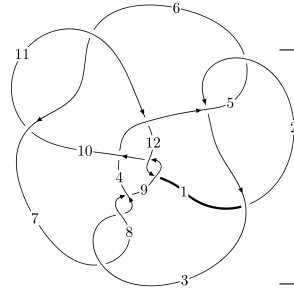
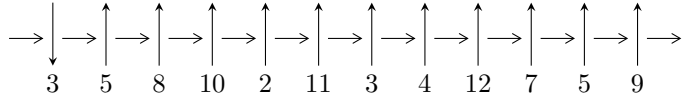


12n<sub>0366</sub> (K12n<sub>0366</sub>)



A knot diagram<sup>1</sup>

**Linearized knot diagram**



**Solving Sequence**

$$4,9 \xrightarrow{c_8} 8 \xrightarrow{c_3} 3 \xrightarrow{c_7} 1,7 \xrightarrow{c_{12}} 12 \xrightarrow{c_9} 10 \xrightarrow{c_4} 5 \xrightarrow{c_2} 2 \xrightarrow{c_5} 6 \xrightarrow{c_{11}} 11 \rightsquigarrow c_1, c_6, c_{10}$$

**Ideals for irreducible components<sup>2</sup> of  $X_{\text{par}}$**

$$I_1^u = \langle 8.60410 \times 10^{36} u^{33} - 9.82765 \times 10^{36} u^{32} + \dots + 2.12256 \times 10^{38} b + 1.92039 \times 10^{38}, \\ 3.53556 \times 10^{37} u^{33} + 3.38592 \times 10^{37} u^{32} + \dots + 8.49024 \times 10^{38} a - 2.51443 \times 10^{39}, u^{34} - u^{33} + \dots + 14u - 4 \rangle$$

$$I_2^u = \langle -41317u^{19} + 14868u^{18} + \dots + 102043b - 217021, \\ -20816u^{19} + 54137u^{18} + \dots + 204086a + 123227, u^{20} - 10u^{18} + \dots + 6u + 4 \rangle$$

\* 2 irreducible components of  $\dim_{\mathbb{C}} = 0$ , with total 54 representations.

<sup>1</sup>The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/maths/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

<sup>2</sup>All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I.

$$I_1^u = \langle 8.60 \times 10^{36} u^{33} - 9.83 \times 10^{36} u^{32} + \dots + 2.12 \times 10^{38} b + 1.92 \times 10^{38}, 3.54 \times 10^{37} u^{33} + 3.39 \times 10^{37} u^{32} + \dots + 8.49 \times 10^{38} a - 2.51 \times 10^{39}, u^{34} - u^{33} + \dots + 14u - 4 \rangle$$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.0416427u^{33} - 0.0398802u^{32} + \dots + 1.58286u + 2.96155 \\ -0.0405364u^{33} + 0.0463009u^{32} + \dots + 1.98650u - 0.904754 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.00110628u^{33} - 0.0861811u^{32} + \dots - 0.403640u + 3.86631 \\ -0.0405364u^{33} + 0.0463009u^{32} + \dots + 1.98650u - 0.904754 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.322523u^{33} - 0.187269u^{32} + \dots - 12.1237u + 3.64934 \\ -0.0561189u^{33} + 0.0359757u^{32} + \dots + 2.41252u - 0.0498318 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.309604u^{33} - 0.157316u^{32} + \dots - 11.9411u + 1.11047 \\ -0.115816u^{33} - 0.0301325u^{32} + \dots + 2.98843u + 0.206879 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0473120u^{33} - 0.0631917u^{32} + \dots + 0.283713u + 3.39961 \\ -0.0678345u^{33} + 0.0620244u^{32} + \dots + 2.72246u - 1.08024 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.00781040u^{33} + 0.0389021u^{32} + \dots - 0.701468u - 1.89917 \\ -0.203245u^{33} - 0.107497u^{32} + \dots + 1.28592u - 0.355887 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.361377u^{33} - 0.196045u^{32} + \dots - 11.6891u + 3.77920 \\ -0.219182u^{33} + 0.0237395u^{32} + \dots + 3.96379u - 0.616850 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes =  $0.349003u^{33} + 0.651298u^{32} + \dots - 1.59052u + 10.7798$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
$c_1$	$u^{34} + 52u^{33} + \dots - 125583u + 7921$
$c_2, c_5$	$u^{34} + 2u^{33} + \dots + 91u + 89$
$c_3, c_7, c_8$	$u^{34} + u^{33} + \dots - 14u - 4$
$c_4$	$u^{34} - u^{33} + \dots - 1046u - 137$
$c_6, c_{10}$	$u^{34} - u^{33} + \dots + 75u + 17$
$c_9, c_{12}$	$u^{34} + 3u^{33} + \dots + 11u + 1$
$c_{11}$	$u^{34} + u^{33} + \dots - 5852u + 764$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
$c_1$	$y^{34} - 152y^{33} + \dots - 3985291411y + 62742241$
$c_2, c_5$	$y^{34} + 52y^{33} + \dots - 125583y + 7921$
$c_3, c_7, c_8$	$y^{34} - 23y^{33} + \dots - 140y + 16$
$c_4$	$y^{34} + 11y^{33} + \dots - 925058y + 18769$
$c_6, c_{10}$	$y^{34} + 57y^{33} + \dots - 16675y + 289$
$c_9, c_{12}$	$y^{34} + 25y^{33} + \dots + 223y + 1$
$c_{11}$	$y^{34} + 73y^{33} + \dots + 16521896y + 583696$

(vi) Complex Volumes and Cusp Shapes

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.922036 + 0.452881I$ $a = -1.95374 + 1.73996I$ $b = 0.050107 - 0.380343I$	$-10.10770 - 1.83068I$	$-1.32953 + 4.89170I$
$u = -0.922036 - 0.452881I$ $a = -1.95374 - 1.73996I$ $b = 0.050107 + 0.380343I$	$-10.10770 + 1.83068I$	$-1.32953 - 4.89170I$
$u = 1.06806$ $a = -1.57173$ $b = -1.48329$	5.61986	15.0470
$u = -0.684975 + 0.829271I$ $a = 1.26384 - 0.77066I$ $b = 0.61689 - 1.83184I$	$-6.65191 - 3.35398I$	$5.96369 + 3.28451I$
$u = -0.684975 - 0.829271I$ $a = 1.26384 + 0.77066I$ $b = 0.61689 + 1.83184I$	$-6.65191 + 3.35398I$	$5.96369 - 3.28451I$
$u = 0.737579 + 0.460594I$ $a = -0.619611 + 0.405450I$ $b = 0.306540 - 0.990036I$	$-4.82144 - 1.46148I$	$3.54664 - 1.80098I$
$u = 0.737579 - 0.460594I$ $a = -0.619611 - 0.405450I$ $b = 0.306540 + 0.990036I$	$-4.82144 + 1.46148I$	$3.54664 + 1.80098I$
$u = -1.123130 + 0.394227I$ $a = 1.244230 - 0.472944I$ $b = 0.304757 - 1.086760I$	$0.20788 - 1.57648I$	$10.97463 + 0.65835I$
$u = -1.123130 - 0.394227I$ $a = 1.244230 + 0.472944I$ $b = 0.304757 + 1.086760I$	$0.20788 + 1.57648I$	$10.97463 - 0.65835I$
$u = 0.929580 + 0.767374I$ $a = 2.11679 - 0.95570I$ $b = 1.91672 - 0.56786I$	$-12.29770 + 2.91676I$	$6.61132 - 2.45322I$

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.929580 - 0.767374I$ $a = 2.11679 + 0.95570I$ $b = 1.91672 + 0.56786I$	$-12.29770 - 2.91676I$	$6.61132 + 2.45322I$
$u = 1.21069$ $a = -2.25852$ $b = -1.75624$	$6.57930$	$4.63880$
$u = 1.083810 + 0.540124I$ $a = 1.67600 + 0.04657I$ $b = 0.496553 + 0.990924I$	$-3.48312 + 5.52227I$	$3.76620 - 5.89114I$
$u = 1.083810 - 0.540124I$ $a = 1.67600 - 0.04657I$ $b = 0.496553 - 0.990924I$	$-3.48312 - 5.52227I$	$3.76620 + 5.89114I$
$u = 1.25801$ $a = -1.22256$ $b = -1.08785$	$5.55227$	$15.4310$
$u = 0.553050 + 0.482320I$ $a = 0.680935 - 0.534063I$ $b = 0.442741 - 0.243060I$	$-2.01055 + 1.80457I$	$7.37027 - 4.67563I$
$u = 0.553050 - 0.482320I$ $a = 0.680935 + 0.534063I$ $b = 0.442741 + 0.243060I$	$-2.01055 - 1.80457I$	$7.37027 + 4.67563I$
$u = -0.399666 + 0.569326I$ $a = -1.124570 - 0.795239I$ $b = -0.495351 + 1.172960I$	$-2.05097 - 2.54093I$	$8.54961 + 2.56274I$
$u = -0.399666 - 0.569326I$ $a = -1.124570 + 0.795239I$ $b = -0.495351 - 1.172960I$	$-2.05097 + 2.54093I$	$8.54961 - 2.56274I$
$u = 1.271090 + 0.324893I$ $a = -1.326110 - 0.185075I$ $b = -0.562882 - 1.237790I$	$1.94144 + 5.55900I$	$17.2677 - 4.1054I$

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.271090 - 0.324893I$ $a = -1.326110 + 0.185075I$ $b = -0.562882 + 1.237790I$	$1.94144 - 5.55900I$	$17.2677 + 4.1054I$
$u = -1.133490 + 0.786019I$ $a = -1.17308 + 1.24490I$ $b = -0.45959 + 1.84212I$	$-5.26755 - 2.76815I$	$6.74305 + 1.96876I$
$u = -1.133490 - 0.786019I$ $a = -1.17308 - 1.24490I$ $b = -0.45959 - 1.84212I$	$-5.26755 + 2.76815I$	$6.74305 - 1.96876I$
$u = 0.088561 + 1.396340I$ $a = 0.226588 - 0.656943I$ $b = 0.51304 - 1.81326I$	$19.1288 - 5.4062I$	$6.05474 + 2.05125I$
$u = 0.088561 - 1.396340I$ $a = 0.226588 + 0.656943I$ $b = 0.51304 + 1.81326I$	$19.1288 + 5.4062I$	$6.05474 - 2.05125I$
$u = -1.51491 + 0.11448I$ $a = 0.207183 + 0.310262I$ $b = 0.0322077 - 0.0682113I$	$4.60570 - 3.56043I$	$15.4789 + 7.9563I$
$u = -1.51491 - 0.11448I$ $a = 0.207183 - 0.310262I$ $b = 0.0322077 + 0.0682113I$	$4.60570 + 3.56043I$	$15.4789 - 7.9563I$
$u = 1.47491 + 0.70325I$ $a = 1.73912 + 0.75900I$ $b = 0.93744 + 1.60343I$	$-16.0299 + 12.7557I$	$10.00000 - 5.13495I$
$u = 1.47491 - 0.70325I$ $a = 1.73912 - 0.75900I$ $b = 0.93744 - 1.60343I$	$-16.0299 - 12.7557I$	$10.00000 + 5.13495I$
$u = -0.345078$ $a = 0.490141$ $b = -0.241609$	$0.549407$	$18.2220$

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.169258 + 0.230162I$ $a = 3.30928 - 1.57909I$ $b = -0.261095 + 0.870304I$	$-1.73764 - 2.47115I$	$11.65169 + 4.43713I$
$u = 0.169258 - 0.230162I$ $a = 3.30928 + 1.57909I$ $b = -0.261095 - 0.870304I$	$-1.73764 + 2.47115I$	$11.65169 - 4.43713I$
$u = -1.62548 + 0.63340I$ $a = -0.73552 + 1.36542I$ $b = -0.05359 + 1.57787I$	$-14.9890 - 1.9387I$	0
$u = -1.62548 - 0.63340I$ $a = -0.73552 - 1.36542I$ $b = -0.05359 - 1.57787I$	$-14.9890 + 1.9387I$	0



**II.**

$$I_2^u = \langle -4.13 \times 10^4 u^{19} + 1.49 \times 10^4 u^{18} + \dots + 1.02 \times 10^5 b - 2.17 \times 10^5, -2.08 \times 10^4 u^{19} + 5.41 \times 10^4 u^{18} + \dots + 2.04 \times 10^5 a + 1.23 \times 10^5, u^{20} - 10u^{18} + \dots + 6u + 4 \rangle$$

**(i) Arc colorings**

$$\begin{aligned} a_4 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_9 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix} \\ a_1 &= \begin{pmatrix} 0.101996u^{19} - 0.265266u^{18} + \dots - 1.49571u - 0.603799 \\ 0.404898u^{19} - 0.145703u^{18} + \dots - 2.53587u + 2.12676 \end{pmatrix} \\ a_7 &= \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix} \\ a_{12} &= \begin{pmatrix} -0.302902u^{19} - 0.119562u^{18} + \dots + 1.04016u - 2.73056 \\ 0.404898u^{19} - 0.145703u^{18} + \dots - 2.53587u + 2.12676 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0.992150u^{19} - 0.400944u^{18} + \dots - 2.37768u + 4.62098 \\ -0.0780847u^{19} - 0.198152u^{18} + \dots - 3.56977u - 1.72914 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.501860u^{19} + 0.227585u^{18} + \dots - 1.29265u - 2.70449 \\ -0.400944u^{19} - 0.417304u^{18} + \dots + 6.66808u + 0.0313985 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 0.0242741u^{19} - 0.129666u^{18} + \dots + 0.735984u - 0.802951 \\ 0.810158u^{19} + 0.0423449u^{18} + \dots - 5.27028u + 1.78351 \end{pmatrix} \\ a_6 &= \begin{pmatrix} -0.554884u^{19} - 0.0858119u^{18} + \dots + 1.98350u + 0.737253 \\ -1.23375u^{19} - 0.323609u^{18} + \dots + 12.8278u + 0.0295856 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0.664975u^{19} - 0.390840u^{18} + \dots - 3.07351u + 2.69337 \\ -0.414012u^{19} + 0.324383u^{18} + \dots - 4.90638u - 4.90765 \end{pmatrix} \end{aligned}$$

**(ii) Obstruction class = 1**

**(iii) Cusp Shapes =**  $\frac{150899}{102043}u^{19} + \frac{457156}{102043}u^{18} + \dots - \frac{3098728}{102043}u - \frac{1725625}{102043}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
$c_1$	$u^{20} - 15u^{19} + \dots - 10u + 1$
$c_2$	$u^{20} + u^{19} + \dots + 2u - 1$
$c_3$	$u^{20} - 10u^{18} + \dots - 6u + 4$
$c_4$	$u^{20} - 3u^{18} + \dots + u - 1$
$c_5$	$u^{20} - u^{19} + \dots - 2u - 1$
$c_6$	$u^{20} + 8u^{18} + \dots - 2u - 1$
$c_7, c_8$	$u^{20} - 10u^{18} + \dots + 6u + 4$
$c_9$	$u^{20} + 4u^{19} + \dots + 6u^2 + 1$
$c_{10}$	$u^{20} + 8u^{18} + \dots + 2u - 1$
$c_{11}$	$u^{20} + 6u^{18} + \dots - 20u - 112$
$c_{12}$	$u^{20} - 4u^{19} + \dots + 6u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
$c_1$	$y^{20} - 33y^{19} + \dots + 22y + 1$
$c_2, c_5$	$y^{20} + 15y^{19} + \dots + 10y + 1$
$c_3, c_7, c_8$	$y^{20} - 20y^{19} + \dots - 124y + 16$
$c_4$	$y^{20} - 6y^{19} + \dots - 13y + 1$
$c_6, c_{10}$	$y^{20} + 16y^{19} + \dots + 10y + 1$
$c_9, c_{12}$	$y^{20} + 4y^{19} + \dots + 12y + 1$
$c_{11}$	$y^{20} + 12y^{19} + \dots - 34224y + 12544$

(vi) Complex Volumes and Cusp Shapes

Solutions to $I_2^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.612301 + 0.818596I$ $a = -0.067302 - 0.254585I$ $b = -0.401431 - 1.017480I$	$-3.53566 - 0.22064I$	$5.65649 + 1.54234I$
$u = -0.612301 - 0.818596I$ $a = -0.067302 + 0.254585I$ $b = -0.401431 + 1.017480I$	$-3.53566 + 0.22064I$	$5.65649 - 1.54234I$
$u = 1.002890 + 0.425695I$ $a = 1.91303 + 1.46841I$ $b = 0.629652 - 0.151473I$	$-9.59237 + 1.63826I$	$13.10729 + 0.49726I$
$u = 1.002890 - 0.425695I$ $a = 1.91303 - 1.46841I$ $b = 0.629652 + 0.151473I$	$-9.59237 - 1.63826I$	$13.10729 - 0.49726I$
$u = -1.207850 + 0.102646I$ $a = 2.03086 - 0.75278I$ $b = 0.745320 - 1.075030I$	$-2.13884 - 3.22223I$	$8.01422 + 2.52111I$
$u = -1.207850 - 0.102646I$ $a = 2.03086 + 0.75278I$ $b = 0.745320 + 1.075030I$	$-2.13884 + 3.22223I$	$8.01422 - 2.52111I$
$u = -1.039500 + 0.630586I$ $a = -1.55688 + 0.02679I$ $b = -0.738283 + 0.944855I$	$-2.28953 - 5.18286I$	$10.14826 + 4.21922I$
$u = -1.039500 - 0.630586I$ $a = -1.55688 - 0.02679I$ $b = -0.738283 - 0.944855I$	$-2.28953 + 5.18286I$	$10.14826 - 4.21922I$
$u = 1.22442$ $a = -2.03415$ $b = -1.74489$	6.94299	27.7690
$u = 0.733786$ $a = -2.65242$ $b = -1.84135$	4.93941	2.40420

Solutions to $I_2^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.308800 + 0.304453I$ $a = -1.192490 - 0.050495I$ $b = -0.464800 - 1.223010I$	$1.37495 + 5.83178I$	$5.48272 - 8.86173I$
$u = 1.308800 - 0.304453I$ $a = -1.192490 + 0.050495I$ $b = -0.464800 + 1.223010I$	$1.37495 - 5.83178I$	$5.48272 + 8.86173I$
$u = 0.116813 + 0.627556I$ $a = 1.09932 - 1.18449I$ $b = -0.198146 + 0.916761I$	$-2.55287 - 2.35473I$	$1.50587 + 2.86724I$
$u = 0.116813 - 0.627556I$ $a = 1.09932 + 1.18449I$ $b = -0.198146 - 0.916761I$	$-2.55287 + 2.35473I$	$1.50587 - 2.86724I$
$u = -0.596398 + 0.154090I$ $a = -1.018880 + 0.068684I$ $b = 0.363803 + 1.056440I$	$-4.37423 + 2.18819I$	$9.13692 - 5.14183I$
$u = -0.596398 - 0.154090I$ $a = -1.018880 - 0.068684I$ $b = 0.363803 - 1.056440I$	$-4.37423 - 2.18819I$	$9.13692 + 5.14183I$
$u = -1.52607 + 0.20387I$ $a = 0.791649 - 0.377958I$ $b = -0.000385 - 0.551221I$	$3.15923 - 0.69222I$	$7.75845 + 0.32737I$
$u = -1.52607 - 0.20387I$ $a = 0.791649 + 0.377958I$ $b = -0.000385 + 0.551221I$	$3.15923 + 0.69222I$	$7.75845 - 0.32737I$
$u = 1.57451 + 0.13378I$ $a = -0.156023 + 0.726050I$ $b = -0.142609 + 0.648848I$	$4.13850 + 3.24894I$	$3.10320 + 0.10633I$
$u = 1.57451 - 0.13378I$ $a = -0.156023 - 0.726050I$ $b = -0.142609 - 0.648848I$	$4.13850 - 3.24894I$	$3.10320 - 0.10633I$

### III. u-Polynomials

Crossings	u-Polynomials at each crossing
$c_1$	$(u^{20} - 15u^{19} + \dots - 10u + 1)(u^{34} + 52u^{33} + \dots - 125583u + 7921)$
$c_2$	$(u^{20} + u^{19} + \dots + 2u - 1)(u^{34} + 2u^{33} + \dots + 91u + 89)$
$c_3$	$(u^{20} - 10u^{18} + \dots - 6u + 4)(u^{34} + u^{33} + \dots - 14u - 4)$
$c_4$	$(u^{20} - 3u^{18} + \dots + u - 1)(u^{34} - u^{33} + \dots - 1046u - 137)$
$c_5$	$(u^{20} - u^{19} + \dots - 2u - 1)(u^{34} + 2u^{33} + \dots + 91u + 89)$
$c_6$	$(u^{20} + 8u^{18} + \dots - 2u - 1)(u^{34} - u^{33} + \dots + 75u + 17)$
$c_7, c_8$	$(u^{20} - 10u^{18} + \dots + 6u + 4)(u^{34} + u^{33} + \dots - 14u - 4)$
$c_9$	$(u^{20} + 4u^{19} + \dots + 6u^2 + 1)(u^{34} + 3u^{33} + \dots + 11u + 1)$
$c_{10}$	$(u^{20} + 8u^{18} + \dots + 2u - 1)(u^{34} - u^{33} + \dots + 75u + 17)$
$c_{11}$	$(u^{20} + 6u^{18} + \dots - 20u - 112)(u^{34} + u^{33} + \dots - 5852u + 764)$
$c_{12}$	$(u^{20} - 4u^{19} + \dots + 6u^2 + 1)(u^{34} + 3u^{33} + \dots + 11u + 1)$

#### IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
$c_1$	$(y^{20} - 33y^{19} + \dots + 22y + 1)$ $\cdot (y^{34} - 152y^{33} + \dots - 3985291411y + 62742241)$
$c_2, c_5$	$(y^{20} + 15y^{19} + \dots + 10y + 1)(y^{34} + 52y^{33} + \dots - 125583y + 7921)$
$c_3, c_7, c_8$	$(y^{20} - 20y^{19} + \dots - 124y + 16)(y^{34} - 23y^{33} + \dots - 140y + 16)$
$c_4$	$(y^{20} - 6y^{19} + \dots - 13y + 1)(y^{34} + 11y^{33} + \dots - 925058y + 18769)$
$c_6, c_{10}$	$(y^{20} + 16y^{19} + \dots + 10y + 1)(y^{34} + 57y^{33} + \dots - 16675y + 289)$
$c_9, c_{12}$	$(y^{20} + 4y^{19} + \dots + 12y + 1)(y^{34} + 25y^{33} + \dots + 223y + 1)$
$c_{11}$	$(y^{20} + 12y^{19} + \dots - 34224y + 12544)$ $\cdot (y^{34} + 73y^{33} + \dots + 16521896y + 583696)$