Branching Law for the Finite Subgroups of $\mathbf{SL}_4\mathbb{C}$
Example — Type II

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The group of type II is the subgroup $\langle F_1,\ F_2',\ F_3'\rangle$ of $\mathbf{SL}_4\mathbb{C}$, with

$$F_1 = \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & j & 0 \\ 0 & 0 & 0 & j^2 \end{pmatrix},\ F_2' = \frac{1}{3}\begin{pmatrix} 3 & 0 & 0 & 0 \\ 0 & -1 & 2 & 2 \\ 0 & 2 & -1 & 2 \\ 0 & 2 & 2 & -1 \end{pmatrix},\ F_3' = \frac{1}{4}\begin{pmatrix} -1 & \sqrt{15} & 0 & 0 \\ \sqrt{15} & 1 & 0 & 0 \\ 0 & 0 & 0 & 4 \\ 0 & 0 & 4 & 0 \end{pmatrix}.$$

Here $l+1=5$, $\mathrm{rank}(A^{(1)}) = \mathrm{rank}(A^{(2)}) = 4$.
$\Theta^{(1)} = \overline{\Theta^{(3)}} = (4,\ 0,\ -1,\ 1,\ -1)$, $\Theta^{(2)} = (6,\ -2,\ 1,\ 0,\ 1)$, $p=4$, and $\tau_0 = s_0 s_1$, $\tau_1 = s_2$, $\tau_2 = s_3$, $\tau_3 = s_4$.

$$A^{(1)} = A^{(3)} = \begin{pmatrix} 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 & 2 \end{pmatrix},\ A^{(2)} = \begin{pmatrix} 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 1 & 2 \\ 1 & 0 & 1 & 1 & 2 \\ 0 & 1 & 1 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \end{pmatrix},\ C_{II} = \begin{pmatrix} 2 & 0 & 0 & -2 & 0 \\ 0 & 2 & -2 & -2 & -2 \\ 0 & -2 & 2 & -2 & -2 \\ -2 & -2 & -2 & 2 & -2 \\ 0 & -2 & -2 & -2 & 2 \end{pmatrix}.$$

$$\begin{aligned} D_{II}(t,\ u,\ w) &= (w-1)^4 (u+1)^3 (u-1)^5 (t-1)^4 \left(w^2+w+1\right)\left(w^4+w^3+w^2+w+1\right) \\ &\quad (w+1)^2 \left(u^4+u^3+u^2+u+1\right)\left(u^2+u+1\right)^2 \left(t^2+t+1\right)\left(t^4+t^3+t^2+t+1\right)(t+1)^2 \\ &= (u-1)(u+1)(u^2+u+1)\widetilde{D}_{II}(t)\widetilde{D}_{II}(u)\widetilde{D}_{II}(w) \end{aligned}$$

with $\widetilde{D}_{II}(t) = (t-1)^4(t+1)^2(t^2+t+1)(t^4+t^3+t^2+t+1)$

$$\widehat{P}_{II}(t) = \frac{t^8 - t^6 + t^4 - t^2 + 1}{t^{12} - 2\,t^{10} - t^9 + t^8 + t^7 + t^5 + t^4 - t^3 - 2\,t^2 + 1}$$

$N_{II}(t,\ u,\ w)_0 = -t^{10}u^{14}w^{10} - t^{10}u^{13}w^{10} + t^{10}u^{14}w^8 + t^{10}u^{12}w^{10} + t^8u^{14}w^{10} + t^{10}u^{13}w^8 - t^{10}u^{12}w^9 + 3\,t^{10}u^{11}w^{10} - t^9u^{14}w^8 - t^9u^{12}w^{10} - t^8u^{14}w^9 + t^8u^{13}w^{10} - t^{10}u^{14}w^6 - t^{10}u^{13}w^7 - 4\,t^{10}u^{12}w^8 - 4\,t^{10}u^{11}w^9 - t^{10}u^{10}w^{10} - t^9u^{14}w^7 - 3\,t^9u^{13}w^8 - 3\,t^9u^{12}w^9 - 4\,t^9u^{11}w^{10} - 2\,t^8u^{14}w^8 - 3\,t^8u^{13}w^9 - 4\,t^8u^{12}w^{10} - t^7u^{14}w^9 - t^7u^{13}w^{10} - t^6u^{14}w^{10} - 2\,t^{10}u^{13}w^6 - t^{10}u^{12}w^7 - 9\,t^{10}u^{11}w^8 - 5\,t^{10}u^{10}w^9 - 4\,t^{10}u^9w^{10} - 5\,t^9u^{13}w^7 - 4\,t^9u^{12}w^8 - 9\,t^9u^{11}w^9 - 5\,t^9u^{10}w^{10} - 6\,t^8u^{13}w^8 - 4\,t^8u^{12}w^9 - 9\,t^8u^{11}w^{10} - 5\,t^7u^{13}w^9 - t^7u^{12}w^{10} - 2\,t^6u^{13}w^{10} + t^{10}u^{14}w^4 - 2\,t^{10}u^{13}w^5 + t^{10}u^{12}w^6 - t^{10}u^{11}w^7 - 4\,t^{10}u^{10}w^8 - 2\,t^{10}u^9w^9 - 6\,t^{10}u^8w^{10} + t^9u^{14}w^5 - 2\,t^9u^{13}w^6 - 5\,t^9u^{12}w^7 - 3\,t^9u^{11}w^8 - 11\,t^9u^{10}w^9 - 2\,t^9u^9w^{10} - 3\,t^8u^{13}w^7 - 2\,t^8u^{12}w^8 - 3\,t^8u^{11}w^9 - 4\,t^8u^{10}w^{10} - 3\,t^7u^{13}w^8 - 5\,t^7u^{12}w^9 - t^7u^{11}w^{10} - 2\,t^6u^{13}w^9 + t^6u^{12}w^{10} + t^5u^{14}w^9 - 2\,t^5u^{13}w^{10} + t^4u^{14}w^{10} - 3\,t^{10}u^{12}w^5 + 4\,t^{10}u^{11}w^6 - 2\,t^{10}u^{10}w^7 + 2\,t^{10}u^9w^8 - 2\,t^{10}u^8w^9 - 4\,t^{10}u^7w^{10} - t^9u^{14}w^4 + t^9u^{13}w^5 - 5\,t^9u^{12}w^6 + 2\,t^9u^{11}w^7 - 5\,t^9u^{10}w^8 - 9\,t^9u^9w^9 - 2\,t^9u^8w^{10} - t^8u^{14}w^5 - t^8u^{13}w^6 - 8\,t^8u^{12}w^7 + 4\,t^8u^{11}w^8 - 5\,t^8u^{10}w^9 + 2\,t^8u^9w^{10} - 2\,t^7u^{14}w^6 + 2\,t^7u^{13}w^7 - 8\,t^7u^{12}w^8 + 2\,t^7u^{11}w^9 - 2\,t^7u^{10}w^{10} - 2\,t^6u^{14}w^7 - t^6u^{13}w^8 - 5\,t^6u^{12}w^9 + 4\,t^6u^{11}w^{10} - t^5u^{14}w^8 + t^5u^{13}w^9 - 3\,t^5u^{12}w^{10} - t^4u^{14}w^9 - t^{10}u^{14}w^2 + t^{10}u^{13}w^3 - 4\,t^{10}u^{12}w^4 + 2\,t^{10}u^{11}w^5 + t^{10}u^{10}w^6 - 5\,t^{10}u^9w^7 + 5\,t^{10}u^8w^8 - 5\,t^{10}u^7w^9 - t^{10}u^6w^{10} - 2\,t^9u^{14}w^3 - t^9u^{13}w^4 - 4\,t^9u^{12}w^5 - 3\,t^9u^{11}w^6 + 5\,t^9u^{10}w^7 - 11\,t^9u^9w^8 - 7\,t^9u^8w^9 - 5\,t^9u^7w^{10} - 3\,t^8u^{14}w^4 + t^8u^{13}w^5 - 7\,t^8u^{12}w^6 -$

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$5\,t^8u^{11}w^7-4\,t^8u^{10}w^8-11\,t^8u^9w^9+5\,t^8u^8w^{10}-3\,t^7u^{14}w^5-t^7u^{13}w^6-4\,t^7u^{12}w^7-5\,t^7u^{11}w^8+5\,t^7u^{10}w^9-5\,t^7u^9w^{10}-$
$t^6u^{14}w^6-t^6u^{13}w^7-7\,t^6u^{12}w^8-3\,t^6u^{11}w^9+t^6u^{10}w^{10}-3\,t^5u^{14}w^7+t^5u^{13}w^8-4\,t^5u^{12}w^9+2\,t^5u^{11}w^{10}-3\,t^4u^{14}w^8-t^4u^{13}w^9-$
$4\,t^4u^{12}w^{10}-2\,t^3u^{14}w^9+t^3u^{13}w^{10}-t^2u^{14}w^{10}+t^{10}u^{13}w^2+t^{10}u^{12}w^3-2\,t^{10}u^{11}w^4+10\,t^{10}u^{10}w^5-3\,t^{10}u^9w^6+4\,t^{10}u^8w^7+$
$t^{10}u^7w^8-4\,t^{10}u^6w^9+3\,t^{10}u^5w^{10}-2\,t^9u^{13}w^3+2\,t^9u^{12}w^4-6\,t^9u^{11}w^5+6\,t^9u^{10}w^6+3\,t^9u^9w^7-7\,t^9u^8w^8-4\,t^9u^7w^9-$
$4\,t^9u^6w^{10}-2\,t^8u^{13}w^4+3\,t^8u^{12}w^5-6\,t^8u^{11}w^6+8\,t^8u^{10}w^7-12\,t^8u^9w^8-7\,t^8u^8w^9+t^8u^7w^{10}-3\,t^7u^{13}w^5+4\,t^7u^{12}w^6-$
$10\,t^7u^{11}w^7+8\,t^7u^{10}w^8+3\,t^7u^9w^9+4\,t^7u^8w^{10}-t^6u^{13}w^6+4\,t^6u^{12}w^7-6\,t^6u^{11}w^8+6\,t^6u^{10}w^9-3\,t^6u^9w^{10}-3\,t^5u^{13}w^7+$
$3\,t^5u^{12}w^8-6\,t^5u^{11}w^9+10\,t^5u^{10}w^{10}-2\,t^4u^{13}w^8+2\,t^4u^{12}w^9-2\,t^4u^{11}w^{10}-2\,t^3u^{13}w^9+t^3u^{12}w^{10}+t^2u^{13}w^{10}+4\,t^{10}u^{12}w^2-$
$t^{10}u^{11}w^3+7\,t^{10}u^{10}w^4+8\,t^{10}u^9w^5+12\,t^{10}u^7w^7-4\,t^{10}u^6w^8-t^{10}u^5w^9+t^{10}u^4w^{10}+t^9u^{14}w+5\,t^9u^{12}w^3+6\,t^9u^{11}w^4+$
$3\,t^9u^{10}w^5+16\,t^9u^9w^6+3\,t^9u^8w^7+4\,t^9u^7w^8-t^9u^5w^{10}+2\,t^8u^{14}w^2-t^8u^{13}w^3+10\,t^8u^{12}w^4-2\,t^8u^{11}w^5+12\,t^8u^{10}w^6+$
$20\,t^8u^9w^7-10\,t^8u^8w^8+4\,t^8u^7w^9-4\,t^8u^6w^{10}+3\,t^7u^{14}w^3-t^7u^{13}w^4+9\,t^7u^{12}w^5+5\,t^7u^{11}w^6+2\,t^7u^{10}w^7+20\,t^7u^9w^8+$
$3\,t^7u^8w^9+12\,t^7u^7w^{10}+3\,t^6u^{14}w^4-2\,t^6u^{13}w^5+7\,t^6u^{12}w^6+5\,t^6u^{11}w^7+12\,t^6u^{10}w^8+16\,t^6u^9w^9+t^5u^{14}w^5-2\,t^5u^{13}w^6+$
$9\,t^5u^{12}w^7-2\,t^5u^{11}w^8+3\,t^5u^{10}w^9+8\,t^5u^9w^{10}+3\,t^4u^{14}w^6-t^4u^{13}w^7+10\,t^4u^{12}w^8+6\,t^4u^{11}w^9+7\,t^4u^{10}w^{10}+3\,t^3u^{14}w^7-$
$t^3u^{13}w^8+5\,t^3u^{12}w^9-t^3u^{11}w^{10}+2\,t^2u^{14}w^8+4\,t^2u^{12}w^{10}+tu^{14}w^9-t^{10}u^{13}+t^{10}u^{11}w^2-2\,t^{10}u^{10}w^3+13\,t^{10}u^9w^4-3\,t^{10}u^8w^5+$
$9\,t^{10}u^7w^6+7\,t^{10}u^6w^7-6\,t^{10}u^5w^8-t^{10}u^3w^{10}+t^9u^{13}w+10\,t^9u^{11}w^3+7\,t^9u^{10}w^4+16\,t^9u^9w^5+15\,t^9u^8w^6+5\,t^9u^7w^7+$
$5\,t^9u^6w^8+2\,t^8u^{12}w^3+14\,t^8u^{11}w^4-5\,t^8u^{10}w^5+27\,t^8u^9w^6+5\,t^8u^8w^7+6\,t^8u^7w^8+5\,t^8u^6w^9-6\,t^8u^5w^{10}+t^7u^{14}w^2+$
$3\,t^7u^{13}w^3+2\,t^7u^{12}w^4+16\,t^7u^{11}w^5+2\,t^7u^{10}w^6+20\,t^7u^9w^7+5\,t^7u^8w^8+5\,t^7u^7w^9+7\,t^7u^6w^{10}+t^6u^{14}w^3+3\,t^6u^{13}w^4+$
$2\,t^6u^{12}w^5+11\,t^6u^{11}w^6+2\,t^6u^{10}w^7+27\,t^6u^9w^8+15\,t^6u^8w^9+9\,t^6u^7w^{10}+2\,t^5u^{14}w^4-t^5u^{13}w^5+2\,t^5u^{12}w^6+16\,t^5u^{11}w^7-$
$5\,t^5u^{10}w^8+16\,t^5u^9w^9-3\,t^5u^8w^{10}+2\,t^4u^{14}w^5+3\,t^4u^{13}w^6+2\,t^4u^{12}w^7+14\,t^4u^{11}w^8+7\,t^4u^{10}w^9+13\,t^4u^9w^{10}+t^3u^{14}w^6+$
$3\,t^3u^{13}w^7+2\,t^3u^{12}w^8+10\,t^3u^{11}w^9-2\,t^3u^{10}w^{10}+t^2u^{14}w^7+t^2u^{11}w^{10}+tu^{13}w^9-u^{13}w^{10}-t^{10}u^{12}-6\,t^{10}u^{10}w^2+7\,t^{10}u^9w^3+$
$9\,t^{10}u^8w^4-3\,t^{10}u^7w^5+13\,t^{10}u^6w^6-2\,t^{10}u^5w^7+t^{10}u^4w^8-t^{10}u^2w^{10}-2\,t^9u^{12}w+t^9u^{11}w^2+9\,t^9u^{10}w^3+8\,t^9u^9w^4+$
$22\,t^9u^8w^5+8\,t^9u^7w^6+5\,t^9u^6w^7+t^9u^5w^8-3\,t^9u^4w^9-6\,t^8u^{12}w^2+11\,t^8u^{11}w^3+3\,t^8u^{10}w^4+10\,t^8u^9w^5+20\,t^8u^8w^6-$
$9\,t^8u^7w^7+18\,t^8u^6w^8+t^8u^5w^9+t^8u^4w^{10}-t^7u^{14}w+2\,t^7u^{13}w^2-3\,t^7u^{12}w^3+10\,t^7u^{11}w^4+3\,t^7u^{10}w^5+t^7u^9w^6+16\,t^7u^8w^7-$
$9\,t^7u^7w^8+5\,t^7u^6w^9-2\,t^7u^5w^{10}-t^6u^{14}w^2+4\,t^6u^{13}w^3-4\,t^6u^{12}w^4+14\,t^6u^{11}w^5-t^6u^{10}w^6+t^6u^9w^7+20\,t^6u^8w^8+8\,t^6u^7w^9+$
$13\,t^6u^6w^{10}+6\,t^5u^{13}w^4-4\,t^5u^{12}w^5+14\,t^5u^{11}w^6+3\,t^5u^{10}w^7+10\,t^5u^9w^8+22\,t^5u^8w^9-3\,t^5u^7w^{10}+6\,t^4u^{13}w^5-4\,t^4u^{12}w^6+$
$10\,t^4u^{11}w^7+3\,t^4u^{10}w^8+8\,t^4u^9w^9+9\,t^4u^8w^{10}+4\,t^3u^{13}w^6-3\,t^3u^{12}w^7+11\,t^3u^{11}w^8+9\,t^3u^{10}w^9+7\,t^3u^9w^{10}-t^2u^{14}w^6+$
$2\,t^2u^{13}w^7-6\,t^2u^{12}w^8+t^2u^{11}w^9-6\,t^2u^{10}w^{10}-tu^{14}w^7-2\,tu^{12}w^9-u^{12}w^{10}+t^{10}u^{11}-t^{10}u^{10}w-4\,t^{10}u^9w^2+12\,t^{10}u^8w^3+$
$8\,t^{10}u^6w^5+7\,t^{10}u^5w^6-t^{10}u^4w^7+4\,t^{10}u^3w^8-4\,t^9u^{11}w+5\,t^9u^{10}w^2+6\,t^9u^9w^3+15\,t^9u^8w^4+17\,t^9u^7w^5+7\,t^9u^6w^6+$
$6\,t^9u^5w^7-3\,t^9u^3w^9+t^8u^{13}-t^8u^{12}w+14\,t^8u^{10}w^3-5\,t^8u^9w^4+32\,t^8u^8w^5-4\,t^8u^7w^6+3\,t^8u^6w^7+12\,t^8u^5w^8+4\,t^8u^3w^{10}-$
$t^7u^{13}w+t^7u^{12}w^2-t^7u^{11}w^3+13\,t^7u^{10}w^4-12\,t^7u^9w^5+10\,t^7u^8w^6+3\,t^7u^6w^8+6\,t^7u^5w^9-t^7u^4w^{10}+2\,t^6u^{13}w^2+2\,t^6u^{12}w^3-$
$2\,t^6u^{11}w^4+13\,t^6u^{10}w^5-14\,t^6u^9w^6+10\,t^6u^8w^7-4\,t^6u^7w^8+7\,t^6u^6w^9+7\,t^6u^5w^{10}+4\,t^5u^{13}w^3+t^5u^{12}w^4+6\,t^5u^{11}w^5+$
$13\,t^5u^{10}w^6-12\,t^5u^9w^7+32\,t^5u^8w^8+17\,t^5u^7w^9+8\,t^5u^6w^{10}+6\,t^4u^{13}w^4+t^4u^{12}w^5-2\,t^4u^{11}w^6+13\,t^4u^{10}w^7-5\,t^4u^9w^8+$
$15\,t^4u^8w^9+4\,t^3u^{13}w^5+2\,t^3u^{12}w^6-t^3u^{11}w^7+14\,t^3u^{10}w^8+6\,t^3u^9w^9+12\,t^3u^8w^{10}+2\,t^2u^{13}w^6+t^2u^{12}w^7+5\,t^2u^{10}w^9-$
$4\,t^2u^9w^{10}-tu^{13}w^7-tu^{12}w^8-4\,tu^{11}w^9-tu^{10}w^{10}+u^{13}w^8+u^{11}w^{10}+3\,t^{10}u^{10}-4\,t^{10}u^9w+t^{10}u^8w^2+4\,t^{10}u^7w^3-3\,t^{10}u^6w^4+$
$10\,t^{10}u^5w^5-2\,t^{10}u^4w^6+t^{10}u^3w^7+t^{10}u^2w^8-t^9u^{11}-4\,t^9u^{10}w+4\,t^9u^9w^2+3\,t^9u^8w^3+16\,t^9u^7w^4+7\,t^9u^6w^5+6\,t^9u^5w^6+$
$6\,t^9u^4w^7-t^9u^2w^9+t^8u^{12}-3\,t^8u^{11}w+12\,t^8u^{10}w^2-2\,t^8u^9w^3+4\,t^8u^8w^4+21\,t^8u^7w^5-16\,t^8u^6w^6+11\,t^8u^5w^7-8\,t^8u^4w^8+$
$t^8u^2w^{10}+t^7u^{12}w-4\,t^7u^{11}w^2+6\,t^7u^{10}w^3-10\,t^7u^8w^5+7\,t^7u^7w^6-10\,t^7u^6w^7+11\,t^7u^5w^8+6\,t^7u^4w^9+t^7u^3w^{10}+7\,t^6u^{12}w^2-$
$5\,t^6u^{11}w^3+8\,t^6u^{10}w^4-11\,t^6u^9w^5-10\,t^6u^8w^6+7\,t^6u^7w^7-16\,t^6u^6w^8+6\,t^6u^5w^9-2\,t^6u^4w^{10}+t^5u^{14}w+6\,t^5u^{12}w^3-$
$11\,t^5u^{11}w^4+18\,t^5u^{10}w^5-11\,t^5u^9w^6-10\,t^5u^8w^7+21\,t^5u^7w^8+7\,t^5u^6w^9+10\,t^5u^5w^{10}+t^4u^{14}w^2+t^4u^{13}w^3+9\,t^4u^{12}w^4-$
$11\,t^4u^{11}w^5+8\,t^4u^{10}w^6+4\,t^4u^8w^8+16\,t^4u^7w^9-3\,t^4u^6w^{10}+2\,t^3u^{14}w^3+t^3u^{13}w^4+6\,t^3u^{12}w^5-5\,t^3u^{11}w^6+6\,t^3u^{10}w^7-$
$2\,t^3u^9w^8+3\,t^3u^8w^9+4\,t^3u^7w^{10}+t^2u^{14}w^4+7\,t^2u^{12}w^6-4\,t^2u^{11}w^7+12\,t^2u^{10}w^8+4\,t^2u^9w^9+t^2u^8w^{10}+tu^{14}w^5+tu^{12}w^7-$
$3\,tu^{11}w^8-4\,tu^{10}w^9-4\,tu^9w^{10}+u^{12}w^8-u^{11}w^9+3\,u^{10}w^{10}-t^{10}u^9-5\,t^{10}u^8w+5\,t^{10}u^7w^2-5\,t^{10}u^6w^3+t^{10}u^5w^4+2\,t^{10}u^4w^5-$
$4\,t^{10}u^3w^6+t^{10}u^2w^7-t^{10}uw^8-4\,t^9u^{10}-5\,t^9u^9w-7\,t^9u^8w^2+2\,t^9u^7w^3+6\,t^9u^6w^4-2\,t^9u^5w^5+2\,t^9u^4w^6+2\,t^9u^3w^7+$
$t^9uw^9-4\,t^8u^{11}-4\,t^8u^{10}w+6\,t^8u^9w^2-13\,t^8u^8w^3+17\,t^8u^7w^4-14\,t^8u^6w^5-7\,t^8u^5w^6-2\,t^8u^4w^7-12\,t^8u^3w^8-t^8uw^{10}-$
$t^7u^{12}-t^7u^{11}w-8\,t^7u^{10}w^2+t^7u^9w^3-22\,t^7u^8w^4+t^7u^7w^5-18\,t^7u^6w^6-14\,t^7u^5w^7-2\,t^7u^4w^8+2\,t^7u^3w^9+t^7u^2w^{10}-t^6u^{13}-$
$2\,t^6u^{11}w^2-6\,t^6u^{10}w^3+5\,t^6u^9w^4-35\,t^6u^8w^5+4\,t^6u^7w^6-18\,t^6u^6w^7-7\,t^6u^5w^8+2\,t^6u^4w^9-4\,t^6u^3w^{10}+t^5u^{13}w+4\,t^5u^{12}w^2-$
$5\,t^5u^{11}w^3-11\,t^5u^{10}w^4+7\,t^5u^9w^5-35\,t^5u^8w^6+t^5u^7w^7-14\,t^5u^6w^8-2\,t^5u^5w^9+2\,t^5u^4w^{10}-2\,t^4u^{13}w^2+5\,t^4u^{12}w^3-$
$7\,t^4u^{11}w^4-11\,t^4u^{10}w^5+5\,t^4u^9w^6-22\,t^4u^8w^7+17\,t^4u^7w^8+6\,t^4u^6w^9+t^4u^5w^{10}+t^3u^{14}w^2+2\,t^3u^{13}w^3+5\,t^3u^{12}w^4-$
$5\,t^3u^{11}w^5-6\,t^3u^{10}w^6+t^3u^9w^7-13\,t^3u^8w^8+2\,t^3u^7w^9-5\,t^3u^6w^{10}+t^2u^{14}w^3-2\,t^2u^{13}w^4+4\,t^2u^{12}w^5-2\,t^2u^{11}w^6-8\,t^2u^{10}w^7+$
$6\,t^2u^9w^8-7\,t^2u^8w^9+5\,t^2u^7w^{10}+tu^{13}w^5-tu^{11}w^7-4\,tu^{10}w^8-5\,tu^9w^9-5\,tu^8w^{10}-u^{13}w^6-u^{12}w^7-4\,u^{11}w^8-4\,u^{10}w^9-$
$u^9w^{10}-4\,t^{10}u^8-2\,t^{10}u^7w+2\,t^{10}u^6w^2-2\,t^{10}u^5w^3+4\,t^{10}u^4w^4-3\,t^{10}u^3w^5-5\,t^9u^9-7\,t^9u^8w-11\,t^9u^7w^2+t^9u^6w^3-3\,t^9u^5w^4-$
$5\,t^9u^4w^5-t^9u^3w^6+t^9w^9-9\,t^8u^{10}-3\,t^8u^9w-10\,t^8u^8w^2+t^8u^7w^3+8\,t^8u^6w^4-23\,t^8u^5w^5+5\,t^8u^4w^6-8\,t^8u^3w^7-t^7u^{11}-$
$4\,t^7u^{10}w-3\,t^7u^9w^2-8\,t^7u^8w^3-20\,t^7u^7w^4-2\,t^7u^6w^5-28\,t^7u^5w^6-14\,t^7u^4w^7-8\,t^7u^3w^8-2\,t^6u^{12}-2\,t^6u^{11}w-16\,t^6u^{10}w^2-$
$19\,t^6u^8w^4-23\,t^6u^7w^5-3\,t^6u^6w^6-28\,t^6u^5w^7+5\,t^6u^4w^8-t^6u^3w^9-t^5u^{12}w+5\,t^5u^{11}w^2-15\,t^5u^{10}w^3+3\,t^5u^9w^4-27\,t^5u^8w^5-$
$23\,t^5u^7w^6-2\,t^5u^6w^7-23\,t^5u^5w^8-5\,t^5u^4w^9-3\,t^5u^3w^{10}-3\,t^4u^{12}w^2+3\,t^4u^{11}w^3-25\,t^4u^{10}w^4+3\,t^4u^9w^5-19\,t^4u^8w^6-$
$20\,t^4u^7w^7+8\,t^4u^6w^8-3\,t^4u^5w^9+4\,t^4u^4w^{10}-t^3u^{14}w+2\,t^3u^{13}w^2+3\,t^3u^{11}w^4-15\,t^3u^{10}w^5-8\,t^3u^8w^7+t^3u^7w^8+t^3u^6w^9-$
$2\,t^3u^5w^{10}+2\,t^2u^{13}w^3-3\,t^2u^{12}w^4+5\,t^2u^{11}w^5-16\,t^2u^{10}w^6-3\,t^2u^9w^7-10\,t^2u^8w^8-11\,t^2u^7w^9+2\,t^2u^6w^{10}-tu^{14}w^3-tu^{12}w^5-$
$2\,tu^{11}w^6-4\,tu^{10}w^7-3\,tu^9w^8-7\,tu^8w^9-2\,tu^7w^{10}-2\,u^{12}w^6-u^{11}w^7-9\,u^{10}w^8-5\,u^9w^9-4\,u^8w^{10}-6\,t^{10}u^7-2\,t^{10}u^6w-$
$4\,t^{10}u^5w^2-t^{10}u^4w^3+t^{10}u^3w^4-2\,t^{10}u^2w^5+t^{10}uw^6-2\,t^9u^8-8\,t^9u^7w-5\,t^9u^6w^2-2\,t^9u^5w^3-5\,t^9u^4w^4-3\,t^9u^3w^5-t^9u^2w^6-$
$t^9uw^7-4\,t^8u^9-5\,t^8u^8w-20\,t^8u^7w^2+11\,t^8u^6w^3-12\,t^8u^5w^4-7\,t^8u^4w^5+5\,t^8u^3w^6-3\,t^8u^2w^7+4\,t^8uw^8-t^7u^{10}-2\,t^7u^9w+$
$11\,t^7u^8w^2-14\,t^7u^7w^3-2\,t^7u^6w^4-13\,t^7u^5w^5-13\,t^7u^4w^6-4\,t^7u^3w^7-3\,t^7u^2w^8-t^7uw^9+t^6u^{11}-5\,t^6u^{10}w-12\,t^6u^9w^2-$
$2\,t^6u^8w^3-36\,t^6u^7w^4+4\,t^6u^6w^5-23\,t^6u^5w^6-13\,t^6u^4w^7+5\,t^6u^3w^8-t^6u^2w^9+t^6uw^{10}-2\,t^5u^{12}-3\,t^5u^{11}w-7\,t^5u^{10}w^2-$
$13\,t^5u^9w^3+4\,t^5u^8w^4-48\,t^5u^7w^5+4\,t^5u^6w^6-13\,t^5u^5w^7-7\,t^5u^4w^8-3\,t^5u^3w^9-2\,t^5u^2w^{10}+t^4u^{13}-t^4u^{12}w+5\,t^4u^{11}w^2-$
$13\,t^4u^{10}w^3-23\,t^4u^9w^4+4\,t^4u^8w^5-36\,t^4u^7w^6-2\,t^4u^6w^7-12\,t^4u^5w^8-5\,t^4u^4w^9+t^4u^3w^{10}-t^3u^{13}w-3\,t^3u^{12}w^2-4\,t^3u^{11}w^3-$
$13\,t^3u^{10}w^4-13\,t^3u^9w^5-2\,t^3u^8w^6-14\,t^3u^7w^7+11\,t^3u^6w^8-2\,t^3u^5w^9-t^3u^4w^{10}+4\,t^2u^{13}w^2-3\,t^2u^{12}w^3+5\,t^2u^{11}w^4-$
$7\,t^2u^{10}w^5-12\,t^2u^9w^6+11\,t^2u^8w^7-20\,t^2u^7w^8-5\,t^2u^6w^9-4\,t^2u^5w^{10}-tu^{13}w^3-tu^{12}w^4-3\,tu^{11}w^5-5\,tu^{10}w^6-2\,tu^9w^7-$
$5\,tu^8w^8-8\,tu^7w^9-2\,tu^6w^{10}+u^{13}w^4-2\,u^{12}w^5+u^{11}w^6-u^{10}w^7-4\,u^9w^8-2\,u^8w^9-6\,u^7w^{10}-4\,t^{10}u^6-5\,t^{10}u^5w-9\,t^{10}u^4w^2-$
$t^{10}u^3w^3-2\,t^{10}u^2w^4-2\,t^9u^7-7\,t^9u^6w-3\,t^9u^5w^2-4\,t^9u^4w^3-2\,t^9u^3w^4-t^9u^2w^5-t^9w^7+2\,t^8u^8-11\,t^8u^7w-10\,t^8u^6w^2-$
$3\,t^8u^5w^3-16\,t^8u^4w^4+5\,t^8u^3w^5-3\,t^8u^2w^6+2\,t^8uw^7-2\,t^7u^9+t^7u^8w+t^7u^7w^2-8\,t^7u^6w^3-15\,t^7u^4w^5+3\,t^7u^3w^6+2\,t^7uw^8-$
$t^7w^9+4\,t^6u^{10}-3\,t^6u^9w+8\,t^6u^8w^2-20\,t^6u^7w^3-19\,t^6u^6w^4+3\,t^6u^5w^5-25\,t^6u^4w^6+3\,t^6u^3w^7-3\,t^6u^2w^8-3\,t^5u^{11}-5\,t^5u^{10}w-$

$23\,t^5u^9w^2-2\,t^5u^8w^3-23\,t^5u^7w^4-27\,t^5u^6w^5+3\,t^5u^5w^6-15\,t^5u^4w^7+5\,t^5u^3w^8-t^5u^2w^9-t^4u^{11}w+5\,t^4u^{10}w^2-28\,t^4u^9w^3-$
$3\,t^4u^8w^4-23\,t^4u^7w^5-19\,t^4u^6w^6-16\,t^4u^4w^8-2\,t^4u^3w^9-2\,t^4u^2w^{10}-8\,t^3u^{11}w^2-14\,t^3u^{10}w^3-28\,t^3u^9w^4-2\,t^3u^8w^5-$
$20\,t^3u^7w^6-8\,t^3u^6w^7-3\,t^3u^5w^8-4\,t^3u^4w^9-t^3u^3w^{10}-8\,t^2u^{11}w^3+5\,t^2u^{10}w^4-23\,t^2u^9w^5+8\,t^2u^8w^6+t^2u^7w^7-10\,t^2u^6w^8-$
$3\,t^2u^5w^9-9\,t^2u^4w^{10}+tu^{14}w-tu^{11}w^4-5\,tu^{10}w^5-3\,tu^9w^6+tu^8w^7-11\,tu^7w^8-7\,tu^6w^9-5\,tu^5w^{10}-3\,u^{11}w^5+4\,u^{10}w^6-$
$2\,u^9w^7+2\,u^8w^8-2\,u^7w^9-4\,u^6w^{10}-t^{10}u^5-4\,t^{10}u^4w-4\,t^{10}u^3w^2-t^{10}u^2w^3-t^{10}uw^4-5\,t^9u^6-5\,t^9u^5w-4\,t^9u^4w^2-t^9u^3w^3+$
$t^9uw^5+5\,t^8u^7-7\,t^8u^6w+6\,t^8u^5w^2-8\,t^8u^4w^3-2\,t^8u^3w^4+4\,t^8u^2w^5-2\,t^8uw^6+t^8w^7-5\,t^7u^8+2\,t^7u^7w-13\,t^7u^6w^2+$
$t^7u^5w^3-6\,t^7u^4w^4-5\,t^7u^3w^5+5\,t^7u^2w^6+2\,t^7uw^7+t^7w^8+t^6u^9+6\,t^6u^8w+17\,t^6u^7w^2-22\,t^6u^6w^3+5\,t^6u^5w^4-11\,t^6u^4w^5-$
$7\,t^6u^3w^6+5\,t^6u^2w^7-2\,t^6uw^8+2\,t^5u^{10}-2\,t^5u^9w-14\,t^5u^8w^2+t^5u^7w^3-35\,t^5u^6w^4+7\,t^5u^5w^5-11\,t^5u^4w^6-5\,t^5u^3w^7+$
$4\,t^5u^2w^8+t^5uw^9-4\,t^4u^{11}+2\,t^4u^{10}w-7\,t^4u^9w^2-18\,t^4u^8w^3+4\,t^4u^7w^4-35\,t^4u^6w^5+5\,t^4u^5w^6-6\,t^4u^4w^7-2\,t^4u^3w^8-$
$t^4uw^{10}+t^3u^{12}+2\,t^3u^{11}w-2\,t^3u^{10}w^2-14\,t^3u^9w^3-18\,t^3u^8w^4+t^3u^7w^5-22\,t^3u^6w^6+t^3u^5w^7-8\,t^3u^4w^8-t^3u^3w^9-t^3u^2w^{10}-$
$t^2u^{13}-12\,t^2u^{11}w^2-2\,t^2u^{10}w^3-7\,t^2u^9w^4-14\,t^2u^8w^5+17\,t^2u^7w^6-13\,t^2u^6w^7+6\,t^2u^5w^8-4\,t^2u^4w^9-4\,t^2u^3w^{10}+tu^{13}w+$
$2\,tu^{11}w^3+2\,tu^{10}w^4-2\,tu^9w^5+6\,tu^8w^6+2\,tu^7w^7-7\,tu^6w^8-5\,tu^5w^9-4\,tu^4w^{10}-u^{13}w^2+u^{12}w^3-4\,u^{11}w^4+2\,u^{10}w^5+u^9w^6-$
$5\,u^8w^7+5\,u^7w^8-5\,u^6w^9-u^5w^{10}+3\,t^{10}u^4-t^{10}u^3w+t^{10}u^2w^2-4\,t^9u^5-4\,t^9u^4w-3\,t^9u^3w^2+t^9u^2w^3+t^9w^5+t^8u^6+4\,t^8u^5w+$
$12\,t^8u^4w^2-4\,t^8u^3w^3+7\,t^8u^2w^4+t^8w^6+4\,t^7u^7+3\,t^7u^6w-2\,t^7u^5w^2+6\,t^7u^4w^3-5\,t^7u^3w^4+6\,t^7u^2w^5+t^7uw^6+2\,t^7w^7-$
$3\,t^6u^8+16\,t^6u^7w+4\,t^6u^6w^2+8\,t^6u^4w^4-11\,t^6u^3w^5+9\,t^6u^2w^6+t^6uw^7+t^6w^8+10\,t^5u^9+7\,t^5u^8w+21\,t^5u^7w^2-10\,t^5u^6w^3-$
$11\,t^5u^5w^4+18\,t^5u^4w^5-11\,t^5u^3w^6+6\,t^5u^2w^7+t^5w^9-2\,t^4u^{10}+6\,t^4u^9w-16\,t^4u^8w^2+7\,t^4u^7w^3-10\,t^4u^6w^4-11\,t^4u^5w^5+$
$8\,t^4u^4w^6-5\,t^4u^3w^7+7\,t^4u^2w^8+t^3u^{11}+6\,t^3u^{10}w+11\,t^3u^9w^2-10\,t^3u^8w^3+7\,t^3u^7w^4-10\,t^3u^6w^5+6\,t^3u^4w^7-4\,t^3u^3w^8+$
$t^3u^2w^9+t^2u^{12}-8\,t^2u^{10}w^2+11\,t^2u^9w^3-16\,t^2u^8w^4+21\,t^2u^7w^5+4\,t^2u^6w^6-2\,t^2u^5w^7+12\,t^2u^4w^8-3\,t^2u^3w^9+t^2u^2w^{10}-$
$tu^{12}w+6\,tu^{10}w^3+6\,tu^9w^4+7\,tu^8w^5+16\,tu^7w^6+3\,tu^6w^7+4\,tu^5w^8-4\,tu^4w^9-tu^3w^{10}+u^{12}w^2+u^{11}w^3-2\,u^{10}w^4+10\,u^9w^5-$
$3\,u^8w^6+4\,u^7w^7+u^6w^8-4\,u^5w^9+3\,u^4w^{10}+t^{10}u^3+t^{10}uw^2-t^9u^4-4\,t^9u^3w-t^9u^2w^2-t^9uw^3-4\,t^8u^5+5\,t^8u^4w+t^8u^2w^3+$
$2\,t^8uw^4+12\,t^7u^6+6\,t^7u^5w+14\,t^7u^4w^2-t^7u^3w^3+2\,t^7u^2w^4+4\,t^7uw^5+15\,t^6u^6w-5\,t^6u^5w^2+13\,t^6u^4w^3-2\,t^6u^3w^4+t^6u^2w^5+$
$6\,t^6uw^6+8\,t^5u^8+17\,t^5u^7w+32\,t^5u^6w^2-12\,t^5u^5w^3+13\,t^5u^4w^4+6\,t^5u^3w^5+t^5u^2w^6+4\,t^5uw^7+7\,t^4u^9+7\,t^4u^8w-4\,t^4u^7w^2+$
$10\,t^4u^6w^3-14\,t^4u^5w^4+13\,t^4u^4w^5-2\,t^4u^3w^6+2\,t^4u^2w^7+2\,t^4uw^8-t^3u^{10}+6\,t^3u^9w+3\,t^3u^8w^2+10\,t^3u^6w^4-12\,t^3u^5w^5+$
$13\,t^3u^4w^6-t^3u^3w^7+t^3u^2w^8-t^3uw^9+4\,t^2u^{11}+12\,t^2u^9w^2+3\,t^2u^8w^3-4\,t^2u^7w^4+32\,t^2u^6w^5-5\,t^2u^5w^6+14\,t^2u^4w^7-t^2u^2w^9+$
$t^2uw^{10}-3\,tu^{11}w+6\,tu^9w^3+7\,tu^8w^4+17\,tu^7w^5+15\,tu^6w^6+6\,tu^5w^7+5\,tu^4w^8-4\,tu^3w^9+4\,u^{11}w^2-u^{10}w^3+7\,u^9w^4+8\,u^8w^5+$
$12\,u^6w^7-4\,u^5w^8-u^4w^9+u^3w^{10}-t^{10}u^2-2\,t^9u^2w-t^9w^3-6\,t^8u^4+t^8u^3w-6\,t^8u^2w^2+2\,t^8uw^3-t^8w^4+7\,t^7u^5+9\,t^7u^4w+$
$11\,t^7u^3w^2-3\,t^7u^2w^3+4\,t^7uw^4+9\,t^6u^6+8\,t^6u^5w+3\,t^6u^4w^2+10\,t^6u^3w^3-4\,t^6u^2w^4+6\,t^6uw^5-3\,t^5u^7+22\,t^5u^6w+10\,t^5u^5w^2+$
$3\,t^5u^4w^3+14\,t^5u^3w^4-4\,t^5u^2w^5+6\,t^5uw^6+13\,t^4u^8+8\,t^4u^7w+20\,t^4u^6w^2+t^4u^5w^3-t^4u^4w^4+14\,t^4u^3w^5-4\,t^4u^2w^6+4\,t^4uw^7-$
$t^4w^8-2\,t^3u^9+5\,t^3u^8w-9\,t^3u^7w^2+16\,t^3u^6w^3+t^3u^5w^4+3\,t^3u^4w^5+10\,t^3u^3w^6-3\,t^3u^2w^7+2\,t^3uw^8-t^3w^9+t^2u^{10}+t^2u^9w+$
$18\,t^2u^8w^2-9\,t^2u^7w^3+20\,t^2u^6w^4+10\,t^2u^5w^5+3\,t^2u^4w^6+11\,t^2u^3w^7-6\,t^2u^2w^8-3\,tu^{10}w+tu^9w^2+5\,tu^8w^3+8\,tu^7w^4+$
$22\,tu^6w^5+8\,tu^5w^6+9\,tu^4w^7+tu^3w^8-2\,tu^2w^9-u^{12}+u^{10}w^2-2\,u^9w^3+13\,u^8w^4-3\,u^7w^5+9\,u^6w^6+7\,u^5w^7-6\,u^4w^8-$
$u^2w^{10}-t^{10}u+t^9uw+t^8u^3+t^8w^3-2\,t^7u^4+10\,t^7u^3w+2\,t^7u^2w^2+3\,t^7uw^3+t^7w^4+13\,t^6u^5+7\,t^6u^4w+14\,t^6u^3w^2+2\,t^6u^2w^3+$
$3\,t^6uw^4+2\,t^6w^5-3\,t^5u^6+16\,t^5u^5w-5\,t^5u^4w^2+16\,t^5u^3w^3+2\,t^5u^2w^4-t^5uw^5+2\,t^5w^6+9\,t^4u^7+15\,t^4u^6w+27\,t^4u^5w^2+$
$2\,t^4u^4w^3+11\,t^4u^3w^4+2\,t^4u^2w^5+3\,t^4uw^6+t^4w^7+7\,t^3u^8+5\,t^3u^7w+5\,t^3u^6w^2+20\,t^3u^5w^3+2\,t^3u^4w^4+16\,t^3u^3w^5+2\,t^3u^2w^6+$
$3\,t^3uw^7+t^3w^8-6\,t^2u^9+5\,t^2u^8w+6\,t^2u^7w^2+5\,t^2u^6w^3+27\,t^2u^5w^4-5\,t^2u^4w^5+14\,t^2u^3w^6+2\,t^2u^2w^7+5\,tu^8w^2+5\,tu^7w^3+$
$15\,tu^6w^4+16\,tu^5w^5+7\,tu^4w^6+10\,tu^3w^7+tuw^9-u^{11}-6\,u^9w^2+7\,u^8w^3+9\,u^7w^4-3\,u^6w^5+13\,u^5w^6-2\,u^4w^7+u^3w^8-uw^{10}+$
$t^9w+4\,t^8u^2+2\,t^8w^2-t^7u^3+5\,t^7u^2w-t^7uw^2+3\,t^7w^3+7\,t^6u^4+6\,t^6u^3w+10\,t^6u^2w^2-t^6uw^3+3\,t^6w^4+8\,t^5u^5+3\,t^5u^4w-$
$2\,t^5u^3w^2+9\,t^5u^2w^3-2\,t^5uw^4+t^5w^5+16\,t^4u^5w+12\,t^4u^4w^2+5\,t^4u^3w^3+7\,t^4u^2w^4-2\,t^4uw^5+3\,t^4w^6+12\,t^3u^7+3\,t^3u^6w+$
$20\,t^3u^5w^2+2\,t^3u^4w^3+5\,t^3u^3w^4+9\,t^3u^2w^5-t^3uw^6+3\,t^3w^7-4\,t^2u^8+4\,t^2u^7w-10\,t^2u^6w^2+20\,t^2u^5w^3+12\,t^2u^4w^4-$
$2\,t^2u^3w^5+10\,t^2u^2w^6-t^2uw^7+2\,t^2w^8-tu^9+4\,tu^7w^2+3\,tu^6w^3+16\,tu^5w^4+3\,tu^4w^5+6\,tu^3w^6+5\,tu^2w^7+tw^9+u^{10}-u^9w-$
$4\,u^8w^2+12\,u^7w^3+8\,u^5w^5+7\,u^4w^6-u^3w^7+4\,u^2w^8+t^8u+t^7u^2-2\,t^7uw-2\,t^6u^3+2\,t^6u^2w-2\,t^6uw^2+10\,t^5u^4-6\,t^5u^3w+$
$3\,t^5u^2w^2-3\,t^5uw^3-3\,t^4u^5+6\,t^4u^4w-6\,t^4u^3w^2+4\,t^4u^2w^3-t^4uw^4+4\,t^3u^6+3\,t^3u^5w+8\,t^3u^4w^2-10\,t^3u^3w^3+4\,t^3u^2w^4-$
$3\,t^3uw^5+t^2u^7-7\,t^2u^6w-12\,t^2u^5w^2+8\,t^2u^4w^3-6\,t^2u^3w^4+3\,t^2u^2w^5-2\,t^2uw^6-4\,tu^8-4\,tu^7w-7\,tu^6w^2+3\,tu^5w^3+6\,tu^4w^4-$
$6\,tu^3w^5+2\,tu^2w^6-2\,tuw^7+3\,u^9-4\,u^8w+u^7w^2+4\,u^6w^3-3\,u^5w^4+10\,u^4w^5-2\,u^3w^6+u^2w^7+uw^8-t^8+t^7u-2\,t^7w-4\,t^6u^2-$
$t^6uw-3\,t^6w^2+2\,t^5u^3-4\,t^5u^2w+t^5uw^2-3\,t^5w^3+t^4u^4-3\,t^4u^3w-7\,t^4u^2w^2-t^4uw^3-t^4w^4-5\,t^3u^5+5\,t^3u^4w-5\,t^3u^3w^2-$
$4\,t^3u^2w^3-t^3uw^4-3\,t^3w^5+5\,t^2u^6-11\,t^2u^5w-4\,t^2u^4w^2-5\,t^2u^3w^3-7\,t^2u^2w^4+t^2uw^5-3\,t^2w^6-5\,tu^7-7\,tu^6w-11\,tu^5w^2+$
$5\,tu^4w^3-3\,tu^3w^4-4\,tu^2w^5-tuw^6-2\,tw^7-u^8-5\,u^7w+5\,u^6w^2-5\,u^5w^3+u^4w^4+2\,u^3w^5-4\,u^2w^6+uw^7-w^8-t^6w-3\,t^5u^2+$
$t^5uw-t^5w^2+4\,t^4u^3-5\,t^4u^2w-t^4uw^2-2\,t^4w^3-2\,t^3u^4+2\,t^3u^3w-8\,t^3u^2w^2+2\,t^3uw^3-2\,t^3w^4+2\,t^2u^5-5\,t^2u^4w+4\,t^2u^3w^2-$
$8\,t^2u^2w^3-t^2uw^4-t^2w^5-2\,tu^6-9\,tu^5w-5\,tu^4w^2+2\,tu^3w^3-5\,tu^2w^4+tuw^5-tw^6-4\,u^7-2\,u^6w+2\,u^5w^2-2\,u^4w^3+4\,u^3w^4-$
$3\,u^2w^5+t^6-2\,t^5u+t^5w+t^4u^2-2\,t^4uw-t^3u^3-5\,t^3u^2w-3\,t^3uw^2-4\,t^2u^4-3\,t^2u^3w-2\,t^2u^2w^2-3\,t^2uw^3-2\,tu^5-11\,tu^4w-$
$3\,tu^3w^2-5\,tu^2w^3-2\,tuw^4+tw^5-6\,u^6-2\,u^5w-4\,u^4w^2-u^3w^3+u^2w^4-2\,uw^5+w^6-2\,t^4u-t^3u^2-5\,t^3uw-9\,t^2u^3-4\,t^2u^2w-$
$6\,t^2uw^2-5\,tu^4-9\,tu^3w-4\,tu^2w^2-5\,tuw^3-4\,u^5-5\,u^4w-9\,u^3w^2-u^2w^3-2\,uw^4-t^4-t^3u-t^3w-4\,t^2u^2-3\,t^2uw-2\,t^2w^2-$
$4\,tu^3-3\,tu^2w-3\,tuw^2-tw^3-u^4-4\,u^3w-4\,u^2w^2-uw^3-w^4+t^2u-t^2w-tu^2-tw^2+3\,u^3-u^2w+uw^2+t^2+u^2+w^2-u-1$

$N_{II}(t,\,u,\,w)_1=-(t^8u^9w^8-t^8u^8w^8+t^7u^{10}w^7+t^8u^{10}w^5+3\,t^8u^8w^7+t^8u^7w^8+t^7u^{10}w^6+t^7u^9w^7+3\,t^7u^8w^8+t^6u^{10}w^7+$
$t^5u^{10}w^8+2\,t^8u^8w^6+2\,t^8u^6w^8-t^7u^{10}w^5+t^7u^9w^6-2\,t^7u^8w^7+t^6u^9w^7+2\,t^6u^8w^8-t^5u^{10}w^7+t^8u^9w^4-4\,t^8u^8w^5-t^8u^7w^6-$
$t^8u^6w^7+t^8u^5w^8+2\,t^7u^9w^5-4\,t^7u^8w^6+3\,t^7u^7w^7-t^7u^6w^8-t^6u^{10}w^5+t^6u^9w^6-4\,t^6u^8w^7-t^6u^7w^8-t^5u^{10}w^6+2\,t^5u^9w^7-$
$4\,t^5u^8w^8+t^4u^9w^8+2\,t^8u^7w^5-3\,t^8u^6w^6+t^8u^5w^7-t^8u^4w^8+t^7u^{10}w^3+4\,t^7u^8w^5+3\,t^7u^6w^7+t^7u^5w^8+2\,t^6u^{10}w^4-2\,t^6u^8w^6-$
$3\,t^6u^6w^8+3\,t^5u^{10}w^5+4\,t^5u^8w^7+2\,t^5u^7w^8+2\,t^4u^{10}w^6+t^3u^{10}w^7+2\,t^8u^8w^3-2\,t^8u^7w^4+3\,t^8u^6w^5-t^8u^5w^6+2\,t^8u^4w^7+$
$t^8u^3w^8-t^7u^9w^3+2\,t^7u^8w^4-8\,t^7u^7w^5+3\,t^7u^6w^6-t^7u^5w^7+2\,t^7u^4w^8-2\,t^6u^9w^4+5\,t^6u^8w^5-3\,t^6u^7w^6+3\,t^6u^6w^7-$
$t^6u^5w^8-5\,t^5u^9w^5+5\,t^5u^8w^6-8\,t^5u^7w^7+3\,t^5u^6w^8-2\,t^4u^9w^6+2\,t^4u^8w^7-2\,t^4u^7w^8-t^3u^9w^7+2\,t^3u^8w^8-2\,t^8u^8w^2-$
$4\,t^8u^7w^3+t^8u^6w^4-4\,t^8u^5w^5+t^8u^4w^6-t^8u^3w^7-5\,t^7u^8w^3-5\,t^7u^6w^5-3\,t^7u^5w^6-2\,t^7u^4w^7-t^7u^3w^8-t^6u^{10}w^2-5\,t^6u^8w^4-$
$4\,t^6u^7w^5+4\,t^6u^6w^6-3\,t^6u^5w^7+t^6u^4w^8-2\,t^5u^{10}w^3+2\,t^5u^9w^4-10\,t^5u^8w^5-4\,t^5u^7w^6-5\,t^5u^6w^7-4\,t^5u^5w^8-3\,t^4u^{10}w^4+$
$2\,t^4u^9w^5-5\,t^4u^8w^6+t^4u^6w^8-2\,t^3u^{10}w^5-5\,t^3u^8w^7-4\,t^3u^7w^8-t^2u^{10}w^6-2\,t^2u^8w^8-t^8u^8w+t^8u^7w^2-4\,t^8u^6w^3+t^8u^5w^4-$
$4\,t^8u^4w^5-2\,t^8u^3w^6-t^7u^8w^2+5\,t^7u^7w^3-4\,t^7u^6w^4+5\,t^7u^5w^5-4\,t^7u^4w^6+t^7u^3w^7-4\,t^6u^8w^3+6\,t^6u^7w^4-8\,t^6u^6w^5+$
$3\,t^6u^5w^6-4\,t^6u^4w^7-2\,t^6u^3w^8+3\,t^5u^9w^3-4\,t^5u^8w^4+17\,t^5u^7w^5-8\,t^5u^6w^6+5\,t^5u^5w^7-4\,t^5u^4w^8+t^4u^{10}w^3+2\,t^4u^9w^4-$
$4\,t^4u^8w^5+6\,t^4u^7w^6-4\,t^4u^6w^7+t^4u^5w^8+t^3u^{10}w^4+3\,t^3u^9w^5-4\,t^3u^8w^6+5\,t^3u^7w^7-4\,t^3u^6w^8-t^2u^8w^7+t^2u^7w^8-tu^8w^8+$
$t^8u^8+2\,t^8u^7w-t^8u^6w^2+3\,t^8u^5w^3-2\,t^8u^4w^4+2\,t^8u^3w^5+t^7u^8w-5\,t^7u^7w^2+2\,t^7u^6w^3+t^7u^5w^4+t^7u^4w^5+2\,t^7u^3w^6+$
$3\,t^6u^8w^2+3\,t^6u^7w^3+t^6u^6w^4+8\,t^6u^5w^5-5\,t^6u^4w^6+2\,t^6u^3w^7-3\,t^5u^9w^2+6\,t^5u^8w^3-4\,t^5u^7w^4+9\,t^5u^6w^5+8\,t^5u^5w^6+$

$$t^5u^4w^7 + 2\,t^5u^3w^8 + t^4u^{10}w^2 - 3\,t^4u^9w^3 + 9\,t^4u^8w^4 - 4\,t^4u^7w^5 + t^4u^6w^6 + t^4u^5w^7 - 2\,t^4u^4w^8 - 3\,t^3u^9w^4 + 6\,t^3u^8w^5 +$$
$$3\,t^3u^7w^6 + 2\,t^3u^6w^7 + 3\,t^3u^5w^8 + t^2u^{10}w^4 - 3\,t^2u^9w^5 + 3\,t^2u^8w^6 - 5\,t^2u^7w^7 - t^2u^6w^8 + tu^8w^7 + 2\,tu^7w^8 + u^8w^8 - t^8u^7 +$$
$$t^8u^6w - 3\,t^8u^5w^2 + 2\,t^8u^4w^3 - 2\,t^7u^7w + t^7u^6w^2 - 9\,t^7u^5w^3 + t^7u^4w^4 - 3\,t^7u^3w^5 + t^6u^8w - 4\,t^6u^7w^2 + 8\,t^6u^6w^3 - 7\,t^6u^5w^4 +$$
$$7\,t^6u^4w^5 + 3\,t^6u^3w^6 - t^5u^9w + t^5u^8w^2 - 15\,t^5u^7w^3 + 10\,t^5u^6w^4 - 19\,t^5u^5w^5 + 7\,t^5u^4w^6 - 3\,t^5u^3w^7 - t^4u^{10}w - t^4u^9w^2 -$$
$$8\,t^4u^7w^4 + 10\,t^4u^6w^5 - 7\,t^4u^5w^6 + t^4u^4w^7 - t^3u^{10}w^2 - 2\,t^3u^9w^3 - 15\,t^3u^7w^5 + 8\,t^3u^6w^6 - 9\,t^3u^5w^7 + 2\,t^3u^4w^8 - t^2u^{10}w^3 -$$
$$t^2u^9w^4 + t^2u^8w^5 - 4\,t^2u^7w^6 + t^2u^6w^7 - 3\,t^2u^5w^8 - tu^{10}w^4 - tu^9w^5 + tu^8w^6 - 2\,tu^7w^7 + tu^6w^8 - u^7w^8 + t^8u^6 - t^8u^5w - t^8u^4w^2 -$$
$$4\,t^8u^3w^3 + t^8u^2w^4 + 3\,t^7u^7 + t^7u^6w + 2\,t^7u^5w^2 - 2\,t^7u^4w^3 - 2\,t^7u^3w^4 + t^7u^2w^5 - t^6u^7w - 6\,t^6u^5w^3 + 6\,t^6u^4w^4 - 5\,t^6u^3w^5 +$$
$$4\,t^6u^2w^6 + t^5u^9 + 10\,t^5u^7w^2 - 2\,t^5u^6w^3 - t^5u^5w^4 - 5\,t^5u^3w^6 + t^5u^2w^7 + t^4u^9w - 5\,t^4u^8w^2 + 6\,t^4u^7w^3 - 6\,t^4u^6w^4 - t^4u^5w^5 +$$
$$6\,t^4u^4w^6 - 2\,t^4u^3w^7 + t^4u^2w^8 + t^3u^9w^2 - 2\,t^3u^8w^3 + 6\,t^3u^7w^4 - 2\,t^3u^6w^5 - 6\,t^3u^5w^6 - 2\,t^3u^4w^7 - 4\,t^3u^3w^8 - t^2u^{10}w^2 +$$
$$t^2u^9w^3 - 5\,t^2u^8w^4 + 10\,t^2u^7w^5 + 2\,t^2u^5w^7 - t^2u^4w^8 + tu^9w^4 - tu^7w^6 + tu^6w^7 - tu^5w^8 + u^9w^5 + 3\,u^7w^7 + u^6w^8 + 2\,t^8u^5 +$$
$$2\,t^8u^3w^2 + 4\,t^7u^5w - t^7u^4w^2 + 6\,t^7u^3w^3 + 2\,t^7u^2w^4 + 2\,t^6u^7 - t^6u^6w + 8\,t^6u^5w^2 - 5\,t^6u^4w^3 + 4\,t^6u^3w^4 + 2\,t^6u^2w^5 + 6\,t^5u^7w -$$
$$5\,t^5u^6w^2 + 24\,t^5u^5w^3 - 7\,t^5u^4w^4 + 13\,t^5u^3w^5 + 2\,t^5u^2w^6 + 2\,t^4u^8w + 4\,t^4u^7w^2 - 7\,t^4u^6w^3 + 12\,t^4u^5w^4 - 7\,t^4u^4w^5 + 4\,t^4u^3w^6 +$$
$$2\,t^4u^2w^7 + 2\,t^3u^8w^2 + 13\,t^3u^7w^3 - 7\,t^3u^6w^4 + 24\,t^3u^5w^5 - 5\,t^3u^4w^6 + 6\,t^3u^3w^7 + 2\,t^2u^8w^3 + 4\,t^2u^7w^4 - 5\,t^2u^6w^5 + 8\,t^2u^5w^6 -$$
$$t^2u^4w^7 + 2\,t^2u^3w^8 + 2\,tu^8w^4 + 6\,tu^7w^5 - tu^6w^6 + 4\,tu^5w^7 + 2\,u^7w^6 + 2\,u^5w^8 + t^8u^4 + 3\,t^8u^3w + t^8uw^3 - t^7u^5 + t^7u^4w -$$
$$t^7u^3w^2 + t^7uw^4 - t^6u^6 + 2\,t^6u^5w + 10\,t^6u^3w^3 - 5\,t^6u^2w^4 + t^6uw^5 - t^6w^6 - 4\,t^5u^7 - 2\,t^5u^6w - 6\,t^5u^5w^2 - 2\,t^5u^4w^3 + 6\,t^5u^3w^4 -$$
$$2\,t^5u^2w^5 + t^5uw^6 + t^4u^8 - 2\,t^4u^7w + 6\,t^4u^6w^2 - t^4u^5w^3 - 6\,t^4u^4w^4 + 6\,t^4u^3w^5 - 5\,t^4u^2w^6 + t^4uw^7 + t^3u^8w - 5\,t^3u^7w^2 -$$
$$t^3u^5w^4 - 2\,t^3u^4w^5 + 10\,t^3u^3w^6 + t^3uw^8 + 4\,t^2u^8w^2 - 5\,t^2u^7w^3 + 6\,t^2u^6w^4 - 6\,t^2u^5w^5 - t^2u^3w^7 + tu^8w^3 - 2\,tu^7w^4 - 2\,tu^6w^5 +$$
$$2\,tu^5w^6 + tu^4w^7 + 3\,tu^3w^8 + u^8w^4 - 4\,u^7w^5 - u^6w^6 - u^5w^7 + u^4w^8 - t^8u^3 + t^7u^4 - 2\,t^7u^3w + t^7u^2w^2 - t^7uw^3 - t^7w^4 - 3\,t^6u^5 +$$
$$t^6u^4w - 4\,t^6u^3w^2 + t^6u^2w^3 - t^6uw^4 - t^6w^5 + 2\,t^5u^6 - 9\,t^5u^5w + 8\,t^5u^4w^2 - 15\,t^5u^3w^3 - 2\,t^5uw^5 - t^5w^6 + t^4u^6w - 7\,t^4u^5w^2 +$$
$$10\,t^4u^4w^3 - 8\,t^4u^3w^4 - t^4uw^6 - t^4w^7 - 3\,t^3u^7w + 7\,t^3u^6w^2 - 19\,t^3u^5w^3 + 10\,t^3u^4w^4 - 15\,t^3u^3w^5 + t^3u^2w^6 - t^3uw^7 + 3\,t^2u^7w^2 +$$
$$7\,t^2u^6w^3 - 7\,t^2u^5w^4 + 8\,t^2u^4w^5 - 4\,t^2u^3w^6 + t^2u^2w^7 - 3\,tu^7w^3 + tu^6w^4 - 9\,tu^5w^5 + tu^4w^6 - 2\,tu^3w^7 + 2\,u^6w^5 - 3\,u^5w^6 + u^4w^7 -$$
$$u^3w^8 + t^8u^2 + 2\,t^7u^3 + t^7u^2w - t^6u^4 - 5\,t^6u^3w + 3\,t^6u^2w^2 - 3\,t^6uw^3 + t^6w^4 + 3\,t^5u^5 + 2\,t^5u^4w + 3\,t^5u^3w^2 + 6\,t^5u^2w^3 - 3\,t^5uw^4 -$$
$$2\,t^4u^6 + t^4u^5w + t^4u^4w^2 - 4\,t^4u^3w^3 + 9\,t^4u^2w^4 - 3\,t^4uw^5 + t^4w^6 + 2\,t^3u^7 + t^3u^6w + 8\,t^3u^5w^2 + 9\,t^3u^4w^3 - 4\,t^3u^3w^4 + 6\,t^3u^2w^5 -$$
$$3\,t^3uw^6 + 2\,t^2u^7w - 5\,t^2u^6w^2 + 8\,t^2u^5w^3 + t^2u^4w^4 + 3\,t^2u^3w^5 + 3\,t^2u^2w^6 + 2\,tu^7w^2 + tu^6w^3 + tu^5w^4 + 2\,tu^4w^5 - 5\,tu^3w^6 +$$
$$tu^2w^7 + 2\,u^7w^3 - 2\,u^6w^4 + 3\,u^5w^5 - u^4w^6 + 2\,u^3w^7 + u^2w^8 - t^7u^2 + t^6u^3 - t^6u^2w - 4\,t^5u^4 + 5\,t^5u^3w - 4\,t^5u^2w^2 + 3\,t^5uw^3 +$$
$$t^5w^4 + t^4u^5 - 4\,t^4u^4w + 6\,t^4u^3w^2 - 4\,t^4u^2w^3 + 2\,t^4uw^4 + t^4w^5 - 4\,t^3u^6 + 5\,t^3u^5w - 8\,t^3u^4w^2 + 17\,t^3u^3w^3 - 4\,t^3u^2w^4 + 3\,t^3uw^5 -$$
$$2\,t^2u^7 - 4\,t^2u^6w + 3\,t^2u^5w^2 - 8\,t^2u^4w^3 + 6\,t^2u^3w^4 - 4\,t^2u^2w^5 + tu^7w - 4\,tu^6w^2 + 5\,tu^5w^3 - 4\,tu^4w^4 + 5\,tu^3w^5 - tu^2w^6 -$$
$$2\,u^7w^2 - 4\,u^6w^3 + u^5w^4 - 4\,u^4w^5 + u^3w^6 - u^2w^7 - 2\,t^6u^2 - t^6w^2 - 4\,t^5u^3 - 5\,t^5u^2w - 2\,t^5w^3 + t^4u^4 - 5\,t^4u^2w^2 + 2\,t^4uw^3 -$$
$$3\,t^4w^4 - 4\,t^3u^5 - 5\,t^3u^4w - 4\,t^3u^3w^2 - 10\,t^3u^2w^3 + 2\,t^3uw^4 - 2\,t^3w^5 + t^2u^6 - 3\,t^2u^5w + 4\,t^2u^4w^2 - 4\,t^2u^3w^3 - 5\,t^2u^2w^4 -$$
$$t^2w^6 - tu^7 - 2\,tu^6w - 3\,tu^5w^2 - 5\,tu^4w^3 - 5\,tu^2w^5 - u^7w + u^6w^2 - 4\,u^5w^3 + u^4w^4 - 4\,u^3w^5 - 2\,u^2w^6 + 2\,t^5u^2 - t^5uw - 2\,t^4u^3 +$$
$$2\,t^4u^2w - 2\,t^4uw^2 + 3\,t^3u^4 - 8\,t^3u^3w + 5\,t^3u^2w^2 - 5\,t^3uw^3 - t^2u^5 + 3\,t^2u^4w - 3\,t^2u^3w^2 + 5\,t^2u^2w^3 - 2\,t^2uw^4 + 2\,tu^6 - tu^5w +$$
$$3\,tu^4w^2 - 8\,tu^3w^3 + 2\,tu^2w^4 - tuw^5 + u^7 + 2\,u^6w - u^5w^2 + 3\,u^4w^3 - 2\,u^3w^4 + 2\,u^2w^5 + t^5w + 2\,t^4w^2 + 2\,t^3u^3 + 4\,t^3u^2w + 3\,t^3w^3 -$$
$$3\,t^2u^4 - 2\,t^2u^2w^2 + 2\,t^2w^4 + tu^5 + 3\,tu^4w + 4\,tu^2w^3 + tw^5 - u^6 + u^5w - 3\,u^4w^2 + 2\,u^3w^3 + t^4u - 4\,t^3u^2 + 2\,t^3uw - t^3w^2 - t^2u^3 -$$
$$4\,t^2u^2w + t^2uw^2 - t^2w^3 - tu^4 + 3\,tu^3w - 4\,tu^2w^2 + 2\,tuw^3 + u^5 - u^4w - u^3w^2 - 4\,u^2w^3 + uw^4 - t^3w + 2\,t^2u^2 + t^2uw - 2\,tu^2w +$$
$$tuw^2 - tw^3 + 2\,u^4 + 2\,u^2w^2 + t^3 + t^2w + 3\,tu^2 + tuw + tw^2 + u^3 + 3\,u^2w + w^3 + tw - u^2 + u)\left(w^2 + w + 1\right)\left(u^2 + u + 1\right)^2\left(t^2 + t + 1\right)$$

$N_{II}(t,\, u,\, w)_2 = N_{II}(t,\, u,\, w)_1$

$$N_{II}(t,\, u,\, w)_3 = -(t^8u^{11}w^7 + t^7u^{11}w^8 - t^8u^{11}w^6 - t^8u^{10}w^7 + t^8u^9w^8 - 3\,t^7u^{11}w^7 - t^7u^{10}w^8 - t^6u^{11}w^8 + t^8u^{11}w^5 + 3\,t^8u^{10}w^6 +$$
$$t^8u^9w^7 + 2\,t^8u^8w^8 + 3\,t^7u^{11}w^6 + 6\,t^7u^{10}w^7 + t^7u^9w^8 + 3\,t^6u^{11}w^7 + 3\,t^6u^{10}w^8 + t^5u^{11}w^8 - t^8u^{11}w^4 - t^8u^{10}w^5 - 2\,t^8u^9w^6 -$$
$$3\,t^8u^8w^7 - t^7u^{11}w^5 - 6\,t^7u^{10}w^6 - 3\,t^7u^9w^7 - 3\,t^7u^8w^8 - 6\,t^6u^{10}w^7 - 2\,t^6u^9w^8 - t^5u^{11}w^7 - t^5u^{10}w^8 - t^4u^{11}w^8 + t^8u^{11}w^3 +$$
$$t^8u^{10}w^4 + t^8u^9w^5 + 4\,t^8u^8w^6 + 4\,t^8u^7w^7 + 3\,t^7u^{11}w^4 + t^7u^{10}w^5 + 5\,t^7u^9w^6 + 8\,t^7u^8w^7 + 4\,t^7u^7w^8 - t^6u^{11}w^5 + 2\,t^6u^{10}w^6 +$$
$$5\,t^6u^9w^7 + 4\,t^6u^8w^8 - t^5u^{11}w^6 + t^5u^{10}w^7 + t^5u^9w^8 + 3\,t^4u^{11}w^7 + t^4u^{10}w^8 + t^3u^{11}w^8 - t^8u^{10}w^3 + t^8u^9w^4 - 4\,t^8u^8w^5 - 4\,t^8u^7w^6 +$$
$$t^8u^6w^7 + 2\,t^8u^5w^8 - 2\,t^7u^{11}w^3 - 2\,t^7u^{10}w^4 - t^7u^9w^5 - 8\,t^7u^8w^6 - 12\,t^7u^7w^7 + t^7u^6w^8 - t^6u^{11}w^4 + 3\,t^6u^{10}w^5 - 2\,t^6u^9w^6 -$$
$$8\,t^6u^8w^7 - 4\,t^6u^7w^8 + 2\,t^5u^{11}w^5 + 3\,t^5u^{10}w^6 - t^5u^9w^7 - 4\,t^5u^8w^8 - t^4u^{11}w^6 - 2\,t^4u^{10}w^7 + t^4u^9w^8 - 2\,t^3u^{11}w^7 - t^3u^{10}w^8 +$$
$$3\,t^8u^8w^4 + t^8u^7w^5 + t^8u^6w^6 - t^8u^5w^7 + t^8u^4w^8 + 3\,t^7u^{10}w^3 - 2\,t^7u^9w^4 + 5\,t^7u^8w^5 + 11\,t^7u^7w^6 + t^7u^6w^7 - t^7u^5w^8 - 3\,t^6u^9w^5 +$$
$$2\,t^6u^8w^6 + 11\,t^6u^7w^7 + t^6u^6w^8 - 6\,t^5u^{10}w^5 - 3\,t^5u^9w^6 + 5\,t^5u^8w^7 + t^5u^7w^8 - 2\,t^4u^9w^7 + 3\,t^4u^8w^8 + 3\,t^3u^{10}w^7 - 2\,t^8u^9w^2 -$$
$$5\,t^8u^8w^3 - 3\,t^8u^7w^4 - 2\,t^8u^6w^5 - 3\,t^8u^5w^6 - 3\,t^8u^4w^7 - 3\,t^7u^9w^3 - 8\,t^7u^8w^4 - 5\,t^7u^7w^5 - 7\,t^7u^6w^6 - 2\,t^7u^5w^7 - 3\,t^7u^4w^8 +$$
$$2\,t^6u^{11}w^2 - t^6u^{10}w^3 + 2\,t^6u^9w^4 - 7\,t^6u^7w^6 - 7\,t^6u^6w^7 - 3\,t^6u^5w^8 + t^5u^{11}w^3 + 3\,t^5u^{10}w^4 + 4\,t^5u^9w^5 - 5\,t^5u^7w^7 - 2\,t^5u^6w^8 -$$
$$2\,t^4u^{11}w^4 + 3\,t^4u^{10}w^5 + 2\,t^4u^9w^6 - 8\,t^4u^8w^7 - 3\,t^4u^7w^8 + t^3u^{11}w^5 - t^3u^{10}w^6 - 3\,t^3u^9w^7 - 5\,t^3u^8w^8 + 2\,t^2u^{11}w^6 - 2\,t^2u^9w^8 +$$
$$t^8u^9w + 4\,t^8u^8w^2 + 3\,t^8u^7w^3 - 2\,t^8u^6w^4 + 3\,t^8u^5w^5 + 4\,t^8u^4w^6 + t^8u^3w^7 - 2\,t^7u^{10}w + 3\,t^7u^9w^2 + 9\,t^7u^8w^3 + 8\,t^7u^7w^4 + t^7u^6w^5 +$$
$$9\,t^7u^5w^6 + 9\,t^7u^4w^7 + t^7u^3w^8 - t^6u^{11}w - 4\,t^6u^{10}w^2 + 2\,t^6u^9w^3 + 4\,t^6u^8w^4 - 2\,t^6u^7w^5 + 8\,t^6u^6w^6 + 9\,t^6u^5w^7 + 4\,t^6u^4w^8 -$$
$$3\,t^5u^{11}w^2 - 4\,t^5u^{10}w^3 - 3\,t^5u^9w^4 - 4\,t^5u^8w^5 - 2\,t^5u^7w^6 + t^5u^6w^7 + 3\,t^5u^5w^8 + t^4u^{11}w^3 - 2\,t^4u^{10}w^4 - 3\,t^4u^9w^5 + 4\,t^4u^8w^6 +$$
$$8\,t^4u^7w^7 - 2\,t^4u^6w^8 + t^3u^{11}w^4 - 4\,t^3u^{10}w^5 + 2\,t^3u^9w^6 + 9\,t^3u^8w^7 + 3\,t^3u^7w^8 - 3\,t^2u^{11}w^5 - 4\,t^2u^{10}w^6 + 3\,t^2u^9w^7 + 4\,t^2u^8w^8 -$$
$$tu^{11}w^6 - 2\,tu^{10}w^7 + tu^9w^8 - 3\,t^8u^8w - 3\,t^8u^7w^2 - 2\,t^8u^6w^3 - 3\,t^8u^5w^4 - 5\,t^8u^4w^5 - 2\,t^8u^3w^6 + t^7u^{10} + t^7u^9w - 8\,t^7u^8w^2 -$$
$$12\,t^7u^7w^3 + 3\,t^7u^6w^4 - 10\,t^7u^5w^5 - 13\,t^7u^4w^6 - 4\,t^7u^3w^7 + 4\,t^6u^{10}w + t^6u^9w^2 - 6\,t^6u^8w^3 - 4\,t^6u^7w^4 + t^6u^6w^5 - 11\,t^6u^5w^6 -$$
$$13\,t^6u^4w^7 - 2\,t^6u^3w^8 + t^5u^{11}w + 6\,t^5u^{10}w^2 + 2\,t^5u^9w^3 - 3\,t^5u^8w^4 + 11\,t^5u^7w^5 + t^5u^6w^6 - 10\,t^5u^5w^7 - 5\,t^5u^4w^8 + t^4u^{11}w^2 +$$
$$t^4u^{10}w^3 + 4\,t^4u^9w^4 - 3\,t^4u^8w^5 - 4\,t^4u^7w^6 + 3\,t^4u^6w^7 - 3\,t^4u^5w^8 + t^3u^{10}w^4 + 2\,t^3u^9w^5 - 6\,t^3u^8w^6 - 12\,t^3u^7w^7 - 2\,t^3u^6w^8 +$$
$$t^2u^{11}w^4 + 6\,t^2u^{10}w^5 + t^2u^9w^6 - 8\,t^2u^8w^7 - 3\,t^2u^7w^8 + tu^{11}w^5 + 4\,tu^{10}w^6 + tu^9w^7 - 3\,tu^8w^8 + u^{10}w^7 + t^8u^8 - t^8u^7w + t^8u^6w^2 +$$
$$t^8u^5w^3 + 3\,t^8u^4w^4 - t^7u^9 + 2\,t^7u^8w + 4\,t^7u^7w^2 + 4\,t^7u^6w^3 + 7\,t^7u^5w^4 + 11\,t^7u^4w^5 + 6\,t^7u^3w^6 - t^6u^{10} - 6\,t^6u^9w - 2\,t^6u^8w^2 +$$
$$6\,t^6u^7w^3 - 3\,t^6u^6w^4 + 6\,t^6u^5w^5 + 14\,t^6u^4w^6 + 6\,t^6u^3w^7 - 4\,t^5u^{10}w - 4\,t^5u^9w^2 + t^5u^8w^3 - 5\,t^5u^7w^4 - 6\,t^5u^6w^5 + 6\,t^5u^5w^6 +$$
$$11\,t^5u^4w^7 - t^4u^{11}w - 4\,t^4u^{10}w^2 - 3\,t^4u^9w^3 + 8\,t^4u^8w^4 - 5\,t^4u^7w^5 - 3\,t^4u^6w^6 + 7\,t^4u^5w^7 + 3\,t^4u^4w^8 - 3\,t^3u^{11}w^2 - 2\,t^3u^{10}w^3 -$$
$$3\,t^3u^9w^4 + t^3u^8w^5 + 6\,t^3u^7w^6 + 4\,t^3u^6w^7 + t^3u^5w^8 - 3\,t^2u^{11}w^3 - 4\,t^2u^{10}w^4 - 4\,t^2u^9w^5 - 2\,t^2u^8w^6 + 4\,t^2u^7w^7 + t^2u^6w^8 -$$
$$tu^{11}w^4 - 4\,tu^{10}w^5 - 6\,tu^9w^6 + 2\,tu^8w^7 - tu^7w^8 - u^{10}w^6 - u^9w^7 + u^8w^8 + 2\,t^8u^7 + t^8u^6w - 4\,t^8u^5w^2 - 4\,t^8u^4w^3 + t^8u^3w^4 -$$
$$t^8u^2w^5 + t^7u^8 + 5\,t^7u^7w - 2\,t^7u^6w^2 - 8\,t^7u^5w^3 - 10\,t^7u^4w^4 - t^7u^3w^5 - t^7u^2w^6 + 3\,t^6u^9 + 6\,t^6u^8w + 7\,t^6u^7w^2 - 4\,t^6u^6w^3 -$$
$$5\,t^6u^5w^4 - 7\,t^6u^4w^5 - 6\,t^6u^3w^6 - t^6u^2w^7 + t^5u^{10} + 4\,t^5u^9w + 8\,t^5u^8w^2 + 6\,t^5u^7w^3 + 7\,t^5u^6w^4 + 2\,t^5u^5w^5 - 7\,t^5u^4w^6 - t^5u^3w^7 -$$
$$t^5u^2w^8 + 4\,t^4u^{10}w + 2\,t^4u^9w^2 - 5\,t^4u^8w^3 + 2\,t^4u^7w^4 + 7\,t^4u^6w^5 - 5\,t^4u^5w^6 - 10\,t^4u^4w^7 + t^4u^3w^8 + t^3u^{11}w + 6\,t^3u^{10}w^2 +$$
$$t^3u^9w^3 - 5\,t^3u^8w^4 + 6\,t^3u^7w^5 - 4\,t^3u^6w^6 - 8\,t^3u^5w^7 - 4\,t^3u^4w^8 + 3\,t^2u^{11}w^2 + 6\,t^2u^{10}w^3 + 2\,t^2u^9w^4 + 8\,t^2u^8w^5 + 7\,t^2u^7w^6 -$$
$$2\,t^2u^6w^7 - 4\,t^2u^5w^8 + tu^{11}w^3 + 4\,tu^{10}w^4 + 4\,tu^9w^5 + 6\,tu^8w^6 + 5\,tu^7w^7 + tu^6w^8 + u^{10}w^5 + 3\,u^9w^6 + u^8w^7 + 2\,u^7w^8 + 4\,t^8u^5w +$$

$4\,t^8u^4w^2+t^8u^3w^3+t^8u^2w^4+t^8uw^5-3\,t^7u^7-6\,t^7u^6w+11\,t^7u^5w^2+13\,t^7u^4w^3+3\,t^7u^2w^5+2\,t^7uw^6-2\,t^6u^8-11\,t^6u^7w-$
$4\,t^6u^6w^2+10\,t^6u^5w^3+8\,t^6u^4w^4+2\,t^6u^3w^5+3\,t^6u^2w^6+2\,t^6uw^7-t^5u^9-5\,t^5u^8w-14\,t^5u^7w^2-3\,t^5u^6w^3+6\,t^5u^5w^4-$
$2\,t^5u^4w^5+2\,t^5u^3w^6+3\,t^5u^2w^7+t^5uw^8-t^4u^{10}-2\,t^4u^9w+t^4u^7w^3-10\,t^4u^6w^4+6\,t^4u^5w^5+8\,t^4u^4w^6+t^4u^2w^8-4\,t^3u^{10}w-$
$2\,t^3u^9w^2+6\,t^3u^8w^3+t^3u^7w^4-3\,t^3u^6w^5+10\,t^3u^5w^6+13\,t^3u^4w^7+t^3u^3w^8-t^2u^{11}w-6\,t^2u^{10}w^2-2\,t^2u^9w^3-14\,t^2u^7w^5-$
$4\,t^2u^6w^6+11\,t^2u^5w^7+4\,t^2u^4w^8-tu^{11}w^2-4\,tu^{10}w^3-2\,tu^9w^4-5\,tu^8w^5-11\,tu^7w^6-6\,tu^6w^7+4\,tu^5w^8-u^{10}w^4-u^9w^5-$
$2\,u^8w^6-3\,u^7w^7-3\,t^8u^4w-2\,t^8u^3w^2-t^8u^2w^3-t^8uw^4+4\,t^7u^6-6\,t^7u^5w-11\,t^7u^4w^2-5\,t^7u^3w^3-2\,t^7u^2w^4-4\,t^7uw^5-t^7w^6+$
$4\,t^6u^7+11\,t^6u^6w-4\,t^6u^5w^2-14\,t^6u^4w^3-2\,t^6u^2w^5-6\,t^6uw^6-t^6w^7+t^5u^8+13\,t^5u^7w+10\,t^5u^6w^2-3\,t^5u^5w^3+t^5u^4w^4+$
$6\,t^5u^3w^5-2\,t^5u^2w^6-4\,t^5uw^7+t^4u^9+8\,t^4u^7w^2+6\,t^4u^6w^3-10\,t^4u^5w^4+t^4u^4w^5-2\,t^4u^2w^7-t^4uw^8+t^3u^{10}+3\,t^3u^9w+$
$2\,t^3u^8w^2-2\,t^3u^7w^3+6\,t^3u^6w^4-3\,t^3u^5w^5-14\,t^3u^4w^6-5\,t^3u^3w^7-t^3u^2w^8+2\,t^2u^{10}w+3\,t^2u^9w^2+2\,t^2u^8w^3+8\,t^2u^7w^4+$
$10\,t^2u^6w^5-4\,t^2u^5w^6-11\,t^2u^4w^7-2\,t^2u^3w^8+2\,tu^{10}w^2+3\,tu^9w^3+13\,tu^7w^5+11\,tu^6w^6-6\,tu^5w^7-3\,tu^4w^8+u^{10}w^3+u^9w^4+$
$u^8w^5+4\,u^7w^6+4\,u^6w^7+2\,t^8u^4+t^8u^3w+3\,t^8u^2w^2+t^8uw^3+t^7u^5+5\,t^7u^4w+6\,t^7u^3w^2+4\,t^7u^2w^3+4\,t^7uw^4+t^7w^5-4\,t^6u^6-$
$2\,t^6u^5w+7\,t^6u^4w^2+8\,t^6u^3w^3+2\,t^6u^2w^4+6\,t^6uw^5+3\,t^6w^6-4\,t^5u^7-8\,t^5u^6w-4\,t^5u^5w^2+6\,t^5u^4w^3-5\,t^5u^3w^4+t^5u^2w^5+$
$6\,t^5uw^6+t^5w^7+t^4u^8-10\,t^4u^7w-5\,t^4u^6w^2+7\,t^4u^5w^3+2\,t^4u^4w^4-5\,t^4u^3w^5+2\,t^4u^2w^6+4\,t^4uw^7-t^3u^9-t^3u^8w-7\,t^3u^7w^2+$
$2\,t^3u^6w^3+7\,t^3u^5w^4+6\,t^3u^4w^5+8\,t^3u^3w^6+4\,t^3u^2w^7+t^3uw^8-t^2u^9w-6\,t^2u^8w^2-7\,t^2u^7w^3-5\,t^2u^6w^4-4\,t^2u^5w^5+$
$7\,t^2u^4w^6+6\,t^2u^3w^7+3\,t^2u^2w^8-tu^9w^2-tu^8w^3-10\,tu^7w^4-8\,tu^6w^5-2\,tu^5w^6+5\,tu^4w^7+tu^3w^8-u^9w^3+u^8w^4-4\,u^7w^5-$
$4\,u^6w^6+u^5w^7+2\,u^4w^8+t^8u^3-t^8u^2w-t^8uw^2-t^7u^4+2\,t^7u^3w-6\,t^7u^2w^2-4\,t^7uw^3-t^7w^4+t^6u^5+4\,t^6u^4w-2\,t^6u^3w^2-$
$4\,t^6u^2w^3-4\,t^6uw^4-3\,t^6w^5+t^5u^6+4\,t^5u^5w+6\,t^5u^4w^2+t^5u^3w^3-3\,t^5u^2w^4-2\,t^5uw^5-3\,t^5w^6+3\,t^4u^7+7\,t^4u^6w-3\,t^4u^5w^2-$
$5\,t^4u^4w^3+8\,t^4u^3w^4-3\,t^4u^2w^5-4\,t^4uw^6-t^4w^7+11\,t^3u^7w+6\,t^3u^6w^2-6\,t^3u^5w^3-5\,t^3u^4w^4+t^3u^3w^5-4\,t^3u^2w^6-4\,t^3uw^7+$
$6\,t^2u^8w+14\,t^2u^7w^2+6\,t^2u^6w^3-3\,t^2u^5w^4+6\,t^2u^4w^5-2\,t^2u^3w^6-6\,t^2u^2w^7-t^2uw^8+6\,tu^8w^2+11\,tu^7w^3+7\,tu^6w^4+$
$4\,tu^5w^5+4\,tu^4w^6+2\,tu^3w^7-tu^2w^8+3\,u^7w^4+u^6w^5+u^5w^6-u^4w^7+u^3w^8+t^8uw-3\,t^7u^3+t^7u^2w+4\,t^7uw^2+t^7w^3-3\,t^6u^4-$
$8\,t^6u^3w+t^6u^2w^2+6\,t^6uw^3+t^6w^4-2\,t^5u^5-12\,t^5u^4w-6\,t^5u^3w^2+2\,t^5u^2w^3+t^5uw^4-3\,t^4u^6+3\,t^4u^5w-4\,t^4u^4w^2-3\,t^4u^3w^3+$
$4\,t^4u^2w^4+t^4uw^5+t^4w^6-5\,t^3u^7-10\,t^3u^6w+t^3u^5w^2+11\,t^3u^4w^3-3\,t^3u^3w^4+2\,t^3u^2w^5+6\,t^3uw^6+t^3w^7-2\,t^2u^8-13\,t^2u^7w-$
$11\,t^2u^6w^2+t^2u^5w^3-4\,t^2u^4w^4-6\,t^2u^3w^5+t^2u^2w^6+4\,t^2uw^7-4\,tu^8w-13\,tu^7w^2-10\,tu^6w^3+3\,tu^5w^4-12\,tu^4w^5-8\,tu^3w^6+$
$tu^2w^7+tuw^8-2\,u^8w^2-5\,u^7w^3-3\,u^6w^4-2\,u^5w^5-3\,u^4w^6-3\,u^3w^7+t^7u^2-2\,t^7uw-t^7w^2+4\,t^6u^3+3\,t^6u^2w-4\,t^6uw^2-$
$3\,t^6w^3+3\,t^5u^4+9\,t^5u^3w+2\,t^5u^2w^2-4\,t^5uw^3+t^5w^4-2\,t^4u^5+8\,t^4u^4w+4\,t^4u^3w^2-3\,t^4u^2w^3-2\,t^4uw^4+t^4w^5+3\,t^3u^6+$
$t^3u^5w-2\,t^3u^4w^2-4\,t^3u^3w^3-3\,t^3u^2w^4-4\,t^3uw^5-3\,t^3w^6+4\,t^2u^7+9\,t^2u^6w+8\,t^2u^5w^2-2\,t^2u^4w^3+4\,t^2u^3w^4+2\,t^2u^2w^5-$
$4\,t^2uw^6-t^2w^7+tu^8+9\,tu^7w+9\,tu^6w^2+tu^5w^3+8\,tu^4w^4+9\,tu^3w^5+3\,tu^2w^6-2\,tuw^7+u^8w+4\,u^7w^2+3\,u^6w^3-2\,u^5w^4+$
$3\,u^4w^5+4\,u^3w^6+u^2w^7-2\,t^6u^2+2\,t^6w^2-5\,t^5u^3-3\,t^5u^2w-t^5uw^2+t^5w^3-3\,t^4u^4-8\,t^4u^3w+2\,t^4u^2w^2+3\,t^4uw^3-2\,t^4w^4-$
$2\,t^3u^5-5\,t^3u^4w+4\,t^3u^2w^3+3\,t^3uw^4+t^3w^5-3\,t^2u^6-7\,t^2u^5w-7\,t^2u^4w^2+2\,t^2u^2w^4-t^2uw^5+2\,t^2w^6-3\,tu^7-2\,tu^6w-$
$7\,tu^5w^2-5\,tu^4w^3-8\,tu^3w^4-3\,tu^2w^5-3\,u^7w-3\,u^6w^2-2\,u^5w^3-3\,u^4w^4-5\,u^3w^5-2\,u^2w^6+3\,t^5uw+3\,t^4u^3-2\,t^4u^2w+t^3u^4+$
$5\,t^3u^3w-3\,t^3u^2w^2-6\,t^3uw^3+t^2u^5+11\,t^2u^4w+2\,t^2u^3w^2-3\,t^2u^2w^3-tu^6+tu^5w+11\,tu^4w^2+5\,tu^3w^3-2\,tu^2w^4+3\,tuw^5+$
$u^7-u^6w+u^5w^2+u^4w^3+3\,u^3w^4-t^5u-2\,t^5w+t^4u^2-2\,t^4uw-t^4w^2-4\,t^3u^3-t^3u^2w+3\,t^3uw^2+2\,t^3w^3-4\,t^2u^4-8\,t^2u^3w-$
$2\,t^2u^2w^2+3\,t^2uw^3-t^2w^4+tu^5-12\,tu^4w-8\,tu^3w^2-tu^2w^3-2\,tuw^4-2\,tw^5+2\,u^6+u^5w-4\,u^4w^2-4\,u^3w^3+u^2w^4-uw^5+$
$t^5+t^4u+3\,t^4w+t^3u^2+t^3uw-t^3w^2+4\,t^2u^3+5\,t^2u^2w+2\,t^2uw^2-t^2w^3+4\,tu^4+8\,tu^3w+5\,tu^2w^2+tuw^3+3\,tw^4+4\,u^4w+$
$4\,u^3w^2+u^2w^3+uw^4+w^5-t^4-t^3u-t^3w-2\,t^2u^2-6\,t^2uw-3\,tu^3-3\,tu^2w-6\,tuw^2-tw^3-3\,u^3w-2\,u^2w^2-uw^3-w^4+$
$t^3+3\,t^2u+3\,t^2w+tu^2+6\,tuw+3\,tw^2+2\,u^3+u^2w+3\,uw^2+w^3-t^2-tu-3\,tw+u^2-uw-w^2+t+w)\,(u+1)^3\,(w+1)^2\,(t+1)^2$

$N_{II}(t,\,u,\,w)_4\;=\;-(t^6u^{10}w^4+2\,t^6u^9w^5+3\,t^6u^8w^6+t^5u^{10}w^5+2\,t^5u^9w^6+t^4u^{10}w^6+t^6u^9w^4+2\,t^6u^8w^5+2\,t^6u^7w^6+$
$t^5u^{10}w^4+2\,t^5u^9w^5+2\,t^5u^8w^6+t^4u^{10}w^5+t^4u^9w^6-2\,t^6u^8w^4+3\,t^6u^7w^5+2\,t^6u^6w^6+t^5u^9w^4+4\,t^5u^8w^5+3\,t^5u^7w^6-$
$t^4u^{10}w^4+t^4u^9w^5-2\,t^4u^8w^6+t^6u^7w^4+3\,t^6u^6w^5+2\,t^6u^5w^6+2\,t^5u^8w^4+4\,t^5u^7w^5+3\,t^5u^6w^6+2\,t^4u^9w^4+2\,t^4u^8w^5+$
$t^4u^7w^6-2\,t^6u^7w^3+3\,t^6u^5w^5+3\,t^6u^4w^6-t^5u^8w^3-2\,t^5u^7w^4+3\,t^5u^6w^5+3\,t^5u^5w^6+4\,t^4u^8w^4-2\,t^4u^7w^5+t^3u^{10}w^3-$
$t^3u^8w^5-2\,t^3u^7w^6-7\,t^6u^7w^2-10\,t^6u^6w^3-6\,t^6u^5w^4-t^6u^4w^5-5\,t^5u^8w^2-8\,t^5u^7w^3-9\,t^5u^6w^4-2\,t^5u^5w^5-t^5u^4w^6-$
$3\,t^4u^9w^2-5\,t^4u^8w^3-10\,t^4u^7w^4-9\,t^4u^6w^5-6\,t^4u^5w^6-t^3u^{10}w^2-2\,t^3u^9w^3-5\,t^3u^8w^4-8\,t^3u^7w^5-10\,t^3u^6w^6-t^2u^{10}w^3-$
$3\,t^2u^9w^4-5\,t^2u^8w^5-7\,t^2u^7w^6-t^6u^7w-6\,t^6u^6w^2-10\,t^6u^5w^3-7\,t^6u^4w^4-t^5u^8w-6\,t^5u^7w^2-11\,t^5u^6w^3-7\,t^5u^5w^4-$
$t^4u^9w-4\,t^4u^8w^2-6\,t^4u^7w^3-10\,t^4u^6w^4-7\,t^4u^5w^5-7\,t^4u^4w^6-t^3u^{10}w-2\,t^3u^9w^2-6\,t^3u^8w^3-6\,t^3u^7w^4-11\,t^3u^6w^5-$
$10\,t^3u^5w^6-t^2u^{10}w^2-2\,t^2u^9w^3-4\,t^2u^8w^4-6\,t^2u^7w^5-6\,t^2u^6w^6-tu^{10}w^3-tu^9w^4-tu^8w^5-tu^7w^6+3\,t^6u^7+3\,t^6u^6w-$
$2\,t^6u^4w^3+2\,t^5u^8+2\,t^5u^7w-3\,t^5u^6w^2-6\,t^5u^5w^3+2\,t^5u^4w^4+t^4u^9+t^4u^8w+8\,t^4u^7w^2+9\,t^4u^6w^3+10\,t^4u^5w^4+2\,t^4u^4w^5+$
$3\,t^3u^8w^2+4\,t^3u^7w^3+9\,t^3u^6w^4-6\,t^3u^5w^5-2\,t^3u^4w^6+3\,t^2u^8w^3+8\,t^2u^7w^4-3\,t^2u^6w^5+tu^8w^4+2\,tu^7w^5+3\,tu^6w^6+u^9w^4+$
$2\,u^8w^5+3\,u^7w^6+2\,t^6u^6+3\,t^6u^5w+t^6u^4w^2+2\,t^5u^7+3\,t^5u^6w-t^5u^5w^2-2\,t^5u^4w^3+t^4u^8+4\,t^4u^7w+6\,t^4u^6w^2+12\,t^4u^5w^3+$
$13\,t^4u^4w^4+3\,t^3u^8w+8\,t^3u^7w^2+17\,t^3u^6w^3+12\,t^3u^5w^4-2\,t^3u^4w^5+3\,t^2u^8w^2+8\,t^2u^7w^3+6\,t^2u^6w^4-t^2u^5w^5+t^2u^4w^6+$
$3\,tu^8w^3+4\,tu^7w^4+3\,tu^6w^5+3\,tu^5w^6+u^8w^4+2\,u^7w^5+2\,u^6w^6+2\,t^6u^5+3\,t^6u^4w-2\,t^6u^3w^2+3\,t^5u^6+4\,t^5u^5w-t^5u^4w^2+$
$2\,t^5u^3w^3-2\,t^4u^7-t^4u^6w-2\,t^4u^5w^2+6\,t^4u^4w^3+2\,t^4u^3w^4+2\,t^3u^7w+6\,t^3u^6w^2+20\,t^3u^5w^3+6\,t^3u^4w^4+2\,t^3u^3w^5+$
$2\,t^2u^7w^2+6\,t^2u^6w^3-2\,t^2u^5w^4-t^2u^4w^5-2\,t^2u^3w^6+2\,tu^7w^3-tu^6w^4+4\,tu^5w^5+3\,tu^4w^6-2\,u^7w^4+3\,u^6w^5+2\,u^5w^6+$
$2\,t^6u^4+2\,t^6u^3w+t^6u^2w^2+3\,t^5u^5+3\,t^5u^4w+4\,t^5u^3w^2+3\,t^5u^2w^3+t^4u^6-t^4u^5w+6\,t^4u^4w^2+8\,t^4u^3w^3+3\,t^4u^2w^4-$
$2\,t^3u^6w+12\,t^3u^5w^2+17\,t^3u^4w^3+8\,t^3u^3w^4+3\,t^3u^2w^5+13\,t^2u^6w^2+12\,t^2u^5w^3+6\,t^2u^4w^4+4\,t^2u^3w^5+t^2u^2w^6-2\,tu^6w^3-$
$tu^5w^4+3\,tu^4w^5+2\,tu^3w^6+u^6w^4+3\,u^5w^5+2\,u^4w^6+3\,t^6u^3+2\,t^6u^2w+t^6uw^2+3\,t^5u^4+2\,t^5u^3w+t^5u^2w^2-3\,t^4u^4w+$
$8\,t^4u^3w^2+3\,t^4u^2w^3-2\,t^3u^6-6\,t^3u^5w+9\,t^3u^4w^2+4\,t^3u^3w^3+3\,t^3u^2w^4+2\,t^2u^6w+10\,t^2u^5w^2+9\,t^2u^4w^3+8\,t^2u^3w^4+$
$t^2u^2w^5+t^2uw^6+2\,tu^6w^2-6\,tu^5w^3-3\,tu^4w^4+2\,tu^3w^5+2\,tu^2w^6-2\,u^6w^3+3\,u^4w^5+3\,u^3w^6-t^5u^3-t^5u^2w-t^5uw^2-t^5w^3-$
$6\,t^4u^4-6\,t^4u^3w-4\,t^4u^2w^2-2\,t^4uw^3-t^4w^4-10\,t^3u^5-11\,t^3u^4w-6\,t^3u^3w^2-6\,t^3u^2w^3-2\,t^3uw^4-t^3w^5-7\,t^2u^6-7\,t^2u^5w-$
$10\,t^2u^4w^2-6\,t^2u^3w^3-4\,t^2u^2w^4-t^2uw^5-7\,tu^5w^2-11\,tu^4w^3-6\,tu^3w^4-tu^2w^5-7\,u^6w^2-10\,u^5w^3-6\,u^4w^4-u^3w^5-$
$7\,t^4u^3-5\,t^4u^2w-3\,t^4uw^2-t^4w^3-10\,t^3u^4-8\,t^3u^3w-5\,t^3u^2w^2-2\,t^3uw^3-t^3w^4-6\,t^2u^5-9\,t^2u^4w-10\,t^2u^3w^2-5\,t^2u^2w^3-$
$3\,t^2uw^4-tu^6-2\,tu^5w-9\,tu^4w^2-8\,tu^3w^3-5\,tu^2w^4-u^6w-6\,u^5w^2-10\,u^4w^3-7\,u^3w^4-2\,t^3u^3-t^3u^2w+t^3w^3-2\,t^2u^3w+$

$4\,t^2u^2w^2+3\,tu^5+3\,tu^4w-2\,tu^3w^2-tu^2w^3+3\,u^6+3\,u^5w-2\,u^3w^3+t^2u^3+2\,t^2u^2w+2\,t^2uw^2+3\,tu^4+4\,tu^3w+2\,tu^2w^2+$
$2\,u^5+3\,u^4w+u^3w^2-2\,t^2u^2+t^2uw-t^2w^2+3\,tu^3+4\,tu^2w+tuw^2+2\,u^4+3\,u^3w-2\,u^2w^2+t^2u+t^2w+2\,tu^2+2\,tuw+tw^2+$
$2\,u^3+2\,u^2w+uw^2+t^2+2\,tu+tw+3\,u^2+2\,uw+w^2)\left(w^4+w^3+w^2+w+1\right)\left(u^4+u^3+u^2+u+1\right)\left(t^4+t^3+t^2+t+1\right)$