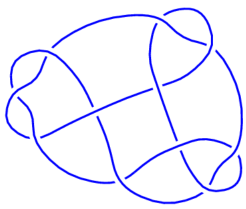
$11a_{107}$ ($K11a_{107}$)



[1]

Arc Sequences

$$\rightarrow \downarrow_{5} \rightarrow \downarrow_{1} \rightarrow \uparrow_{9} \rightarrow \uparrow_{8} \rightarrow \downarrow_{2} \rightarrow \downarrow_{11} \rightarrow \uparrow_{3} \rightarrow \uparrow_{4} \rightarrow \uparrow_{7} \rightarrow \downarrow_{6} \rightarrow \downarrow_{10} \rightarrow$$

Solving Sequence

$$6,11 \xrightarrow[c_6]{} 2,7 \xrightarrow[c_5]{} 5 \xrightarrow[c_1]{} 1 \xrightarrow[c_2]{} 3 \xrightarrow[c_7]{} 8 \xrightarrow[c_4]{} 4 \xrightarrow[c_{10}]{} 10 \xrightarrow[c_9]{} 9 \gg c_3, c_8, c_{11}$$

Representation Ideals

$$I = \bigcap_{i=1}^{4} I_i^u$$

$$\begin{aligned}
I_1^u &= \langle u-1,\ a+1,\ b+2\rangle \\
I_2^u &= \langle b^2+4b+6,\ a+1,\ u+1\rangle \\
I_3^u &= \langle u^{22}-u^{21}+\cdots-u+1,\ a-1,\ u^{20}-u^{19}+\cdots+2b-1\rangle \\
I_4^u &= \langle u^{36}-u^{35}+\cdots+6u-3,\ -153341u^{35}-762800u^{34}+\cdots+2569487b+4445678, \\
&\quad 387329u^{35}+1488862u^{34}+\cdots+7708461a+14884791\rangle
\end{aligned}$$

There are 4 irreducible components with 61 representations.

[1]The knot diagram image is adapter from "C. Livingston and A. H. Moore, KnotInfo: Table of Knot Invariants, http://www.indiana.edu/ knotinfo"

I. $\boldsymbol{I_1^u = \langle u-1,\ a+1,\ b+2\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix}0\\1\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-1\\-2\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-1\\-1\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\1\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0\\-1\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\1\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-1\\-1\end{pmatrix}$$
$$a_4 = \begin{pmatrix}1\\1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-1\\-1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-1\\-1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-1\\-1\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -1.00000$ $b = -2.00000$	-3.28987	-12.0000

II. $I_2^u = \langle b^2 + 4b + 6,\ a + 1,\ u + 1\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1 \\ b \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ -b-1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -1 \\ -1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -b-1 \\ -2b-3 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} b+3 \\ b+5 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1 \\ b+1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -1 \\ b+1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -1 \\ b+1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = -1.00000$ $b = -2.00000 - 1.41421I$	-8.22467	-12.0000
$u = -1.00000$ $a = -1.00000$ $b = -2.00000 + 1.41421I$	-8.22467	-12.0000

III. $I_3^u = \langle u^{22} - u^{21} + \cdots - u + 1,\ a - 1,\ u^{20} - u^{19} + \cdots + 2b - 1\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ -\frac{1}{2}u^{20} + \frac{1}{2}u^{19} + \cdots - \frac{1}{2}u + \frac{1}{2} \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u \\ \frac{1}{2}u^{21} - \frac{1}{2}u^{20} + \cdots + \frac{1}{2}u^2 + \frac{1}{2}u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^4 - u^2 + 1 \\ u^4 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} \frac{1}{2}u^{21} - \frac{1}{2}u^{20} + \cdots + \frac{1}{2}u^2 - \frac{1}{2}u \\ u^{21} - u^{20} + \cdots + u^3 + u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} \frac{1}{2}u^{20} - \frac{1}{2}u^{19} + \cdots + \frac{1}{2}u + \frac{1}{2} \\ \frac{1}{2}u^{21} - \frac{1}{2}u^{20} + \cdots - \frac{3}{2}u + 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1 \\ -\frac{1}{2}u^{20} + \frac{1}{2}u^{19} + \cdots - \frac{1}{2}u + \frac{1}{2} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^4 - u^2 + 1 \\ -\frac{1}{2}u^{20} + \frac{1}{2}u^{19} + \cdots - \frac{1}{2}u + \frac{1}{2} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^4 - u^2 + 1 \\ -\frac{1}{2}u^{20} + \frac{1}{2}u^{19} + \cdots - \frac{1}{2}u + \frac{1}{2} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.187370 - 0.531931I$ $a = \;\; 1.00000$ $b = \;\; 3.28436 - 0.30427I$	$-4.37280 - 10.68877I$	$-4.26664 + 8.95764I$
$u = -1.187370 + 0.531931I$ $a = \;\; 1.00000$ $b = \;\; 3.28436 + 0.30427I$	$-4.37280 + 10.68877I$	$-4.26664 - 8.95764I$
$u = -1.176327 - 0.439674I$ $a = \;\; 1.00000$ $b = \;\; 3.53472 - 0.83570I$	$-11.83206 - 3.58162I$	$-9.60503 + 4.09544I$
$u = -1.176327 + 0.439674I$ $a = \;\; 1.00000$ $b = \;\; 3.53472 + 0.83570I$	$-11.83206 + 3.58162I$	$-9.60503 - 4.09544I$
$u = -0.852419 - 0.584326I$ $a = \;\; 1.00000$ $b = \;\; 1.48788 - 0.45770I$	$2.02679 - 4.63959I$	$2.23017 + 7.26462I$
$u = -0.852419 + 0.584326I$ $a = \;\; 1.00000$ $b = \;\; 1.48788 + 0.45770I$	$2.02679 + 4.63959I$	$2.23017 - 7.26462I$
$u = -0.815720 - 0.225687I$ $a = \;\; 1.00000$ $b = -0.09861 - 2.22285I$	$-7.27839 - 1.13244I$	$-4.78640 + 6.09747I$
$u = -0.815720 + 0.225687I$ $a = \;\; 1.00000$ $b = -0.09861 + 2.22285I$	$-7.27839 + 1.13244I$	$-4.78640 - 6.09747I$
$u = -0.254045 - 0.648067I$ $a = \;\; 1.00000$ $b = \;\; 0.251249 - 0.009194I$	$1.11971 + 1.23902I$	$3.65819 - 2.25067I$
$u = -0.254045 + 0.648067I$ $a = \;\; 1.00000$ $b = \;\; 0.251249 + 0.009194I$	$1.11971 - 1.23902I$	$3.65819 + 2.25067I$

	Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.186960-0.793799I$		
$a=$	1.00000	$-4.25973-4.25337I$	$-1.79063+2.48164I$
$b=$	$0.193004-0.071328I$		
$u=$	$0.186960+0.793799I$		
$a=$	1.00000	$-4.25973+4.25337I$	$-1.79063-2.48164I$
$b=$	$0.193004+0.071328I$		
$u=$	$0.618630-0.421153I$		
$a=$	1.00000	$-0.56996+1.46936I$	$-1.98240-4.73317I$
$b=$	$0.445305+0.633004I$		
$u=$	$0.618630+0.421153I$		
$a=$	1.00000	$-0.56996-1.46936I$	$-1.98240+4.73317I$
$b=$	$0.445305-0.633004I$		
$u=$	$0.646540-0.580966I$		
$a=$	1.00000	$-0.63227+1.36325I$	$-0.37432-3.42755I$
$b=$	$0.776087+0.314460I$		
$u=$	$0.646540+0.580966I$		
$a=$	1.00000	$-0.63227-1.36325I$	$-0.37432+3.42755I$
$b=$	$0.776087-0.314460I$		
$u=$	$0.956567-0.599153I$		
$a=$	1.00000	$-2.37652+8.11206I$	$-3.44648-8.70000I$
$b=$	$1.96840+0.37094I$		
$u=$	$0.956567+0.599153I$		
$a=$	1.00000	$-2.37652-8.11206I$	$-3.44648+8.70000I$
$b=$	$1.96840-0.37094I$		
$u=$	$1.157188-0.495040I$		
$a=$	1.00000	$-5.03371+6.28370I$	$-5.65704-3.70414I$
$b=$	$3.23631+0.58826I$		
$u=$	$1.157188+0.495040I$		
$a=$	1.00000	$-5.03371-6.28370I$	$-5.65704+3.70414I$
$b=$	$3.23631-0.58826I$		

	Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$1.219997-0.539102I$		
$a=$	1.00000	$-10.3818+14.3064I$	$-7.97941-8.76372I$
$b=$	$3.42130+0.17143I$		
$u=$	$1.219997+0.539102I$		
$a=$	1.00000	$-10.3818-14.3064I$	$-7.97941+8.76372I$
$b=$	$3.42130-0.17143I$		

IV.

$\boldsymbol{I^u_4 = \langle u^{36} - u^{35} + \cdots + 6u - 3,\ -1.53\times10^5u^{35} - 7.63\times10^5u^{34} + \cdots + 2.57\times10^6b + 4.45\times10^6,\ 3.87\times10^5u^{35} + 1.49\times10^6u^{34} + \cdots + 7.71\times10^6a + 1.49\times10^7\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.0502473u^{35} - 0.193146u^{34} + \cdots - 0.803997u - 1.93097 \\ 0.0596777u^{35} + 0.296869u^{34} + \cdots + 1.30962u - 1.73018 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.576727u^{35} + 0.636405u^{34} + \cdots + 0.703849u - 2.15074 \\ 0.113153u^{35} + 0.873411u^{34} + \cdots - 2.71773u + 0.0282913 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^4 - u^2 + 1 \\ u^4 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.00672u^{35} + 0.176203u^{34} + \cdots - 0.172694u - 1.77449 \\ -0.0760580u^{35} + 0.243112u^{34} + \cdots - 2.21537u - 0.457299 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.18016u^{35} + 0.0609089u^{34} + \cdots + 6.31119u - 1.37171 \\ -0.929539u^{35} + 0.131653u^{34} + \cdots + 6.70910u - 4.14652 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.0502473u^{35} - 0.193146u^{34} + \cdots - 0.803997u - 1.93097 \\ -1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.917456u^{35} + 0.312533u^{34} + \cdots + 2.46587u - 4.73079 \\ -0.972189u^{35} + 0.764322u^{34} + \cdots + 2.83742u - 3.88441 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.917456u^{35} + 0.312533u^{34} + \cdots + 2.46587u - 4.73079 \\ -0.972189u^{35} + 0.764322u^{34} + \cdots + 2.83742u - 3.88441 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes =**unknown**

(iv) Complex Volumes and Cusp Shapes

Solution to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.275537-0.361311I$ $a=-0.758744+0.576625I$ $b=-2.66691+0.16353I$	$-11.67716+4.87394I$	$-9.52680-3.60136I$
$u=-1.275537+0.361311I$ $a=-0.758744-0.576625I$ $b=-2.66691-0.16353I$	$-11.67716-4.87394I$	$-9.52680+3.60136I$
$u=-1.220413-0.077721I$ $a=-0.631517+0.322495I$ $b=-1.99795+0.35858I$	$-6.64349+1.57187I$	$-6.19122-4.22070I$
$u=-1.220413+0.077721I$ $a=-0.631517-0.322495I$ $b=-1.99795-0.35858I$	$-6.64349-1.57187I$	$-6.19122+4.22070I$
$u=-1.191160-0.342913I$ $a=-0.183529-0.546742I$ $b=-0.792173-0.861391I$	$-8.43501+0.55896I$	$-6.48886+0.25710I$
$u=-1.191160+0.342913I$ $a=-0.183529+0.546742I$ $b=-0.792173+0.861391I$	$-8.43501-0.55896I$	$-6.48886-0.25710I$
$u=-1.154056-0.399864I$ $a=-0.851935+0.589239I$ $b=-2.54226-0.09572I$	$-5.71606-1.88569I$	$-6.31669+3.99357I$
$u=-1.154056+0.399864I$ $a=-0.851935-0.589239I$ $b=-2.54226+0.09572I$	$-5.71606+1.88569I$	$-6.31669-3.99357I$
$u=-1.127623-0.502760I$ $a=-0.134336-0.667269I$ $b=-0.380276-0.832106I$	$-1.40107-5.71427I$	$-0.93404+6.05983I$
$u=-1.127623+0.502760I$ $a=-0.134336+0.667269I$ $b=-0.380276+0.832106I$	$-1.40107+5.71427I$	$-0.93404-6.05983I$

Solution to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.768687$ $a=-1.47077$ $b=-1.86905$	-2.66795	3.97996
$u=-0.670733-0.591312I$ $a=\ \ 0.125365-0.992111I$ $b=-0.200467$	2.54269	4.37196
$u=-0.670733+0.591312I$ $a=\ \ 0.125365+0.992111I$ $b=-0.200467$	2.54269	4.37196
$u=-0.183996-0.819966I$ $a=-0.28996-1.44027I$ $b=-0.380276+0.832106I$	$-1.40107+5.71427I$	$-0.93404-6.05983I$
$u=-0.183996+0.819966I$ $a=-0.28996+1.44027I$ $b=-0.380276-0.832106I$	$-1.40107-5.71427I$	$-0.93404+6.05983I$
$u=\ \ 0.031128-0.714192I$ $a=-0.55179-1.64379I$ $b=-0.792173+0.861391I$	$-8.43501-0.55896I$	$-6.48886-0.25710I$
$u=\ \ 0.031128+0.714192I$ $a=-0.55179+1.64379I$ $b=-0.792173-0.861391I$	$-8.43501+0.55896I$	$-6.48886+0.25710I$
$u=\ \ 0.146584-0.689454I$ $a=-0.24858+1.62846I$ $b=-0.558026-0.688845I$	$-2.16110-1.78695I$	$-2.76057-0.02251I$
$u=\ \ 0.146584+0.689454I$ $a=-0.24858-1.62846I$ $b=-0.558026+0.688845I$	$-2.16110+1.78695I$	$-2.76057+0.02251I$
$u=\ \ 0.155289-0.885938I$ $a=-0.34889+1.39113I$ $b=-0.351798-0.962330I$	$-7.18011-9.13509I$	$-5.01305+5.86478I$

Solution to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.155289 + 0.885938I$ $a = -0.34889 - 1.39113I$ $b = -0.351798 + 0.962330I$	$-7.18011 + 9.13509I$	$-5.01305 - 5.86478I$
$u = 0.515934 - 0.677592I$ $a = 0.056407 + 1.194295I$ $b = -0.175849 - 0.269870I$	$-1.13659 - 3.22673I$	$-0.94474 + 3.62956I$
$u = 0.515934 + 0.677592I$ $a = 0.056407 - 1.194295I$ $b = -0.175849 + 0.269870I$	$-1.13659 + 3.22673I$	$-0.94474 - 3.62956I$
$u = 0.795776 - 0.344494I$ $a = -1.255959 - 0.641376I$ $b = -1.99795 + 0.35858I$	$-6.64349 + 1.57187I$	$-6.19122 - 4.22070I$
$u = 0.795776 + 0.344494I$ $a = -1.255959 + 0.641376I$ $b = -1.99795 - 0.35858I$	$-6.64349 - 1.57187I$	$-6.19122 + 4.22070I$
$u = 0.838347 - 0.577956I$ $a = 0.039459 + 0.835451I$ $b = -0.175849 + 0.269870I$	$-1.13659 + 3.22673I$	$-0.94474 - 3.62956I$
$u = 0.838347 + 0.577956I$ $a = 0.039459 - 0.835451I$ $b = -0.175849 - 0.269870I$	$-1.13659 - 3.22673I$	$-0.94474 + 3.62956I$
$u = 1.086306 - 0.410092I$ $a = -0.091604 + 0.600096I$ $b = -0.558026 + 0.688845I$	$-2.16110 + 1.78695I$	$-2.76057 + 0.02251I$
$u = 1.086306 + 0.410092I$ $a = -0.091604 - 0.600096I$ $b = -0.558026 - 0.688845I$	$-2.16110 - 1.78695I$	$-2.76057 - 0.02251I$
$u = 1.13056$ $a = -0.679917$ $b = -1.86905$	-2.66795	3.97996

Solution to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.176147 - 0.461363I$ $a = -0.835448 - 0.634917I$ $b = -2.66691 + 0.16353I$	$-11.67716 + 4.87394I$	$-9.52680 - 3.60136I$
$u = 1.176147 + 0.461363I$ $a = -0.835448 + 0.634917I$ $b = -2.66691 - 0.16353I$	$-11.67716 - 4.87394I$	$-9.52680 + 3.60136I$
$u = 1.178273 - 0.525126I$ $a = -0.169616 + 0.676302I$ $b = -0.351798 + 0.962330I$	$-7.18011 + 9.13509I$	$-5.01305 - 5.86478I$
$u = 1.178273 + 0.525126I$ $a = -0.169616 - 0.676302I$ $b = -0.351798 - 0.962330I$	$-7.18011 - 9.13509I$	$-5.01305 + 5.86478I$
$u = 1.218797 - 0.339357I$ $a = -0.793977 - 0.549153I$ $b = -2.54226 - 0.09572I$	$-5.71606 - 1.88569I$	$-6.31669 + 3.99357I$
$u = 1.218797 + 0.339357I$ $a = -0.793977 + 0.549153I$ $b = -2.54226 + 0.09572I$	$-5.71606 + 1.88569I$	$-6.31669 - 3.99357I$

V. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1, c_6	$(u-1)(u+1)^2(u^{22}+u^{21}+\cdots+u+1)(u^{36}+u^{35}+\cdots-6u-3)$
c_2, c_{11}	$(u+1)^3(u^{22}+11u^{21}+\cdots+3u+1)(u^{36}+21u^{35}+\cdots+12u+9)$
c_3, c_4, c_8	$u(u^2+2)$ $(-1+3u-u^2-2u^3+4u^4+2u^5+4u^7+9u^8-19u^9+43u^{10}-36u^{11}+55u^{12}-25u^{13}+32$ $(u^{22}+3u^{21}+\cdots+8u+2)$
c_5, c_{10}	$(u-1)^2(u+1)(u^{22}+u^{21}+\cdots+u+1)(u^{36}+u^{35}+\cdots-6u-3)$
c_7	$u(u^2+2)$ $(-5-13u-13u^2-24u^3-16u^4-22u^5-6u^6+2u^7+33u^8+3u^9+43u^{10}+18u^{11}+29u^{12}$ $(u^{22}+3u^{21}+\cdots-16u+2)$
c_9	u^3 $(3+3u-11u^2-44u^3-90u^4-138u^5-144u^6-126u^7-59u^8+5u^9+61u^{10}+86u^{11}+85u$ $(u^{22}+3u^{21}+\cdots-64u^2+16)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1, c_5, c_6 c_{10}	$(y-1)^3(y^{22} - 11y^{21} + \cdots - 3y + 1)(y^{36} - 21y^{35} + \cdots - 12y + 9)$
c_2, c_{11}	$(y-1)^3(y^{22} + 5y^{21} + \cdots + 5y + 1)(y^{36} - 13y^{35} + \cdots - 1260y + 81)$
c_3, c_4, c_8	$y(y+2)^2$ $(1 - 7y + 5y^2 - 24y^3 - 18y^4 + 22y^5 + 236y^7 + 683y^8 + 1011y^9 + 1769y^{10} + 3136y^{11} + 3843y$ $(y^{22} + 21y^{21} + \cdots + 8y + 4)$
c_7	$y(y+2)^2$ $(25 - 39y - 295y^2 - 672y^3 - 922y^4 - 1406y^5 - 1728y^6 - 1928y^7 - 453y^8 + 1387y^9 + 3329y^{1}$ $(y^{22} + 9y^{21} + \cdots - 24y + 4)$
c_9	y^3 $(9 - 75y - 155y^2 + 8y^3 - 474y^4 - 2578y^5 - 4328y^6 - 2912y^7 + 295y^8 + 1671y^9 + 873y^{10} + 1$ $(y^{22} + 13y^{21} + \cdots - 2048y + 256)$