Multi-headed Lattice Green Function (N = 4, M = 2)

REC for $r_{2,4}(n)$ in Theorem 6.1

Out[•]=

$$(287\,649\,792 + 787\,304\,448\,\alpha + 833\,891\,328\,\alpha^2 + 441\,427\,968\,\alpha^3 + 123\,641\,856\,\alpha^4 + 17\,418\,240\,\alpha^5 + 967\,680\,\alpha^6)\,\mathrm{Seq}[\alpha] + (708\,258\,816 + 1\,417\,457\,664\,\alpha + 1\,162\,038\,528\,\alpha^2 + 498\,714\,624\,\alpha^3 + 117\,891\,072\,\alpha^4 + 14\,515\,200\,\alpha^5 + 725\,760\,\alpha^6)\,\mathrm{Seq}[1+\alpha] + (379\,157\,760 + 643\,100\,256\,\alpha + 452\,539\,152\,\alpha^2 + 168\,897\,600\,\alpha^3 + 35\,209\,440\,\alpha^4 + 3\,880\,800\,\alpha^5 + 176\,400\,\alpha^6)\,\mathrm{Seq}[2+\alpha] + (55\,519\,056 + 84\,088\,296\,\alpha + 52\,997\,120\,\alpha^2 + 17\,786\,040\,\alpha^3 + 3\,351\,200\,\alpha^4 + 336\,000\,\alpha^5 + 14\,000\,\alpha^6)\,\mathrm{Seq}[3+\alpha] + (-638\,976 - 904\,864\,\alpha - 533\,288\,\alpha^2 - 167\,156\,\alpha^3 - 29\,341\,\alpha^4 - 2730\,\alpha^5 - 105\,\alpha^6)\,\mathrm{Seq}[4+\alpha] + (-345\,000 - 451\,000\,\alpha - 244\,675\,\alpha^2 - 70\,540\,\alpha^3 - 11\,402\,\alpha^4 - 980\,\alpha^5 - 35\,\alpha^6)\,\mathrm{Seq}[5+\alpha]$$