

Here is the list of the polynomials that appeared in recurrence (3-8).

$$\begin{aligned}
p_0(n) = & -32(n+1)(n+2)(n+3)(2n+1)(188190n^{12} + 9033120n^{11} + 196636077n^{10} \\
& + 2566037664n^9 + 22348696113n^8 + 136791233640n^7 + 603010089167n^6 \\
& + 1927684790736n^5 + 4431569315045n^4 + 7137840911112n^3 \\
& + 7636521367520n^2 + 4865003749056n + 1392924147120),
\end{aligned}$$

$$\begin{aligned}
p_1(n) = & -16(n+2)(n+3)(1317330n^{14} + 65866500n^{13} + 1503857169n^{12} \\
& + 20760892182n^{11} + 193371382152n^{10} + 1283668382640n^9 \\
& + 6252417962213n^8 + 22652074875974n^7 + 61181104559648n^6 \\
& + 122185617069632n^5 + 176840932132448n^4 + 178788780818528n^3 \\
& + 118323932418432n^2 + 45249770219904n + 7356872337408),
\end{aligned}$$

$$\begin{aligned}
p_2(n) = & -8(n+3)(2634660n^{15} + 138319650n^{14} + 3337046838n^{13} + 49041351981n^{12} \\
& + 490558688334n^{11} + 3534403075749n^{10} + 18925445426578n^9 \\
& + 76582421317555n^8 + 235702562060454n^7 + 550556663096637n^6 \\
& + 965306173020288n^5 + 1242997361826972n^4 + 1132032127856288n^3 \\
& + 683206915638848n^2 + 241422852044352n + 36863441565696)
\end{aligned}$$

$$\begin{aligned}
p_3(n) = & 12796920n^{16} + 716627520n^{15} + 18563791716n^{14} + 295112721744n^{13} \\
& + 3220359021324n^{12} + 25558279911144n^{11} + 152466165457756n^{10} \\
& + 69659758889664n^9 + 2460180175868028n^8 + 6727570305322824n^7 \\
& + 14168212166929344n^6 + 22677495644946432n^5 + 26948897666807936n^4 \\
& + 22874101894200448n^3 + 12986387671524864n^2 + 4357597993118208n \\
& + 638687524773888,
\end{aligned}$$

$$\begin{aligned}
p_4(n) = & -8(n+4)(1317330n^{15} + 69159825n^{14} + 1668711609n^{13} \\
& + 24528733875n^{12} + 245436269184n^{11} + 1769040206838n^{10} \\
& + 9477163733840n^9 + 38371342771608n^8 + 118173657708438n^7 \\
& + 276227303311749n^6 + 484688723347467n^5 + 624625431804273n^4 \\
& + 569337448915012n^3 + 343895161638696n^2 + 121621993180992n \\
& + 18586579657104),
\end{aligned}$$

$$\begin{aligned}
p_5(n) = & 4(n+4)(n+5)(1317330n^{14} + 63231840n^{13} + 1384074234n^{12} + 18296400375n^{11} \\
& + 163026294858n^{10} + 1034562798552n^9 + 4815246657374n^8 \\
& + 16669829803063n^7 + 43039009226144n^6 + 82236944277106n^5 \\
& + 114039899423372n^4 + 110702924553784n^3 + 70554744207312n^2 \\
& + 26093788468416n + 4129721936640),
\end{aligned}$$

$$\begin{aligned} p_6(n) = & -2(n+4)(n+5)(n+6)(752760n^{13} + 31992300n^{12} + 614915028n^{11} \\ & + 7072175655n^{10} + 54248839002n^9 + 292721588649n^8 \\ & + 1141262961932n^7 + 3248405599701n^6 + 6731284085834n^5 \\ & + 9991172562507n^4 + 10269147791108n^3 + 6865066373604n^2 \\ & + 2640183959808n + 430545736512), \end{aligned}$$

$$\begin{aligned} p_7(n) = & (n+4)(n+5)(n+6)(n+7)(188190n^{12} + 6774840n^{11} + 109692297n^{10} \\ & + 1055096694n^9 + 6705669852n^8 + 29614574520n^7 + 92981943365n^6 \\ & + 208505889066n^5 + 330097304336n^4 + 357775867560n^3 + 249852405824n^2 \\ & + 99544056672n + 16674683904). \end{aligned}$$