31}m_{50}m_{39} + 60m_{12}m_{31}m_{41}m_{48} \\
 & - 120m_{12}m_{31}m_{32}m_{57} + 120m_{12}m_{31}m_{23}m_{66} - 60m_{12}m_{31}m_{14}m_{75} + 12m_{12}m_{31}m_{05}m_{84} \\
 & + 18m_{12}m_{22}m_{50}m_{48} - 90m_{12}m_{22}m_{41}m_{57} + 180m_{12}m_{22}m_{32}m_{66} - 180m_{12}m_{22}m_{23}m_{75} \\
 & + 90m_{12}m_{22}m_{14}m_{84} - 18m_{12}m_{22}m_{05}m_{93} - 12m_{12}m_{13}m_{50}m_{57} + 60m_{12}m_{13}m_{41}m_{66} \\
 & - 120m_{12}m_{13}m_{32}m_{75} + 120m_{12}m_{13}m_{23}m_{84} - 60m_{12}m_{13}m_{14}m_{93} + 12m_{12}m_{13}m_{05}m_{10,2} \\
 & + 3m_{12}m_{04}m_{50}m_{66} - 15m_{12}m_{04}m_{41}m_{75} + 30m_{12}m_{04}m_{32}m_{84} - 30m_{12}m_{04}m_{23}m_{93} \\
 & + 15m_{12}m_{04}m_{14}m_{10,2} - 3m_{12}m_{04}m_{05}m_{11,1} - m_{03}m_{40}m_{50}m_{39} + 5m_{03}m_{40}m_{41}m_{48} \\
 & - 10m_{03}m_{40}m_{32}m_{57} + 10m_{03}m_{40}m_{23}m_{66} - 5m_{03}m_{40}m_{14}m_{75} + m_{03}m_{40}m_{05}m_{84} \\
 & + 4m_{03}m_{31}m_{50}m_{48} - 20m_{03}m_{31}m_{41}m_{57} + 40m_{03}m_{31}m_{32}m_{66} - 40m_{03}m_{31}m_{23}m_{75} \\
 & + 20m_{03}m_{31}m_{14}m_{84} - 4m_{03}m_{31}m_{05}m_{93} - 6m_{03}m_{22}m_{50}m_{57} + 30m_{03}m_{22}m_{41}m_{66} \\
 & - 60m_{03}m_{22}m_{32}m_{75} + 60m_{03}m_{22}m_{23}m_{84} - 30m_{03}m_{22}m_{14}m_{93} + 6m_{03}m_{22}m_{05}m_{10,2} \\
 & + 4m_{03}m_{13}m_{50}m_{66} - 20m_{03}m_{13}m_{41}m_{75} + 40m_{03}m_{13}m_{32}m_{84} - 40m_{03}m_{13}m_{23}m_{93} \\
 & + 20m_{03}m_{13}m_{14}m_{10,2} - 4m_{03}m_{13}m_{05}m_{11,1} - m_{03}m_{04}m_{50}m_{75} + 5m_{03}m_{04}m_{41}m_{84} \\
 & - 10m_{03}m_{04}m_{32}m_{93} + 10m_{03}m_{04}m_{23}m_{10,2} - 5m_{03}m_{04}m_{14}m_{11,1} + m_{03}m_{04}m_{05}m_{12,0}
 \end{aligned}$$

Generating graph:

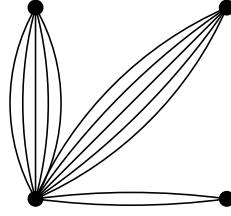
1 1 1 1 1 1 1 1 1 1 1
 2 2 2 2 2 3 3 3 3 4 4 4



$$\begin{aligned}
 I_{81} = & m_{20}m_{50}^2m_{0,12} - 10m_{20}m_{50}m_{41}m_{1,11} + 20m_{20}m_{50}m_{32}m_{2,10} - 20m_{20}m_{50}m_{23}m_{39} \\
 & + 10m_{20}m_{50}m_{14}m_{48} - 2m_{20}m_{50}m_{05}m_{57} + 25m_{20}m_{41}^2m_{2,10} - 100m_{20}m_{41}m_{32}m_{39} \\
 & + 100m_{20}m_{41}m_{23}m_{48} - 50m_{20}m_{41}m_{14}m_{57} + 10m_{20}m_{41}m_{05}m_{66} + 100m_{20}m_{32}^2m_{48} \\
 & - 200m_{20}m_{32}m_{23}m_{57} + 100m_{20}m_{32}m_{14}m_{66} - 20m_{20}m_{32}m_{05}m_{75} + 100m_{20}m_{23}^2m_{66} \\
 & - 100m_{20}m_{23}m_{14}m_{75} + 20m_{20}m_{23}m_{05}m_{84} + 25m_{20}m_{14}^2m_{84} - 10m_{20}m_{14}m_{05}m_{93} \\
 & + m_{20}m_{05}^2m_{10,2} - 2m_{11}m_{50}^2m_{1,11} + 20m_{11}m_{50}m_{41}m_{2,10} - 40m_{11}m_{50}m_{32}m_{39} \\
 & + 40m_{11}m_{50}m_{23}m_{48} - 20m_{11}m_{50}m_{14}m_{57} + 4m_{11}m_{50}m_{05}m_{66} - 50m_{11}m_{41}^2m_{39} \\
 & + 200m_{11}m_{41}m_{32}m_{48} - 200m_{11}m_{41}m_{23}m_{57} + 100m_{11}m_{41}m_{14}m_{66} - 20m_{11}m_{41}m_{05}m_{75} \\
 & - 200m_{11}m_{32}^2m_{57} + 400m_{11}m_{32}m_{23}m_{66} - 200m_{11}m_{32}m_{14}m_{75} + 40m_{11}m_{32}m_{05}m_{84} \\
 & - 200m_{11}m_{23}^2m_{75} + 200m_{11}m_{23}m_{14}m_{84} - 40m_{11}m_{23}m_{05}m_{93} - 50m_{11}m_{14}^2m_{93} \\
 & + 20m_{11}m_{14}m_{05}m_{10,2} - 2m_{11}m_{05}^2m_{11,1} + m_{02}m_{50}^2m_{2,10} - 10m_{02}m_{50}m_{41}m_{39} \\
 & + 20m_{02}m_{50}m_{32}m_{48} - 20m_{02}m_{50}m_{23}m_{57} + 10m_{02}m_{50}m_{14}m_{66} - 2m_{02}m_{50}m_{05}m_{75} \\
 & + 25m_{02}m_{41}^2m_{48} - 100m_{02}m_{41}m_{32}m_{57} + 100m_{02}m_{41}m_{23}m_{66} - 50m_{02}m_{41}m_{14}m_{75} \\
 & + 10m_{02}m_{41}m_{05}m_{84} + 100m_{02}m_{32}^2m_{66} - 200m_{02}m_{32}m_{23}m_{75} + 100m_{02}m_{32}m_{14}m_{84} \\
 & - 20m_{02}m_{32}m_{05}m_{93} + 100m_{02}m_{23}^2m_{84} - 100m_{02}m_{23}m_{14}m_{93} + 20m_{02}m_{23}m_{05}m_{10,2} \\
 & + 25m_{02}m_{14}^2m_{10,2} - 10m_{02}m_{14}m_{05}m_{11,1} + m_{02}m_{05}^2m_{12,0}
 \end{aligned}$$

Generating graph:

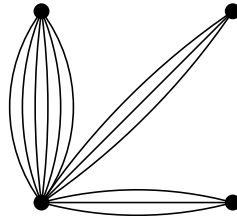
1 1 1 1 1 1 1 1 1 1 1
 2 2 2 2 2 3 3 3 3 3 4 4



$$\begin{aligned}
I_{82} = & m_{30}^2 m_{60} m_{0,12} - 6m_{30}^2 m_{51} m_{1,11} + 15m_{30}^2 m_{42} m_{2,10} - 20m_{30}^2 m_{33} m_{3,9} + 15m_{30}^2 m_{24} m_{4,8} \\
& - 6m_{30}^2 m_{15} m_{5,7} + m_{30}^2 m_{06} m_{6,6} - 6m_{30} m_{21} m_{60} m_{1,11} + 36m_{30} m_{21} m_{51} m_{2,10} \\
& - 90m_{30} m_{21} m_{42} m_{3,9} + 120m_{30} m_{21} m_{33} m_{4,8} - 90m_{30} m_{21} m_{24} m_{5,7} + 36m_{30} m_{21} m_{15} m_{6,6} \\
& - 6m_{30} m_{21} m_{06} m_{7,5} + 6m_{30} m_{12} m_{60} m_{2,10} - 36m_{30} m_{12} m_{51} m_{3,9} + 90m_{30} m_{12} m_{42} m_{4,8} \\
& - 120m_{30} m_{12} m_{33} m_{5,7} + 90m_{30} m_{12} m_{24} m_{6,6} - 36m_{30} m_{12} m_{15} m_{7,5} + 6m_{30} m_{12} m_{06} m_{8,4} \\
& - 2m_{30} m_{03} m_{60} m_{3,9} + 12m_{30} m_{03} m_{51} m_{4,8} - 30m_{30} m_{03} m_{42} m_{5,7} + 40m_{30} m_{03} m_{33} m_{6,6} \\
& - 30m_{30} m_{03} m_{24} m_{7,5} + 12m_{30} m_{03} m_{15} m_{8,4} - 2m_{30} m_{03} m_{06} m_{9,3} + 9m_{21}^2 m_{60} m_{2,10} \\
& - 54m_{21}^2 m_{51} m_{3,9} + 135m_{21}^2 m_{42} m_{4,8} - 180m_{21}^2 m_{33} m_{5,7} + 135m_{21}^2 m_{24} m_{6,6} - 54m_{21}^2 m_{15} m_{7,5} \\
& + 9m_{21}^2 m_{06} m_{8,4} - 18m_{21} m_{12} m_{60} m_{3,9} + 108m_{21} m_{12} m_{51} m_{4,8} - 270m_{21} m_{12} m_{42} m_{5,7} \\
& + 360m_{21} m_{12} m_{33} m_{6,6} - 270m_{21} m_{12} m_{24} m_{7,5} + 108m_{21} m_{12} m_{15} m_{8,4} - 18m_{21} m_{12} m_{06} m_{9,3} \\
& + 6m_{21} m_{03} m_{60} m_{4,8} - 36m_{21} m_{03} m_{51} m_{5,7} + 90m_{21} m_{03} m_{42} m_{6,6} - 120m_{21} m_{03} m_{33} m_{7,5} \\
& + 90m_{21} m_{03} m_{24} m_{8,4} - 36m_{21} m_{03} m_{15} m_{9,3} + 6m_{21} m_{03} m_{06} m_{10,2} + 9m_{12}^2 m_{60} m_{4,8} \\
& - 54m_{12}^2 m_{51} m_{5,7} + 135m_{12}^2 m_{42} m_{6,6} - 180m_{12}^2 m_{33} m_{7,5} + 135m_{12}^2 m_{24} m_{8,4} - 54m_{12}^2 m_{15} m_{9,3} \\
& + 9m_{12}^2 m_{06} m_{10,2} - 6m_{12} m_{03} m_{60} m_{5,7} + 36m_{12} m_{03} m_{51} m_{6,6} - 90m_{12} m_{03} m_{42} m_{7,5} \\
& + 120m_{12} m_{03} m_{33} m_{8,4} - 90m_{12} m_{03} m_{24} m_{9,3} + 36m_{12} m_{03} m_{15} m_{10,2} - 6m_{12} m_{03} m_{06} m_{11,1} \\
& + m_{03}^2 m_{60} m_{6,6} - 6m_{03}^2 m_{51} m_{7,5} + 15m_{03}^2 m_{42} m_{8,4} - 20m_{03}^2 m_{33} m_{9,3} + 15m_{03}^2 m_{24} m_{10,2} \\
& - 6m_{03}^2 m_{15} m_{11,1} + m_{03}^2 m_{06} m_{12,0}
\end{aligned}$$

Generating graph:

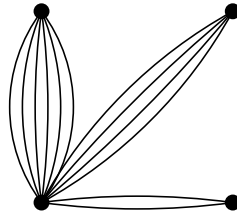
$$\begin{array}{cccccccccccc}
1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\
2 & 2 & 2 & 2 & 2 & 2 & 3 & 3 & 3 & 4 & 4 & 4
\end{array}$$



$$\begin{aligned}
I_{83} = & m_{20}m_{40}m_{60}m_{0,12} - 6m_{20}m_{40}m_{51}m_{1,11} + 15m_{20}m_{40}m_{42}m_{2,10} - 20m_{20}m_{40}m_{33}m_{39} \\
& + 15m_{20}m_{40}m_{24}m_{48} - 6m_{20}m_{40}m_{15}m_{57} + m_{20}m_{40}m_{06}m_{66} - 4m_{20}m_{31}m_{60}m_{1,11} \\
& + 24m_{20}m_{31}m_{51}m_{2,10} - 60m_{20}m_{31}m_{42}m_{39} + 80m_{20}m_{31}m_{33}m_{48} - 60m_{20}m_{31}m_{24}m_{57} \\
& + 24m_{20}m_{31}m_{15}m_{66} - 4m_{20}m_{31}m_{06}m_{75} + 6m_{20}m_{22}m_{60}m_{2,10} - 36m_{20}m_{22}m_{51}m_{39} \\
& + 90m_{20}m_{22}m_{42}m_{48} - 120m_{20}m_{22}m_{33}m_{57} + 90m_{20}m_{22}m_{24}m_{66} - 36m_{20}m_{22}m_{15}m_{75} \\
& + 6m_{20}m_{22}m_{06}m_{84} - 4m_{20}m_{13}m_{60}m_{39} + 24m_{20}m_{13}m_{51}m_{48} - 60m_{20}m_{13}m_{42}m_{57} \\
& + 80m_{20}m_{13}m_{33}m_{66} - 60m_{20}m_{13}m_{24}m_{75} + 24m_{20}m_{13}m_{15}m_{84} - 4m_{20}m_{13}m_{06}m_{93} \\
& + m_{20}m_{04}m_{60}m_{48} - 6m_{20}m_{04}m_{51}m_{57} + 15m_{20}m_{04}m_{42}m_{66} - 20m_{20}m_{04}m_{33}m_{75} \\
& + 15m_{20}m_{04}m_{24}m_{84} - 6m_{20}m_{04}m_{15}m_{93} + m_{20}m_{04}m_{06}m_{10,2} - 2m_{11}m_{40}m_{60}m_{1,11} \\
& + 12m_{11}m_{40}m_{51}m_{2,10} - 30m_{11}m_{40}m_{42}m_{39} + 40m_{11}m_{40}m_{33}m_{48} - 30m_{11}m_{40}m_{24}m_{57} \\
& + 12m_{11}m_{40}m_{15}m_{66} - 2m_{11}m_{40}m_{06}m_{75} + 8m_{11}m_{31}m_{60}m_{2,10} - 48m_{11}m_{31}m_{51}m_{39} \\
& + 120m_{11}m_{31}m_{42}m_{48} - 160m_{11}m_{31}m_{33}m_{57} + 120m_{11}m_{31}m_{24}m_{66} - 48m_{11}m_{31}m_{15}m_{75} \\
& + 8m_{11}m_{31}m_{06}m_{84} - 12m_{11}m_{22}m_{60}m_{39} + 72m_{11}m_{22}m_{51}m_{48} - 180m_{11}m_{22}m_{42}m_{57} \\
& + 240m_{11}m_{22}m_{33}m_{66} - 180m_{11}m_{22}m_{24}m_{75} + 72m_{11}m_{22}m_{15}m_{84} - 12m_{11}m_{22}m_{06}m_{93} \\
& + 8m_{11}m_{13}m_{60}m_{48} - 48m_{11}m_{13}m_{51}m_{57} + 120m_{11}m_{13}m_{42}m_{66} - 160m_{11}m_{13}m_{33}m_{75} \\
& + 120m_{11}m_{13}m_{24}m_{84} - 48m_{11}m_{13}m_{15}m_{93} + 8m_{11}m_{13}m_{06}m_{10,2} - 2m_{11}m_{04}m_{60}m_{57} \\
& + 12m_{11}m_{04}m_{51}m_{66} - 30m_{11}m_{04}m_{42}m_{75} + 40m_{11}m_{04}m_{33}m_{84} - 30m_{11}m_{04}m_{24}m_{93} \\
& + 12m_{11}m_{04}m_{15}m_{10,2} - 2m_{11}m_{04}m_{06}m_{11,1} + m_{02}m_{40}m_{60}m_{2,10} - 6m_{02}m_{40}m_{51}m_{39} \\
& + 15m_{02}m_{40}m_{42}m_{48} - 20m_{02}m_{40}m_{33}m_{57} + 15m_{02}m_{40}m_{24}m_{66} - 6m_{02}m_{40}m_{15}m_{75} \\
& + m_{02}m_{40}m_{06}m_{84} - 4m_{02}m_{31}m_{60}m_{39} + 24m_{02}m_{31}m_{51}m_{48} - 60m_{02}m_{31}m_{42}m_{57} \\
& + 80m_{02}m_{31}m_{33}m_{66} - 60m_{02}m_{31}m_{24}m_{75} + 24m_{02}m_{31}m_{15}m_{84} - 4m_{02}m_{31}m_{06}m_{93} \\
& + 6m_{02}m_{22}m_{60}m_{48} - 36m_{02}m_{22}m_{51}m_{57} + 90m_{02}m_{22}m_{42}m_{66} - 120m_{02}m_{22}m_{33}m_{75} \\
& + 90m_{02}m_{22}m_{24}m_{84} - 36m_{02}m_{22}m_{15}m_{93} + 6m_{02}m_{22}m_{06}m_{10,2} - 4m_{02}m_{13}m_{60}m_{57} \\
& + 24m_{02}m_{13}m_{51}m_{66} - 60m_{02}m_{13}m_{42}m_{75} + 80m_{02}m_{13}m_{33}m_{84} - 60m_{02}m_{13}m_{24}m_{93} \\
& + 24m_{02}m_{13}m_{15}m_{10,2} - 4m_{02}m_{13}m_{06}m_{11,1} + m_{02}m_{04}m_{60}m_{66} - 6m_{02}m_{04}m_{51}m_{75} \\
& + 15m_{02}m_{04}m_{42}m_{84} - 20m_{02}m_{04}m_{33}m_{93} + 15m_{02}m_{04}m_{24}m_{10,2} - 6m_{02}m_{04}m_{15}m_{11,1} \\
& + m_{02}m_{04}m_{06}m_{12,0}
\end{aligned}$$

Generating graph:

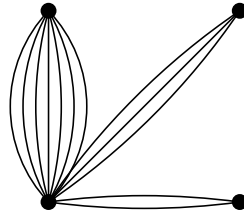
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	3	3	3	3	4



$$\begin{aligned}
I_{84} = & m_{20}m_{30}m_{70}m_{0,12} - 7m_{20}m_{30}m_{61}m_{1,11} + 21m_{20}m_{30}m_{52}m_{2,10} - 35m_{20}m_{30}m_{43}m_{39} \\
& + 35m_{20}m_{30}m_{34}m_{48} - 21m_{20}m_{30}m_{25}m_{57} + 7m_{20}m_{30}m_{16}m_{66} - m_{20}m_{30}m_{07}m_{75} \\
& - 3m_{20}m_{21}m_{70}m_{1,11} + 21m_{20}m_{21}m_{61}m_{2,10} - 63m_{20}m_{21}m_{52}m_{39} + 105m_{20}m_{21}m_{43}m_{48} \\
& - 105m_{20}m_{21}m_{34}m_{57} + 63m_{20}m_{21}m_{25}m_{66} - 21m_{20}m_{21}m_{16}m_{75} + 3m_{20}m_{21}m_{07}m_{84} \\
& + 3m_{20}m_{12}m_{70}m_{2,10} - 21m_{20}m_{12}m_{61}m_{39} + 63m_{20}m_{12}m_{52}m_{48} - 105m_{20}m_{12}m_{43}m_{57} \\
& + 105m_{20}m_{12}m_{34}m_{66} - 63m_{20}m_{12}m_{25}m_{75} + 21m_{20}m_{12}m_{16}m_{84} - 3m_{20}m_{12}m_{07}m_{93} \\
& - m_{20}m_{03}m_{70}m_{39} + 7m_{20}m_{03}m_{61}m_{48} - 21m_{20}m_{03}m_{52}m_{57} + 35m_{20}m_{03}m_{43}m_{66} \\
& - 35m_{20}m_{03}m_{34}m_{75} + 21m_{20}m_{03}m_{25}m_{84} - 7m_{20}m_{03}m_{16}m_{93} + m_{20}m_{03}m_{07}m_{10,2} \\
& - 2m_{11}m_{30}m_{70}m_{1,11} + 14m_{11}m_{30}m_{61}m_{2,10} - 42m_{11}m_{30}m_{52}m_{39} + 70m_{11}m_{30}m_{43}m_{48} \\
& - 70m_{11}m_{30}m_{34}m_{57} + 42m_{11}m_{30}m_{25}m_{66} - 14m_{11}m_{30}m_{16}m_{75} + 2m_{11}m_{30}m_{07}m_{84} \\
& + 6m_{11}m_{21}m_{70}m_{2,10} - 42m_{11}m_{21}m_{61}m_{39} + 126m_{11}m_{21}m_{52}m_{48} - 210m_{11}m_{21}m_{43}m_{57} \\
& + 210m_{11}m_{21}m_{34}m_{66} - 126m_{11}m_{21}m_{25}m_{75} + 42m_{11}m_{21}m_{16}m_{84} - 6m_{11}m_{21}m_{07}m_{93} \\
& - 6m_{11}m_{12}m_{70}m_{39} + 42m_{11}m_{12}m_{61}m_{48} - 126m_{11}m_{12}m_{52}m_{57} + 210m_{11}m_{12}m_{43}m_{66} \\
& - 210m_{11}m_{12}m_{34}m_{75} + 126m_{11}m_{12}m_{25}m_{84} - 42m_{11}m_{12}m_{16}m_{93} + 6m_{11}m_{12}m_{07}m_{10,2} \\
& + 2m_{11}m_{03}m_{70}m_{48} - 14m_{11}m_{03}m_{61}m_{57} + 42m_{11}m_{03}m_{52}m_{66} - 70m_{11}m_{03}m_{43}m_{75} \\
& + 70m_{11}m_{03}m_{34}m_{84} - 42m_{11}m_{03}m_{25}m_{93} + 14m_{11}m_{03}m_{16}m_{10,2} - 2m_{11}m_{03}m_{07}m_{11,1} \\
& + m_{02}m_{30}m_{70}m_{2,10} - 7m_{02}m_{30}m_{61}m_{39} + 21m_{02}m_{30}m_{52}m_{48} - 35m_{02}m_{30}m_{43}m_{57} \\
& + 35m_{02}m_{30}m_{34}m_{66} - 21m_{02}m_{30}m_{25}m_{75} + 7m_{02}m_{30}m_{16}m_{84} - m_{02}m_{30}m_{07}m_{93} \\
& - 3m_{02}m_{21}m_{70}m_{39} + 21m_{02}m_{21}m_{61}m_{48} - 63m_{02}m_{21}m_{52}m_{57} + 105m_{02}m_{21}m_{43}m_{66} \\
& - 105m_{02}m_{21}m_{34}m_{75} + 63m_{02}m_{21}m_{25}m_{84} - 21m_{02}m_{21}m_{16}m_{93} + 3m_{02}m_{21}m_{07}m_{10,2} \\
& + 3m_{02}m_{12}m_{70}m_{48} - 21m_{02}m_{12}m_{61}m_{57} + 63m_{02}m_{12}m_{52}m_{66} - 105m_{02}m_{12}m_{43}m_{75} \\
& + 105m_{02}m_{12}m_{34}m_{84} - 63m_{02}m_{12}m_{25}m_{93} + 21m_{02}m_{12}m_{16}m_{10,2} - 3m_{02}m_{12}m_{07}m_{11,1} \\
& - m_{02}m_{03}m_{70}m_{57} + 7m_{02}m_{03}m_{61}m_{66} - 21m_{02}m_{03}m_{52}m_{75} + 35m_{02}m_{03}m_{43}m_{84} \\
& - 35m_{02}m_{03}m_{34}m_{93} + 21m_{02}m_{03}m_{25}m_{10,2} - 7m_{02}m_{03}m_{16}m_{11,1} + m_{02}m_{03}m_{07}m_{12,0}
\end{aligned}$$

Generating graph:

1	1	1	1	1	1	1	1	1	1	1	1	
2	2	2	2	2	2	2	2	3	3	3	4	4



$$\begin{aligned}
I_{85} = & m_{20}^2 m_{80} m_{0,12} - 8m_{20}^2 m_{71} m_{1,11} + 28m_{20}^2 m_{62} m_{2,10} - 56m_{20}^2 m_{53} m_{39} + 70m_{20}^2 m_{44} m_{48} \\
& - 56m_{20}^2 m_{35} m_{57} + 28m_{20}^2 m_{26} m_{66} - 8m_{20}^2 m_{17} m_{75} + m_{20}^2 m_{08} m_{84} - 4m_{20} m_{11} m_{80} m_{1,11} \\
& + 32m_{20} m_{11} m_{71} m_{2,10} - 112m_{20} m_{11} m_{62} m_{39} + 224m_{20} m_{11} m_{53} m_{48} - 280m_{20} m_{11} m_{44} m_{57} \\
& + 224m_{20} m_{11} m_{35} m_{66} - 112m_{20} m_{11} m_{26} m_{75} + 32m_{20} m_{11} m_{17} m_{84} - 4m_{20} m_{11} m_{08} m_{93} \\
& + 2m_{20} m_{02} m_{80} m_{2,10} - 16m_{20} m_{02} m_{71} m_{39} + 56m_{20} m_{02} m_{62} m_{48} - 112m_{20} m_{02} m_{53} m_{57} \\
& + 140m_{20} m_{02} m_{44} m_{66} - 112m_{20} m_{02} m_{35} m_{75} + 56m_{20} m_{02} m_{26} m_{84} - 16m_{20} m_{02} m_{17} m_{93} \\
& + 2m_{20} m_{02} m_{08} m_{10,2} + 4m_{11}^2 m_{80} m_{2,10} - 32m_{11}^2 m_{71} m_{39} + 112m_{11}^2 m_{62} m_{48} \\
& - 224m_{11}^2 m_{53} m_{57} + 280m_{11}^2 m_{44} m_{66} - 224m_{11}^2 m_{35} m_{75} + 112m_{11}^2 m_{26} m_{84} - 32m_{11}^2 m_{17} m_{93} \\
& + 4m_{11}^2 m_{08} m_{10,2} - 4m_{11} m_{02} m_{80} m_{39} + 32m_{11} m_{02} m_{71} m_{48} - 112m_{11} m_{02} m_{62} m_{57} \\
& + 224m_{11} m_{02} m_{53} m_{66} - 280m_{11} m_{02} m_{44} m_{75} + 224m_{11} m_{02} m_{35} m_{84} - 112m_{11} m_{02} m_{26} m_{93} \\
& + 32m_{11} m_{02} m_{17} m_{10,2} - 4m_{11} m_{02} m_{08} m_{11,1} + m_{02}^2 m_{80} m_{48} - 8m_{02}^2 m_{71} m_{57} + 28m_{02}^2 m_{62} m_{66} \\
& - 56m_{02}^2 m_{53} m_{75} + 70m_{02}^2 m_{44} m_{84} - 56m_{02}^2 m_{35} m_{93} + 28m_{02}^2 m_{26} m_{10,2} - 8m_{02}^2 m_{17} m_{11,1} \\
& + m_{02}^2 m_{08} m_{12,0}
\end{aligned}$$

Generating graph:

1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	3	3	4	4

