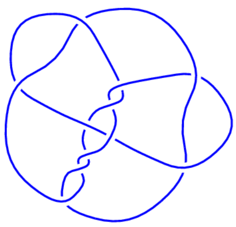
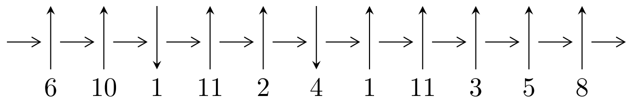
$11n_{170}$ $(K11n_{170})$



[1]

Arc Sequences



Solving Sequence

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

Representation Ideals

$$I = \bigcap_{i=1}^{3} I_i^u$$

$$\begin{aligned}
I_1^u = \langle & u^{10} + 6u^8 + 13u^6 - 2u^5 + 13u^4 - 5u^3 + 6u^2 - 3u + 2,\ u^8 + 5u^6 + 8u^4 - u^3 + 5u^2 + b - u + 1, \\
& -u^9 - 4u^7 - 3u^5 + 2u^4 + 3u^3 + 3u^2 + 2a + 4u + 1\rangle \\
I_2^u = \langle & u^{17} + 9u^{16} + \cdots + 144u + 16,\ -2u^{16} - 15u^{15} + \cdots + 4b - 36,\ -9u^{16} - 73u^{15} + \cdots + 16a - 184\rangle \\
I_3^u = \langle & a^{24} + 3a^{22} + \cdots - 116a + 173, \\
& 3.85826 \times 10^{29}u - 1.07130 \times 10^{28}a^{23} + \cdots - 1.58642 \times 10^{31}a - 3.36046 \times 10^{30}, \\
& 3.66534 \times 10^{31}b - 2.08579 \times 10^{31}a^{23} + \cdots - 2.64709 \times 10^{32}a + 3.01619 \times 10^{33}\rangle
\end{aligned}$$

There are 3 irreducible components with 51 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. $I^u_1 = \langle u^{10} + 6u^8 + \cdots - 3u + 2,\ u^8 + 5u^6 + 8u^4 - u^3 + 5u^2 + b - u + 1,\ -u^9 - 4u^7 + \cdots + 2a + 1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} \frac{1}{2}u^9 + 2u^7 + \cdots - 2u - \frac{1}{2} \\ -u^8 - 5u^6 - 8u^4 + u^3 - 5u^2 + u - 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -\frac{1}{2}u^9 - u^8 + \cdots - \frac{5}{2}u^2 + \frac{3}{2} \\ -u^9 - 5u^7 - 8u^5 + 2u^4 - 5u^3 + 3u^2 - u + 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} \frac{1}{2}u^9 + 2u^7 + \cdots - 2u - \frac{1}{2} \\ u^9 - u^8 + 5u^7 - 5u^6 + 8u^5 - 9u^4 + 6u^3 - 6u^2 + 2u - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -\frac{1}{2}u^9 - u^8 + \cdots - \frac{5}{2}u^2 + \frac{1}{2} \\ -u^9 - u^8 - 5u^7 - 5u^6 - 8u^5 - 6u^4 - 3u^3 - 2u^2 + 2u - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{1}{2}u^9 + 3u^7 + \cdots + 2u - \frac{1}{2} \\ u^9 - u^8 + 6u^7 - 4u^6 + 12u^5 - 6u^4 + 11u^3 - 6u^2 + 4u - 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^8 + 6u^6 + 12u^4 - u^3 + 9u^2 - 2u + 2 \\ u^7 + 4u^5 + 4u^3 - u^2 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{1}{2}u^9 + u^8 + \cdots + \frac{13}{2}u^2 + \frac{1}{2} \\ u^7 + 4u^5 + 5u^3 - 2u^2 + 2u - 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{1}{2}u^9 + u^8 + \cdots + \frac{13}{2}u^2 + \frac{1}{2} \\ u^7 + 4u^5 + 5u^3 - 2u^2 + 2u - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.425241 - 1.086471I$ $a = -0.136795 - 0.585565I$ $b = -0.578028 + 0.397630I$	$0.251695 - 1.343722I$	$7.28435 + 2.33753I$
$u = -0.425241 + 1.086471I$ $a = -0.136795 + 0.585565I$ $b = -0.578028 - 0.397630I$	$0.251695 + 1.343722I$	$7.28435 - 2.33753I$
$u = -0.346672 - 0.885333I$ $a = -0.372631 + 0.538996I$ $b = 0.606372 + 0.143048I$	$1.00791 + 4.33704I$	$4.62897 - 5.70101I$
$u = -0.346672 + 0.885333I$ $a = -0.372631 - 0.538996I$ $b = 0.606372 - 0.143048I$	$1.00791 - 4.33704I$	$4.62897 + 5.70101I$
$u = 0.14100 - 1.67979I$ $a = 0.695387 + 0.173598I$ $b = 0.389657 - 1.143629I$	$-12.68464 - 1.69333I$	$-5.30928 - 0.52333I$
$u = 0.14100 + 1.67979I$ $a = 0.695387 - 0.173598I$ $b = 0.389657 + 1.143629I$	$-12.68464 + 1.69333I$	$-5.30928 + 0.52333I$
$u = 0.186940 - 1.272058I$ $a = -1.179538 - 0.221883I$ $b = -0.50275 + 1.45896I$	$-8.16736 - 3.03930I$	$-1.32324 + 1.14176I$
$u = 0.186940 + 1.272058I$ $a = -1.179538 + 0.221883I$ $b = -0.50275 - 1.45896I$	$-8.16736 + 3.03930I$	$-1.32324 - 1.14176I$
$u = 0.443974 - 0.385855I$ $a = -1.25642 + 1.66531I$ $b = 0.084751 + 1.224153I$	$-5.08161 + 0.78317I$	$-2.78080 - 0.34402I$
$u = 0.443974 + 0.385855I$ $a = -1.25642 - 1.66531I$ $b = 0.084751 - 1.224153I$	$-5.08161 - 0.78317I$	$-2.78080 + 0.34402I$

II. $I^u_2 = \langle u^{17} + 9u^{16} + \cdots + 144u + 16,\ -2u^{16} - 15u^{15} + \cdots + 4b - 36,\ -9u^{16} - 73u^{15} + \cdots + 16a - 184\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.562500u^{16} + 4.56250u^{15} + \cdots + 80.7500u + 11.5000 \\ \frac{1}{2}u^{16} + \frac{15}{4}u^{15} + \cdots + \frac{139}{2}u + 9 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -\frac{7}{16}u^{16} - \frac{53}{16}u^{15} + \cdots - \frac{101}{2}u - 6 \\ -\frac{5}{8}u^{16} - \frac{39}{8}u^{15} + \cdots - 56u - 7 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.562500u^{16} + 4.56250u^{15} + \cdots + 80.7500u + 11.5000 \\ -\frac{1}{4}u^{16} - \frac{3}{2}u^{15} + \cdots + \frac{13}{2}u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} \frac{7}{16}u^{16} + \frac{53}{16}u^{15} + \cdots + \frac{101}{2}u + 7 \\ -\frac{1}{8}u^{16} - \frac{11}{8}u^{15} + \cdots - 26u - 3 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{16} + \frac{67}{8}u^{15} + \cdots + \frac{679}{4}u + \frac{43}{2} \\ -\frac{1}{8}u^{16} - \frac{5}{8}u^{15} + \cdots + \frac{99}{4}u^2 + \frac{9}{2}u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} \frac{11}{16}u^{16} + \frac{95}{16}u^{15} + \cdots + \frac{513}{4}u + 18 \\ u^{16} + 8u^{15} + \cdots + 144u + 19 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{5}{8}u^{16} + \frac{21}{4}u^{15} + \cdots + \frac{383}{4}u + \frac{25}{2} \\ \frac{5}{8}u^{16} + \frac{41}{8}u^{15} + \cdots + \frac{243}{2}u + 16 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{5}{8}u^{16} + \frac{21}{4}u^{15} + \cdots + \frac{383}{4}u + \frac{25}{2} \\ \frac{5}{8}u^{16} + \frac{41}{8}u^{15} + \cdots + \frac{243}{2}u + 16 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.088962 - 0.356976I$ $a = -0.737478 - 0.837097I$ $b = -0.504262 - 1.174829I$	$0.48540 + 8.16941I$	$4.20960 - 6.58024I$
$u = -1.088962 + 0.356976I$ $a = -0.737478 + 0.837097I$ $b = -0.504262 + 1.174829I$	$0.48540 - 8.16941I$	$4.20960 + 6.58024I$
$u = -0.888119 - 0.392484I$ $a = 0.915629 + 0.556181I$ $b = 0.594895 + 0.853325I$	$2.52996 + 1.99554I$	$7.48406 - 3.24951I$
$u = -0.888119 + 0.392484I$ $a = 0.915629 - 0.556181I$ $b = 0.594895 - 0.853325I$	$2.52996 - 1.99554I$	$7.48406 + 3.24951I$
$u = -0.861098 - 1.080224I$ $a = -0.493689 - 0.527971I$ $b = 0.145212 - 0.987929I$	$-1.58511 - 1.52682I$	$1.71933 + 1.54413I$
$u = -0.861098 + 1.080224I$ $a = -0.493689 + 0.527971I$ $b = 0.145212 + 0.987929I$	$-1.58511 + 1.52682I$	$1.71933 - 1.54413I$
$u = -0.570876 - 1.008446I$ $a = 0.159350 + 0.535868I$ $b = -0.449425 + 0.466610I$	$0.75353 + 3.18135I$	$3.49254 + 0.13841I$
$u = -0.570876 + 1.008446I$ $a = 0.159350 - 0.535868I$ $b = -0.449425 - 0.466610I$	$0.75353 - 3.18135I$	$3.49254 - 0.13841I$
$u = -0.43262 - 1.51053I$ $a = 1.024048 - 0.163354I$ $b = 0.68977 + 1.47618I$	$-5.4582 + 13.6098I$	$1.93808 - 7.30834I$
$u = -0.43262 + 1.51053I$ $a = 1.024048 + 0.163354I$ $b = 0.68977 - 1.47618I$	$-5.4582 - 13.6098I$	$1.93808 + 7.30834I$

Solution to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.35508-1.52708I$ $a=-0.897938+0.259587I$ $b=-0.71525-1.27905I$	$-3.71302+6.55902I$	$3.96621-4.14123I$
$u=-0.35508+1.52708I$ $a=-0.897938-0.259587I$ $b=-0.71525+1.27905I$	$-3.71302-6.55902I$	$3.96621+4.14123I$
$u=-0.344169$ $a=\ \ 1.39045$ $b=\ \ 0.478551$	0.721984	13.8929
$u=-0.09174-1.74935I$ $a=\ \ 0.595959-0.229233I$ $b=\ \ 0.455681+1.021508I$	$-12.10842+1.93472I$	$7.26417-4.67402I$
$u=-0.09174+1.74935I$ $a=\ \ 0.595959+0.229233I$ $b=\ \ 0.455681-1.021508I$	$-12.10842-1.93472I$	$7.26417+4.67402I$
$u=-0.039420-0.886123I$ $a=-0.511107+0.491753I$ $b=-0.455902-0.433518I$	$-1.82684+1.47458I$	$1.47955-5.16393I$
$u=-0.039420+0.886123I$ $a=-0.511107-0.491753I$ $b=-0.455902+0.433518I$	$-1.82684-1.47458I$	$1.47955+5.16393I$

III.

$\boldsymbol{I^u_3 = \langle a^{24}+3a^{22}+\cdots-116a+173,\ 3.86\times10^{29}u-1.07\times10^{28}a^{23}+\cdots-1.59\times10^{31}a-3.36\times10^{30},\ 3.67\times10^{31}b-2.09\times10^{31}a^{23}+\cdots-2.65\times10^{32}a+3.02\times10^{33}\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}a\\0.569058a^{23}+0.683181a^{22}+\cdots+7.22194a-82.2893\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-0.683181a^{23}-0.751940a^{22}+\cdots+16.2786a+99.4470\\-0.515710a^{23}-0.805620a^{22}+\cdots-60.8084a+12.5567\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\0.0277664a^{23}+0.180711a^{22}+\cdots+41.1175a+8.70979\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0.0277664a^{23}+0.180711a^{22}+\cdots+41.1175a+8.70979\\0.0277664a^{23}+0.180711a^{22}+\cdots+41.1175a+8.70979\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}a\\0.491325a^{23}+0.566451a^{22}+\cdots+3.84485a-80.2230\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0.0119438a^{23}+0.0777330a^{22}+\cdots+17.6871a+2.99161\\0.0119438a^{23}+0.0777330a^{22}+\cdots+17.6871a+1.99161\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.271370a^{23}-0.393109a^{22}+\cdots-16.1589a+31.2629\\-0.0651748a^{23}-0.397456a^{22}+\cdots-86.7274a-45.5255\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.747795a^{23}-0.876408a^{22}+\cdots+7.26468a+86.0043\\-1.54432a^{23}-1.77631a^{22}+\cdots+31.1561a+196.565\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0.236563a^{23}+0.427958a^{22}+\cdots+41.0437a-6.92858\\0.136825a^{23}+0.629057a^{22}+\cdots+131.668a+37.3239\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.905880a^{23}+1.02723a^{22}+\cdots-24.9576a-131.205\\2.42077a^{23}+2.59645a^{22}+\cdots-110.933a-391.097\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.905880a^{23}+1.02723a^{22}+\cdots-24.9576a-131.205\\2.42077a^{23}+2.59645a^{22}+\cdots-110.933a-391.097\end{pmatrix}$$

(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
$u = 0.569840$ $a = -1.35291 - 1.33061I$ $b = -0.850110 + 0.413706I$	$2.96939 + 3.16396I$	$8.84625 - 2.56480I$
$u = 0.569840$ $a = -1.35291 + 1.33061I$ $b = -0.850110 - 0.413706I$	$2.96939 - 3.16396I$	$8.84625 + 2.56480I$
$u = 0.215080 - 1.307141I$ $a = -1.346231 - 0.013531I$ $b = -0.338066 + 1.017767I$	$-8.16994 - 1.41302I$	$-1.33649 - 1.92930I$
$u = 0.215080 + 1.307141I$ $a = -1.346231 + 0.013531I$ $b = -0.338066 - 1.017767I$	$-8.16994 + 1.41302I$	$-1.33649 + 1.92930I$
$u = 0.215080 - 1.307141I$ $a = -1.092440 - 0.554198I$ $b = -0.23515 + 1.45919I$	$-8.16994 - 4.24323I$	$-1.33649 + 7.88819I$
$u = 0.215080 + 1.307141I$ $a = -1.092440 + 0.554198I$ $b = -0.23515 - 1.45919I$	$-8.16994 + 4.24323I$	$-1.33649 - 7.88819I$
$u = 0.215080 + 1.307141I$ $a = -0.674874 - 0.029964I$ $b = -1.170354 + 0.551735I$	$-1.168189 - 0.335841I$	$2.31698 - 0.41465I$
$u = 0.215080 - 1.307141I$ $a = -0.674874 + 0.029964I$ $b = -1.170354 - 0.551735I$	$-1.168189 + 0.335841I$	$2.31698 + 0.41465I$
$u = 0.215080 + 1.307141I$ $a = -0.267526 - 0.939373I$ $b = 0.105985 + 0.888600I$	$-1.168189 - 0.335841I$	$2.31698 - 0.41465I$
$u = 0.215080 - 1.307141I$ $a = -0.267526 + 0.939373I$ $b = 0.105985 - 0.888600I$	$-1.168189 + 0.335841I$	$2.31698 + 0.41465I$

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.215080 - 1.307141I$ $a = -0.053123 - 1.155631I$ $b = -0.273584 + 1.104984I$	$-1.16819 - 5.99209I$	$2.31698 + 5.54425I$
$u = 0.215080 + 1.307141I$ $a = -0.053123 + 1.155631I$ $b = -0.273584 - 1.104984I$	$-1.16819 + 5.99209I$	$2.31698 - 5.54425I$
$u = 0.569840$ $a = 0.00379 - 2.38625I$ $b = -0.296109 - 0.977179I$	$-4.03235 + 1.41510I$	$5.19277 - 4.90874I$
$u = 0.569840$ $a = 0.00379 + 2.38625I$ $b = -0.296109 + 0.977179I$	$-4.03235 - 1.41510I$	$5.19277 + 4.90874I$
$u = 0.569840$ $a = 0.51963 - 1.71483I$ $b = -0.002161 - 1.359784I$	$-4.03235 - 1.41510I$	$5.19277 + 4.90874I$
$u = 0.569840$ $a = 0.51963 + 1.71483I$ $b = -0.002161 + 1.359784I$	$-4.03235 + 1.41510I$	$5.19277 - 4.90874I$
$u = 0.215080 + 1.307141I$ $a = 0.799530 - 0.127074I$ $b = 0.30723 + 1.75680I$	$-8.16994 + 1.41302I$	$-1.33649 + 1.92930I$
$u = 0.215080 - 1.307141I$ $a = 0.799530 + 0.127074I$ $b = 0.30723 - 1.75680I$	$-8.16994 - 1.41302I$	$-1.33649 - 1.92930I$
$u = 0.215080 + 1.307141I$ $a = 0.856591 - 0.068354I$ $b = 1.52200 - 0.17911I$	$-1.16819 + 5.99209I$	$2.31698 - 5.54425I$
$u = 0.215080 - 1.307141I$ $a = 0.856591 + 0.068354I$ $b = 1.52200 + 0.17911I$	$-1.16819 - 5.99209I$	$2.31698 + 5.54425I$

	Solution to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.215080 - 1.307141I$		
$a =$	$1.115714 - 0.003684I$	$-8.16994 - 4.24323I$	$-1.33649 + 7.88819I$
$b =$	$0.95938 - 1.30878I$		
$u =$	$0.215080 + 1.307141I$		
$a =$	$1.115714 + 0.003684I$	$-8.16994 + 4.24323I$	$-1.33649 - 7.88819I$
$b =$	$0.95938 + 1.30878I$		
$u =$	0.569840		
$a =$	$1.49184 - 0.72600I$	$2.96939 + 3.16396I$	$8.84625 - 2.56480I$
$b =$	$0.770941 + 0.758235I$		
$u =$	0.569840		
$a =$	$1.49184 + 0.72600I$	$2.96939 - 3.16396I$	$8.84625 + 2.56480I$
$b =$	$0.770941 - 0.758235I$		

IV. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1	$(u^3-u^2+2u-1)^8$ $(u^{10}+6u^8+13u^6-2u^5+13u^4-5u^3+6u^2-3u+2)$ $(u^{17}+9u^{16}+\cdots+144u+16)$
c_2, c_{10}	$(u^{10}+4u^8-u^7+6u^6-2u^5+2u^4-u^3-u^2-u+1)$ $(u^{17}+6u^{15}+\cdots-u+1)(u^{24}+u^{23}+\cdots-224u+173)$
c_3, c_6	$(u^{10}+u^8-u^7+2u^6+2u^5+u^4+2u^3-u^2-2u+1)$ $(u^{17}+9u^{15}+\cdots-3u^2+1)(u^{24}+3u^{23}+\cdots+14u+19)$
c_4, c_9	$(u^{10}+4u^8+u^7+6u^6+2u^5+2u^4+u^3-u^2+u+1)$ $(u^{17}+6u^{15}+\cdots-u+1)(u^{24}+u^{23}+\cdots-224u+173)$
c_5	$(u^3-u^2+2u-1)^8$ $(u^{10}+6u^8+13u^6+2u^5+13u^4+5u^3+6u^2+3u+2)$ $(u^{17}+9u^{16}+\cdots+144u+16)$
c_7, c_8	$(u^4-u^3+u^2+1)^6$ $(u^{10}+2u^9+6u^8+8u^7+13u^6+10u^5+11u^4+5u^3+5u^2+1)$ $(u^{17}+9u^{16}+\cdots-32u-8)$
c_{11}	$(u^4-u^3+u^2+1)^6$ $(u^{10}-2u^9+6u^8-8u^7+13u^6-10u^5+11u^4-5u^3+5u^2+1)$ $(u^{17}+9u^{16}+\cdots-32u-8)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1, c_5	$(y^3+3y^2+2y-1)^8(y^{10}+12y^9+\cdots+15y+4)$ $(y^{17}+15y^{16}+\cdots+1408y-256)$
c_2, c_4, c_9 c_{10}	$(y^{10}+8y^9+28y^8+51y^7+46y^6+12y^5-6y^4+3y^3+3y^2-3y+1)$ $(y^{17}+12y^{16}+\cdots-y-1)(y^{24}+15y^{23}+\cdots+196176y+29929)$
c_3, c_6	$(y^{10}+2y^9+5y^8+5y^7+8y^6+4y^5-13y^4+6y^3+11y^2-6y+1)$ $(y^{17}+18y^{16}+\cdots+6y-1)(y^{24}+7y^{23}+\cdots+11812y+361)$
c_7, c_8, c_{11}	$(1+2y+3y^2+y^3+y^4)^6(y^{10}+8y^9+\cdots+10y+1)$ $(y^{17}+9y^{16}+\cdots+160y-64)$