

For $i = 0, 1 \dots 27$

$$\begin{aligned}
[a_0, a_1, U(5.7, a_1, a_0, 1.919), U(5.7, a_1, a_0, 1.95)] &= [4.10600, 4.10607, -4991.700235, -7.323938042 \cdot 10^5] \\
[a_1, a_2, U(5.7, a_2, a_1, 1.919), U(5.7, a_2, a_1, 1.95)] &= [4.10607, 4.10614, -4852.023483, -7.323021661 \cdot 10^5] \\
[a_2, a_3, U(5.7, a_3, a_2, 1.919), U(5.7, a_3, a_2, 1.95)] &= [4.10614, 4.10621, -4712.354553, -7.322105387 \cdot 10^5] \\
[a_3, a_4, U(5.7, a_4, a_3, 1.919), U(5.7, a_4, a_3, 1.95)] &= [4.10621, 4.10629, -4572.693445, -7.321189220 \cdot 10^5] \\
[a_4, a_5, U(5.7, a_5, a_4, 1.919), U(5.7, a_5, a_4, 1.95)] &= [4.10629, 4.10636, -4433.040160, -7.320273159 \cdot 10^5] \\
[a_5, a_6, U(5.7, a_6, a_5, 1.919), U(5.7, a_6, a_5, 1.95)] &= [4.10636, 4.10643, -4293.394697, -7.319357206 \cdot 10^5] \\
[a_6, a_7, U(5.7, a_7, a_6, 1.919), U(5.7, a_7, a_6, 1.95)] &= [4.10643, 4.10650, -4153.757057, -7.318441359 \cdot 10^5] \\
[a_7, a_8, U(5.7, a_8, a_7, 1.919), U(5.7, a_8, a_7, 1.95)] &= [4.10650, 4.10657, -4014.127240, -7.317525619 \cdot 10^5] \\
[a_8, a_9, U(5.7, a_9, a_8, 1.919), U(5.7, a_9, a_8, 1.95)] &= [4.10657, 4.10664, -3874.505247, -7.316609987 \cdot 10^5] \\
[a_9, a_{10}, U(5.7, a_{10}, a_9, 1.919), U(5.7, a_{10}, a_9, 1.95)] &= [4.10664, 4.10671, -3734.891076, -7.315694461 \cdot 10^5] \\
[a_{10}, a_{11}, U(5.7, a_{11}, a_{10}, 1.919), U(5.7, a_{11}, a_{10}, 1.95)] &= [4.10671, 4.10679, -3595.284730, -7.314779042 \cdot 10^5] \\
[a_{11}, a_{12}, U(5.7, a_{12}, a_{11}, 1.919), U(5.7, a_{12}, a_{11}, 1.95)] &= [4.10679, 4.10686, -3455.686207, -7.313863730 \cdot 10^5] \\
[a_{12}, a_{13}, U(5.7, a_{13}, a_{12}, 1.919), U(5.7, a_{13}, a_{12}, 1.95)] &= [4.10686, 4.10693, -3316.095508, -7.312948525 \cdot 10^5] \\
[a_{13}, a_{14}, U(5.7, a_{14}, a_{13}, 1.919), U(5.7, a_{14}, a_{13}, 1.95)] &= [4.10693, 4.10700, -3176.512633, -7.312033427 \cdot 10^5] \\
[a_{14}, a_{15}, U(5.7, a_{15}, a_{14}, 1.919), U(5.7, a_{15}, a_{14}, 1.95)] &= [4.10700, 4.10707, -3036.937583, -7.311118436 \cdot 10^5] \\
[a_{15}, a_{16}, U(5.7, a_{16}, a_{15}, 1.919), U(5.7, a_{16}, a_{15}, 1.95)] &= [4.10707, 4.10714, -2897.370357, -7.310203551 \cdot 10^5] \\
[a_{16}, a_{17}, U(5.7, a_{17}, a_{16}, 1.919), U(5.7, a_{17}, a_{16}, 1.95)] &= [4.10714, 4.10721, -2757.810956, -7.309288774 \cdot 10^5] \\
[a_{17}, a_{18}, U(5.7, a_{18}, a_{17}, 1.919), U(5.7, a_{18}, a_{17}, 1.95)] &= [4.10721, 4.10729, -2618.259379, -7.308374104 \cdot 10^5] \\
[a_{18}, a_{19}, U(5.7, a_{19}, a_{18}, 1.919), U(5.7, a_{19}, a_{18}, 1.95)] &= [4.10729, 4.10736, -2478.715628, -7.307459541 \cdot 10^5] \\
[a_{19}, a_{20}, U(5.7, a_{20}, a_{19}, 1.919), U(5.7, a_{20}, a_{19}, 1.95)] &= [4.10736, 4.10743, -2339.179702, -7.306545084 \cdot 10^5] \\
[a_{20}, a_{21}, U(5.7, a_{21}, a_{20}, 1.919), U(5.7, a_{21}, a_{20}, 1.95)] &= [4.10743, 4.10750, -2199.651601, -7.305630735 \cdot 10^5] \\
[a_{21}, a_{22}, U(5.7, a_{22}, a_{21}, 1.919), U(5.7, a_{22}, a_{21}, 1.95)] &= [4.10750, 4.10757, -2060.131326, -7.304716492 \cdot 10^5] \\
[a_{22}, a_{23}, U(5.7, a_{23}, a_{22}, 1.919), U(5.7, a_{23}, a_{22}, 1.95)] &= [4.10757, 4.10764, -1920.618876, -7.303802357 \cdot 10^5] \\
[a_{23}, a_{24}, U(5.7, a_{24}, a_{23}, 1.919), U(5.7, a_{24}, a_{23}, 1.95)] &= [4.10764, 4.10771, -1781.114253, -7.302888329 \cdot 10^5] \\
[a_{24}, a_{25}, U(5.7, a_{25}, a_{24}, 1.919), U(5.7, a_{25}, a_{24}, 1.95)] &= [4.10771, 4.10779, -1641.617455, -7.301974407 \cdot 10^5] \\
[a_{25}, a_{26}, U(5.7, a_{26}, a_{25}, 1.919), U(5.7, a_{26}, a_{25}, 1.95)] &= [4.10779, 4.10786, -1502.128484, -7.301060593 \cdot 10^5] \\
[a_{26}, a_{27}, U(5.7, a_{27}, a_{26}, 1.919), U(5.7, a_{27}, a_{26}, 1.95)] &= [4.10786, 4.10793, -1362.647340, -7.300146885 \cdot 10^5] \\
[a_{27}, a_{28}, U(5.7, a_{28}, a_{27}, 1.919), U(5.7, a_{28}, a_{27}, 1.95)] &= [4.10793, 4.10800, -1223.174022, -7.299233284 \cdot 10^5]
\end{aligned}$$

For $i = 28, 29 \dots 52$

$$\begin{aligned}
[a_{28}, a_{29}, U(5.5, a_{29}, a_{28}, 1.919), U(5.5, a_{29}, a_{28}, 1.95)] &= [4.10800, 4.10864, -63435.76510, -7.718190094 \cdot 10^5] \\
[a_{29}, a_{30}, U(5.5, a_{30}, a_{29}, 1.919), U(5.5, a_{30}, a_{29}, 1.95)] &= [4.10864, 4.10928, -62335.60754, -7.711423801 \cdot 10^5] \\
[a_{30}, a_{31}, U(5.5, a_{31}, a_{30}, 1.919), U(5.5, a_{31}, a_{30}, 1.95)] &= [4.10928, 4.10992, -61235.86024, -7.704663885 \cdot 10^5] \\
[a_{31}, a_{32}, U(5.5, a_{32}, a_{31}, 1.919), U(5.5, a_{32}, a_{31}, 1.95)] &= [4.10992, 4.11056, -60136.52319, -7.697910346 \cdot 10^5] \\
[a_{32}, a_{33}, U(5.5, a_{33}, a_{32}, 1.919), U(5.5, a_{33}, a_{32}, 1.95)] &= [4.11056, 4.11120, -59037.59639, -7.691163187 \cdot 10^5] \\
[a_{33}, a_{34}, U(5.5, a_{34}, a_{33}, 1.919), U(5.5, a_{34}, a_{33}, 1.95)] &= [4.11120, 4.11184, -57939.07986, -7.684422408 \cdot 10^5] \\
[a_{34}, a_{35}, U(5.5, a_{35}, a_{34}, 1.919), U(5.5, a_{35}, a_{34}, 1.95)] &= [4.11184, 4.11248, -56840.97358, -7.677688010 \cdot 10^5] \\
[a_{35}, a_{36}, U(5.5, a_{36}, a_{35}, 1.919), U(5.5, a_{36}, a_{35}, 1.95)] &= [4.11248, 4.11312, -55743.27757, -7.670959994 \cdot 10^5] \\
[a_{36}, a_{37}, U(5.5, a_{37}, a_{36}, 1.919), U(5.5, a_{37}, a_{36}, 1.95)] &= [4.11312, 4.11376, -54645.99183, -7.664238361 \cdot 10^5] \\
[a_{37}, a_{38}, U(5.5, a_{38}, a_{37}, 1.919), U(5.5, a_{38}, a_{37}, 1.95)] &= [4.11376, 4.11440, -53549.11634, -7.657523112 \cdot 10^5] \\
[a_{38}, a_{39}, U(5.5, a_{39}, a_{38}, 1.919), U(5.5, a_{39}, a_{38}, 1.95)] &= [4.11440, 4.11504, -52452.65112, -7.650814247 \cdot 10^5] \\
[a_{39}, a_{40}, U(5.5, a_{40}, a_{39}, 1.919), U(5.5, a_{40}, a_{39}, 1.95)] &= [4.11504, 4.11568, -51356.59616, -7.644111769 \cdot 10^5] \\
[a_{40}, a_{41}, U(5.5, a_{41}, a_{40}, 1.919), U(5.5, a_{41}, a_{40}, 1.95)] &= [4.11568, 4.11632, -50260.95146, -7.637415677 \cdot 10^5] \\
[a_{41}, a_{42}, U(5.5, a_{42}, a_{41}, 1.919), U(5.5, a_{42}, a_{41}, 1.95)] &= [4.11632, 4.11696, -49165.71702, -7.630725973 \cdot 10^5] \\
[a_{42}, a_{43}, U(5.5, a_{43}, a_{42}, 1.919), U(5.5, a_{43}, a_{42}, 1.95)] &= [4.11696, 4.11760, -48070.89284, -7.624042658 \cdot 10^5] \\
[a_{43}, a_{44}, U(5.5, a_{44}, a_{43}, 1.919), U(5.5, a_{44}, a_{43}, 1.95)] &= [4.11760, 4.11824, -46976.47890, -7.617365732 \cdot 10^5] \\
[a_{44}, a_{45}, U(5.5, a_{45}, a_{44}, 1.919), U(5.5, a_{45}, a_{44}, 1.95)] &= [4.11824, 4.11888, -45882.47521, -7.610695197 \cdot 10^5] \\
[a_{45}, a_{46}, U(5.5, a_{46}, a_{45}, 1.919), U(5.5, a_{46}, a_{45}, 1.95)] &= [4.11888, 4.11952, -44788.88176, -7.604031053 \cdot 10^5] \\
[a_{46}, a_{47}, U(5.5, a_{47}, a_{46}, 1.919), U(5.5, a_{47}, a_{46}, 1.95)] &= [4.11952, 4.12016, -43695.69855, -7.597373302 \cdot 10^5] \\
[a_{47}, a_{48}, U(5.5, a_{48}, a_{47}, 1.919), U(5.5, a_{48}, a_{47}, 1.95)] &= [4.12016, 4.12080, -42602.92557, -7.590721944 \cdot 10^5] \\
[a_{48}, a_{49}, U(5.5, a_{49}, a_{48}, 1.919), U(5.5, a_{49}, a_{48}, 1.95)] &= [4.12080, 4.12144, -41510.56281, -7.584076980 \cdot 10^5] \\
[a_{49}, a_{50}, U(5.5, a_{50}, a_{49}, 1.919), U(5.5, a_{50}, a_{49}, 1.95)] &= [4.12144, 4.12208, -40418.61027, -7.577438411 \cdot 10^5] \\
[a_{50}, a_{51}, U(5.5, a_{51}, a_{50}, 1.919), U(5.5, a_{51}, a_{50}, 1.95)] &= [4.12208, 4.12272, -39327.06794, -7.570806238 \cdot 10^5] \\
[a_{51}, a_{52}, U(5.5, a_{52}, a_{51}, 1.919), U(5.5, a_{52}, a_{51}, 1.95)] &= [4.12272, 4.12336, -38235.93581, -7.564180462 \cdot 10^5] \\
[a_{52}, a_{53}, U(5.5, a_{53}, a_{52}, 1.919), U(5.5, a_{53}, a_{52}, 1.95)] &= [4.12336, 4.12400, -37145.21386, -7.557561083 \cdot 10^5]
\end{aligned}$$

For $i = 53, 54, 55$

$$\begin{aligned}
[a_{53}, a_{54}, U(5.1, a_{54}, a_{53}, 1.919), U(5.1, a_{54}, a_{53}, 1.95)] &= [4.12400, 4.12609, -78594.60556, -7.404628534 \cdot 10^5] \\
[a_{54}, a_{55}, U(5.1, a_{55}, a_{54}, 1.919), U(5.1, a_{55}, a_{54}, 1.95)] &= [4.12609, 4.12818, -75685.92798, -7.388723039 \cdot 10^5] \\
[a_{55}, a_{56}, U(5.1, a_{56}, a_{55}, 1.919), U(5.1, a_{56}, a_{55}, 1.95)] &= [4.12818, 4.13027, -72777.85094, -7.372846818 \cdot 10^5] \\
[a_{56}, a_{57}, U(5.1, a_{57}, a_{56}, 1.919), U(5.1, a_{57}, a_{56}, 1.95)] &= [4.13027, 4.13236, -69870.36749, -7.356999834 \cdot 10^5] \\
[a_{57}, a_{58}, U(5.1, a_{58}, a_{57}, 1.919), U(5.1, a_{58}, a_{57}, 1.95)] &= [4.13236, 4.13445, -66963.47063, -7.341182050 \cdot 10^5]
\end{aligned}$$

$$\begin{aligned}
[a_{58}, a_{59}, U(5.1, a_{59}, a_{58}, 1.919), U(5.1, a_{59}, a_{58}, 1.95)] &= [4.13445, 4.13655, -64057.15330, -7.325393428 \cdot 10^5] \\
[a_{59}, a_{60}, U(5.1, a_{60}, a_{59}, 1.919), U(5.1, a_{60}, a_{59}, 1.95)] &= [4.13655, 4.13864, -61151.40838, -7.309633929 \cdot 10^5] \\
[a_{60}, a_{61}, U(5.1, a_{61}, a_{60}, 1.919), U(5.1, a_{61}, a_{60}, 1.95)] &= [4.13864, 4.14073, -58246.22867, -7.293903513 \cdot 10^5] \\
[a_{61}, a_{62}, U(5.1, a_{62}, a_{61}, 1.919), U(5.1, a_{62}, a_{61}, 1.95)] &= [4.14073, 4.14282, -55341.60694, -7.278202140 \cdot 10^5] \\
[a_{62}, a_{63}, U(5.1, a_{63}, a_{62}, 1.919), U(5.1, a_{63}, a_{62}, 1.95)] &= [4.14282, 4.14491, -52437.53585, -7.262529770 \cdot 10^5] \\
[a_{63}, a_{64}, U(5.1, a_{64}, a_{63}, 1.919), U(5.1, a_{64}, a_{63}, 1.95)] &= [4.14491, 4.14700, -49534.00804, -7.246886363 \cdot 10^5] \\
[a_{64}, a_{65}, U(5.1, a_{65}, a_{64}, 1.919), U(5.1, a_{65}, a_{64}, 1.95)] &= [4.14700, 4.14909, -46631.01607, -7.231271875 \cdot 10^5] \\
[a_{65}, a_{66}, U(5.1, a_{66}, a_{65}, 1.919), U(5.1, a_{66}, a_{65}, 1.95)] &= [4.14909, 4.15118, -43728.55243, -7.215686265 \cdot 10^5] \\
[a_{66}, a_{67}, U(5.1, a_{67}, a_{66}, 1.919), U(5.1, a_{67}, a_{66}, 1.95)] &= [4.15118, 4.15327, -40826.60956, -7.200129490 \cdot 10^5] \\
[a_{67}, a_{68}, U(5.1, a_{68}, a_{67}, 1.919), U(5.1, a_{68}, a_{67}, 1.95)] &= [4.15327, 4.15536, -37925.17984, -7.184601506 \cdot 10^5] \\
[a_{68}, a_{69}, U(5.1, a_{69}, a_{68}, 1.919), U(5.1, a_{69}, a_{68}, 1.95)] &= [4.15536, 4.15745, -35024.25556, -7.169102269 \cdot 10^5] \\
[a_{69}, a_{70}, U(5.1, a_{70}, a_{69}, 1.919), U(5.1, a_{70}, a_{69}, 1.95)] &= [4.15745, 4.15955, -32123.82896, -7.153631734 \cdot 10^5] \\
[a_{70}, a_{71}, U(5.1, a_{71}, a_{70}, 1.919), U(5.1, a_{71}, a_{70}, 1.95)] &= [4.15955, 4.16164, -29223.89225, -7.138189857 \cdot 10^5] \\
[a_{71}, a_{72}, U(5.1, a_{72}, a_{71}, 1.919), U(5.1, a_{72}, a_{71}, 1.95)] &= [4.16164, 4.16373, -26324.43751, -7.122776591 \cdot 10^5] \\
[a_{72}, a_{73}, U(5.1, a_{73}, a_{72}, 1.919), U(5.1, a_{73}, a_{72}, 1.95)] &= [4.16373, 4.16582, -23425.45682, -7.107391889 \cdot 10^5] \\
[a_{73}, a_{74}, U(5.1, a_{74}, a_{73}, 1.919), U(5.1, a_{74}, a_{73}, 1.95)] &= [4.16582, 4.16791, -20526.94215, -7.092035704 \cdot 10^5] \\
[a_{74}, a_{75}, U(5.1, a_{75}, a_{74}, 1.919), U(5.1, a_{75}, a_{74}, 1.95)] &= [4.16791, 4.17000, -17628.88542, -7.076707989 \cdot 10^5]
\end{aligned} \tag{1}$$

>