

Supplementary material for BI-TP 2012/25, arXiv:1207.1309

Authors: J. Moller and Y. Schroder (U. Bielefeld)

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For documentation see the paper

"Three-loop matching coefficients for hot QCD: Reduction and gauge independence"

by J. Moller and Y.Schroder

BI-TP 2012/25, arXiv:1207.1309, submitted to JHEP

Here, we supply some of the results as ASCII files to be used by computer algebra programs like FORM or Mathematica.

All equation numbers given below refer to the above paper. Results are shown in Feynman gauge only. Full results are available from the authors upon request.

Available computer-readable files, also linked on:

<http://www.physik.uni-bielefeld.de/theory/e6/BI-TP-2012-25.html>

3-loop self-energy $\Pi_{\{E3\}}(0)$ needed for screening mass, see Eqs.(2.8),(C.14) in the paper

3-loop self-energy $\Pi'_{\{T3\}}(0)$ needed for effective gauge coupling, see Eqs.(2.15),(C.15) in the paper

Notation:

- $\text{polyr}(a,b)$ stands for the ratio of polynomials a/b
- sum-integrals $I(a_1, \dots, a_6, c_1, c_2, c_3, q_1, q_2, q_3)$ as in Eq.(3.1) in the paper

3-loop self-energy $\Pi_{\{E3\}}(0)$ needed for screening mass,
 see Eqs.(2.8),(C.14) in the paper

$$\begin{aligned}
 & +Ca^3 I(1,1,3,0,0,0,0,0,0,0,0) * \text{polyr}(-17888670+40321537*d- \\
 & 32980197*d^2+12861306*d^3-2500728*d^4+168965*d^5+22927*d^6-5556*d \\
 & ^7+428*d^8-12*d^9, -12240+16848*d-8780*d^2+2180*d^3-260*d^4+12*d^5 \\
 &) \\
 & +Ca^3 I(1,2,2,0,0,0,0,0,0,0,0) * \text{polyr}(835002999-1955619177*d+ \\
 & 1773916347*d^2-871878607*d^3+265750183*d^4-54365257*d^5+8063867*d \\
 & ^6-962409*d^7+100054*d^8-8458*d^9+470*d^10-12*d^11, -428400+736560 \\
 & *d-521716*d^2+198508*d^3-44040*d^4+5720*d^5-404*d^6+12*d^7) \\
 & +Ca^3 I(2,1,0,0,1,1,0,0,0,0,0) * \text{polyr}(-5982874650+15746937177*d- \\
 & 16624545697*d^2+9570753896*d^3-3368583144*d^4+758945005*d^5- \\
 & 110080397*d^6+9945330*d^7-508752*d^8+11232*d^9, 293760-477792*d+ \\
 & 311808*d^2-105000*d^3+19320*d^4-1848*d^5+72*d^6) \\
 & +Ca^3 I(2,2,0,0,1,1,0,0,0,0,2) * \text{polyr}(-44843571+87835128*d- \\
 & 60268527*d^2+21013488*d^3-4196553*d^4+490680*d^5-31509*d^6+864*d^ \\
 & 7, -12240+16848*d-8780*d^2+2180*d^3-260*d^4+12*d^5) \\
 & +Ca^3 I(3,1,0,0,1,1,0,0,0,0,2,0) * \text{polyr}(-8970183+15976949*d- \\
 & 9186962*d^2+2517598*d^3-363343*d^4+26733*d^5-792*d^6, 4080-4256*d+ \\
 & 1508*d^2-224*d^3+12*d^4) \\
 & +Ca^3 I(3,1,0,0,1,1,0,0,0,2,0,0) * \text{polyr}(-1784823003+3594455520*d- \\
 & 2566665395*d^2+924113816*d^3-187571257*d^4+21811744*d^5-1356345*d \\
 & ^6+34920*d^7, -36720+50544*d-26340*d^2+6540*d^3-780*d^4+36*d^5) \\
 & +Ca^3 I(4,1,0,0,1,1,0,0,0,1,3,0) * \text{polyr}(3564-4284*d+756*d^2-36*d^3 \\
 & , -204+172*d-41*d^2+3*d^3) \\
 & +Ca^3 I(5,1,0,0,1,1,0,0,0,6,0,0) * \text{polyr}(1000448-1328640*d+352768*d \\
 & ^2-24576*d^3, -30+31*d-10*d^2+d^3) \\
 & +Ca^3 I(5,3,0,0,1,1,0,0,0,6,4,0) * \text{polyr}(-49152+49152*d, -30+31*d-10 \\
 & *d^2+d^3) \\
 & +Ca^3 I(6,2,0,0,1,1,0,0,0,7,3,0) * \text{polyr}(-122880+122880*d, -30+31*d- \\
 & 10*d^2+d^3) \\
 & +Ca^2 * Nf * I(1,1,0,0,2,1,0,0,1,0,0,0) * \text{polyr}(1077860076-1231617508*d \\
 & +599939778*d^2-161851905*d^3+26163869*d^4-2536762*d^5+136440*d^6- \\
 & 3105*d^7-3*d^8, -8160+10552*d-5144*d^2+1202*d^3-136*d^4+6*d^5) \\
 & +Ca^2 * Nf * I(1,1,0,0,2,2,0,0,1,2,0,0) * \text{polyr}(505701-782869*d+333414* \\
 & d^2-61254*d^3+5173*d^4-165*d^5, 180-216*d+91*d^2-16*d^3+d^4) \\
 & +Ca^2 * Nf * I(1,1,0,0,3,1,0,0,1,1,1,0) * \text{polyr}(1013112-549356*d+110092 \\
 & *d^2-9684*d^3+316*d^4, -60+52*d-13*d^2+d^3) \\
 & +Ca^2 * Nf * I(1,1,0,0,3,1,0,0,1,2,0,0) * \text{polyr}(1314-2468*d+1392*d^2- \\
 & 252*d^3+14*d^4, -60+52*d-13*d^2+d^3)
 \end{aligned}$$

$+Ca^2*Nf*I(1,1,3,0,0,0,0,0,1,0,0,0)*polyr(509724-279278*d+56670*d^2-5042*d^3+166*d^4,-90+63*d-14*d^2+d^3)$
 $+Ca^2*Nf*I(1,1,3,0,0,0,0,1,0,0,0,0)*polyr(73805022-97925885*d+50780219*d^2-13580454*d^3+2048956*d^4-180605*d^5+9951*d^6-416*d^7+12*d^8,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(1,1,3,0,0,0,0,1,1,0,0,0)*polyr(-1019970+559280*d-113612*d^2+10160*d^3-338*d^4,-90+63*d-14*d^2+d^3)$
 $+Ca^2*Nf*I(1,1,3,0,0,0,1,1,0,0,0,0)*polyr(81188757-82098233*d+31580630*d^2-5854798*d^3+526933*d^4-18489*d^5,3060-2682*d+854*d^2-118*d^3+6*d^4)$
 $+Ca^2*Nf*I(1,2,2,0,0,0,0,0,1,0,0,0)*polyr(-1118471874+943933173*d-271194847*d^2+9885559*d^3+12274345*d^4-3263859*d^5+390707*d^6-24307*d^7+709*d^8-6*d^9,-107100+184140*d-130429*d^2+49627*d^3-11010*d^4+1430*d^5-101*d^6+3*d^7)$
 $+Ca^2*Nf*I(1,2,2,0,0,0,0,1,1,0,0,0)*polyr(3688641-6309363*d+3381252*d^2-878223*d^3+128710*d^4-11737*d^5+756*d^6-37*d^7+d^8,6300-9720*d+5957*d^2-1868*d^3+318*d^4-28*d^5+d^6)$
 $+Ca^2*Nf*I(1,2,2,0,0,0,1,0,0,0,0,0)*polyr(2048332221-2980000575*d+1805059449*d^2-603081801*d^3+123463403*d^4-16415931*d^5+1530135*d^6-117235*d^7+8380*d^8-458*d^9+12*d^10,-214200+368280*d-260858*d^2+99254*d^3-22020*d^4+2860*d^5-202*d^6+6*d^7)$
 $+Ca^2*Nf*I(1,2,2,0,0,0,1,0,1,0,0,0)*polyr(6902188746-9403613081*d+5636563717*d^2-1932595765*d^3+413028997*d^4-56181675*d^5+4739935*d^6-226439*d^7+4685*d^8,-107100+184140*d-130429*d^2+49627*d^3-11010*d^4+1430*d^5-101*d^6+3*d^7)$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,0,2,0,0)*polyr(-1168128+475968*d-63232*d^2+2752*d^3,-30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(1,2,3,0,0,0,1,1,0,2,0,0)*polyr(1168128-475968*d+63232*d^2-2752*d^3,-30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(2,1,0,0,1,1,0,0,1,0,0,0)*polyr(2959529856-5317399590*d+3931233373*d^2-1580276873*d^3+379937838*d^4-56028954*d^5+4927733*d^6-231265*d^7+3840*d^8+42*d^9,48960-79632*d+51968*d^2-17500*d^3+3220*d^4-308*d^5+12*d^6)$
 $+Ca^2*Nf*I(2,1,0,0,1,1,1,1,0,0,0,0)*polyr(-329+638*d-402*d^2+102*d^3-9*d^4,12-7*d+d^2)$
 $+Ca^2*Nf*I(2,1,0,0,2,1,0,0,1,0,2,0)*polyr(121737852-105831348*d+38082640*d^2-7255608*d^3+771148*d^4-43284*d^5+1000*d^6,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(2,1,0,0,2,1,0,0,1,2,0,0)*polyr(-468035634+426530284*d-161251646*d^2+32370568*d^3-3639182*d^4+217228*d^5-5378*d^6,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$

$+Ca^2*Nf*I(2,1,0,0,3,1,0,0,1,3,1,0)*polyr(3168-3808*d+672*d^2-32*d^3,-36+36*d-11*d^2+d^3)$
 $+Ca^2*Nf*I(2,2,0,0,1,1,0,0,1,0,0,2)*polyr(-34658721-13362666*d+24118989*d^2-9081868*d^3+1540585*d^4-125066*d^5+3947*d^6,-6120+8424*d-4390*d^2+1090*d^3-130*d^4+6*d^5)$
 $+Ca^2*Nf*I(2,2,0,0,1,1,0,0,1,1,1,0)*polyr(203770503-589878680*d+464540393*d^2-173113686*d^3+35543713*d^4-4154364*d^5+261847*d^6-7190*d^7+24*d^8,30600-48240*d+30374*d^2-9840*d^3+1740*d^4-160*d^5+6*d^6)$
 $+Ca^2*Nf*I(2,2,0,0,1,1,0,0,1,2,0,0)*polyr(-5155544433+6554248101*d-3522089465*d^2+1037746045*d^3-181155579*d^4+18743767*d^5-1064603*d^6+25607*d^7,30600-48240*d+30374*d^2-9840*d^3+1740*d^4-160*d^5+6*d^6)$
 $+Ca^2*Nf*I(3,1,0,0,1,1,0,0,1,0,0,2)*polyr(-1978715637+1874572872*d-735699665*d^2+153035440*d^3-17785983*d^4+1094408*d^5-27835*d^6,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(3,1,0,0,1,1,0,0,1,0,2,0)*polyr(2040093135-1933663464*d+759046675*d^2-157814640*d^3+18308973*d^4-1122216*d^5+28337*d^6,-6120+8424*d-4390*d^2+1090*d^3-130*d^4+6*d^5)$
 $+Ca^2*Nf*I(3,1,0,0,1,1,0,0,1,1,1,0)*polyr(-12072445947+13881684585*d-6822209287*d^2+1857973181*d^3-302861953*d^4+29546955*d^5-1597053*d^6+36879*d^7,15300-24120*d+15187*d^2-4920*d^3+870*d^4-80*d^5+3*d^6)$
 $+Ca^2*Nf*I(3,1,0,0,1,1,0,0,1,2,0,0)*polyr(9594362109-11559148443*d+5969213485*d^2-1712379075*d^3+294490319*d^4-30323657*d^5+1728007*d^6-41945*d^7,30600-48240*d+30374*d^2-9840*d^3+1740*d^4-160*d^5+6*d^6)$
 $+Ca^2*Nf*I(3,1,0,0,1,1,1,1,0,2,0,0)*polyr(-56+80*d-24*d^2,-3+d)$
 $+Ca^2*Nf*I(3,1,0,0,2,1,0,0,1,1,3,0)*polyr(16353792-8999808*d+1837184*d^2-164992*d^3+5504*d^4,180-216*d+91*d^2-16*d^3+d^4)$
 $+Ca^2*Nf*I(3,2,0,0,1,1,0,0,1,0,4,0)*polyr(-3115008+1442304*d-219904*d^2+11008*d^3,-30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,1,1,2)*polyr(61776-17232*d+1584*d^2-48*d^3,-204+172*d-41*d^2+3*d^3)$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,1,3,0)*polyr(-1132379352+840062808*d-247136592*d^2+36020304*d^3-2599896*d^4+74328*d^5,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,2,2,0)*polyr(-1080017280+753445248*d-204811776*d^2+26880768*d^3-1678464*d^4+38784*d^5,-3060+4212*d-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,4,0,0)*polyr(3382503768-2685187800*d$

$+847973712*d^2-133014864*d^3+10349400*d^4-318936*d^5, -3060+4212*d$
 $-2195*d^2+545*d^3-65*d^4+3*d^5)$
 $+Ca^2*Nf*I(4,2,0,0,1,1,0,0,1,6,0,0)*polyr(-3115008+923136*d-66048$
 $*d^2, -30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,3,3,0)*polyr(12460032-3692544*d+$
 $264192*d^2, -30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,4,0,2)*polyr(24213504-6580224*d+$
 $430080*d^2, -30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,5,1,0)*polyr(-24311808+6690816*d-$
 $442368*d^2, -30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,6,0,0)*polyr(-24225792+6592512*d-$
 $430080*d^2, -30+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(6,1,0,0,1,1,0,0,1,7,1,0)*polyr(-4177920+737280*d, -30+$
 $31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(6,1,0,0,1,1,0,0,1,8,0,0)*polyr(-11304960+1966080*d, -30$
 $+31*d-10*d^2+d^3)$
 $+Ca^2*Nf*I(6,1,0,0,2,1,0,0,1,7,0,3)*polyr(983040, -30+31*d-10*d^2+$
 $d^3)$
 $+Ca^2*Nf*I(6,1,0,0,2,1,0,0,1,9,0,1)*polyr(-2949120, -30+31*d-10*d^$
 $2+d^3)$
 $+Ca^2*Nf*I(6,1,0,0,2,1,0,0,1,10,0,0)*polyr(1966080, -30+31*d-10*d^$
 $2+d^3)$
 $+Ca^2*Nf*I(6,2,0,0,1,1,0,0,1,7,3,0)*polyr(983040, -60+62*d-20*d^2+$
 $2*d^3)$
 $+Ca^2*Nf*I(6,2,0,0,1,1,0,0,1,8,2,0)*polyr(1474560, -30+31*d-10*d^2$
 $+d^3)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,8,0,2)*polyr(-5898240, -30+31*d-10*d^$
 $2+d^3)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,8,2,0)*polyr(2949120, -30+31*d-10*d^2$
 $+d^3)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,9,0,1)*polyr(-5898240, -30+31*d-10*d^$
 $2+d^3)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,9,1,0)*polyr(8847360, -30+31*d-10*d^2$
 $+d^3)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,10,0,0)*polyr(11796480, -30+31*d-10*d$
 $^2+d^3)$
 $+Ca*Nf^2*I(1,1,3,0,0,0,1,1,0,0,0,0)*polyr(2184-3924*d+2336*d^2-$
 $680*d^3+88*d^4-4*d^5, -30+31*d-10*d^2+d^3)$
 $+Ca*Nf^2*I(1,1,3,0,0,0,1,1,1,0,0,0)*polyr(-9021447+6972142*d-$
 $2142596*d^2+326954*d^3-24757*d^4+744*d^5, -1530+2871*d-1768*d^2+$
 $486*d^3-62*d^4+3*d^5)$

$+Ca*Nf^2*I(1,2,2,0,0,0,1,0,1,0,0,0)*polyr(-84+124*d-44*d^2+4*d^3, 10-7*d+d^2)$
 $+Ca*Nf^2*I(1,2,2,0,0,0,1,1,1,0,0,0)*polyr(-834985863+1117554786*d -645236733*d^2+209900806*d^3-41974833*d^4+5247368*d^5-393163*d^6+ 15126*d^7-128*d^8-6*d^9, 107100-291240*d+314569*d^2-180056*d^3+ 60637*d^4-12440*d^5+1531*d^6-104*d^7+3*d^8)$
 $+Ca*Nf^2*I(2,1,0,0,1,1,1,1,0,0,0,0)*polyr(6037550730-9917363967*d +7033020806*d^2-2814144030*d^3+695389574*d^4-108741291*d^5+ 10515806*d^6-575352*d^7+13644*d^8, -73440+192888*d-197400*d^2+ 104202*d^3-31080*d^4+5292*d^5-480*d^6+18*d^7)$
 $+Ca*Nf^2*I(2,2,0,0,1,1,1,1,0,0,0,2)*polyr(44672211-42588405*d+ 16927194*d^2-3590118*d^3+428355*d^4-27237*d^5+720*d^6, 3060-7272*d +6407*d^2-2740*d^3+610*d^4-68*d^5+3*d^6)$
 $+Ca*Nf^2*I(3,1,0,0,1,1,1,1,0,0,2,0)*polyr(8935911-6940606*d+ 2138852*d^2-326810*d^3+24757*d^4-744*d^5, -1020+2084*d-1441*d^2+ 433*d^3-59*d^4+3*d^5)$
 $+Ca*Nf^2*I(3,1,0,0,1,1,1,1,0,2,0,0)*polyr(1801562427-1846511733*d +786153550*d^2-177970730*d^3+22595471*d^4-1525537*d^5+42792*d^6, 9180-21816*d+19221*d^2-8220*d^3+1830*d^4-204*d^5+9*d^6)$
 $+Ca*Nf^2*I(4,1,0,0,1,1,1,1,0,1,3,0)*polyr(-14256+2880*d-144*d^2, 204-376*d+213*d^2-44*d^3+3*d^4)$
 $+Ca*Nf^2*I(5,1,0,0,1,1,1,1,0,6,0,0)*polyr(-4034560+1361920*d- 114688*d^2, 30-61*d+41*d^2-11*d^3+d^4)$
 $+Ca*Nf^2*I(5,3,0,0,1,1,1,1,0,6,4,0)*polyr(196608, 30-61*d+41*d^2- 11*d^3+d^4)$
 $+Ca*Nf^2*I(6,2,0,0,1,1,1,1,0,7,3,0)*polyr(491520, 30-61*d+41*d^2- 11*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,1,0,0,2,1,0,0,1,0,0,0)*polyr(-540+1870*d-2118*d^2+ 958*d^3-182*d^4+12*d^5, -120+74*d-15*d^2+d^3)$
 $+Ca*Nf*Cf*I(1,1,0,0,2,2,0,0,1,2,0,0)*polyr(-2016+3088*d-1296*d^2+ 240*d^3-16*d^4, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(1,1,3,0,0,0,1,1,0,0,0,0)*polyr(2592-5680*d+4208*d^2- 1232*d^3+112*d^4, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(1,2,2,0,0,0,0,0,1,0,0,0)*polyr(3264-22840*d+44516*d^2 -39868*d^3+19908*d^4-5928*d^5+1044*d^6-100*d^7+4*d^8, -900+1260*d- 671*d^2+171*d^3-21*d^4+d^5)$
 $+Ca*Nf*Cf*I(1,2,2,0,0,0,0,1,1,0,0,0)*polyr(-4680+10964*d-9452*d^2 +3920*d^3-840*d^4+92*d^5-4*d^6, 180-216*d+91*d^2-16*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,2,2,0,0,0,1,0,1,0,0,0)*polyr(-90168+217312*d-197890 *d^2+91640*d^3-24734*d^4+4344*d^5-550*d^6+48*d^7-2*d^8, -900+1260* d-671*d^2+171*d^3-21*d^4+d^5)$

$+Ca*Nf*Cf*I(1,2,2,0,0,0,1,1,1,0,0,0)*polyr(-18+30*d-14*d^2+2*d^3, -2+d)$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,0,1,0,2,0,0)*polyr(-1152+1280*d-128*d^2, 15-8*d+d^2)$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,1,1,0,2,0,0)*polyr(1152-1280*d+128*d^2, 15-8*d+d^2)$
 $+Ca*Nf*Cf*I(2,1,0,0,1,1,0,0,1,0,0,0)*polyr(45900-131944*d+148481*d^2-85246*d^3+27274*d^4-4912*d^5+465*d^6-18*d^7, 360-342*d+119*d^2-18*d^3+d^4)$
 $+Ca*Nf*Cf*I(2,1,0,0,1,1,1,1,0,0,0,0)*polyr(2960-5784*d+3684*d^2-944*d^3+84*d^4, 36-21*d+3*d^2)$
 $+Ca*Nf*Cf*I(2,1,0,0,2,1,0,0,1,0,2,0)*polyr(-7056+9856*d-3168*d^2+384*d^3-16*d^4, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(2,1,0,0,2,1,0,0,1,2,0,0)*polyr(56-120*d+72*d^2-8*d^3, -3+d)$
 $+Ca*Nf*Cf*I(2,2,0,0,1,1,0,0,1,1,1,0)*polyr(-7332+19986*d-19982*d^2+9332*d^3-2272*d^4+282*d^5-14*d^6, 450-405*d+133*d^2-19*d^3+d^4)$
 $+Ca*Nf*Cf*I(2,2,0,0,1,1,0,0,1,2,0,0)*polyr(84072-148664*d+83848*d^2-22112*d^3+3080*d^4-232*d^5+8*d^6, 450-405*d+133*d^2-19*d^3+d^4)$
 $+Ca*Nf*Cf*I(3,1,0,0,1,1,0,0,1,0,2,0)*polyr(34128-53376*d+22752*d^2-3712*d^3+208*d^4, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(3,1,0,0,1,1,0,0,1,1,1,0)*polyr(-7632+12136*d-5200*d^2+672*d^3+32*d^4-8*d^5, -150+85*d-16*d^2+d^3)$
 $+Ca*Nf*Cf*I(3,1,0,0,1,1,0,0,1,2,0,0)*polyr(-83736+234188*d-235892*d^2+107128*d^3-24256*d^4+2684*d^5-116*d^6, 450-405*d+133*d^2-19*d^3+d^4)$
 $+Ca*Nf*Cf*I(3,1,0,0,1,1,1,1,0,2,0,0)*polyr(320-432*d+96*d^2+16*d^3, -9+3*d)$
 $+Ca*Nf*Cf*I(3,1,0,0,2,1,0,0,1,1,3,0)*polyr(16128-20224*d+4352*d^2-256*d^3, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(3,2,0,0,1,1,0,0,1,0,4,0)*polyr(-3072+3584*d-512*d^2, 15-8*d+d^2)$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,1,3,0)*polyr(65664-83328*d+18816*d^2-1152*d^3, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,2,2,0)*polyr(-44928+64128*d-21120*d^2+1920*d^3, -90+63*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,4,0,0)*polyr(-384+768*d-384*d^2, -3+d)$
 $+Ca*Nf*Cf*I(4,2,0,0,1,1,0,0,1,6,0,0)*polyr(-3072+3072*d, 15-8*d+d^2)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,0,0,1,3,3,0)*polyr(12288-12288*d, 15-8*d+d$

$\wedge 2)$
 $+Nf^2 * Cf * I(1, 1, 3, 0, 0, 0, 1, 1, 1, 0, 0, 0) * \text{polyr}(-2016 + 1520 * d - 288 * d^2 + 16 * d^3, -90 + 63 * d - 14 * d^2 + d^3)$
 $+Nf^2 * Cf * I(1, 2, 2, 0, 0, 0, 1, 0, 1, 0, 0, 0) * \text{polyr}(40 - 60 * d + 24 * d^2 - 4 * d^3, -2 + d)$
 $+Nf^2 * Cf * I(1, 2, 2, 0, 0, 0, 1, 1, 1, 0, 0, 0) * \text{polyr}(-9528 + 11252 * d - 4960 * d^2 + 1032 * d^3 - 104 * d^4 + 4 * d^5, 300 - 320 * d + 117 * d^2 - 18 * d^3 + d^4)$
 $+Nf^2 * Cf * I(2, 1, 0, 0, 1, 1, 1, 1, 0, 0, 0, 0) * \text{polyr}(804120 - 903892 * d + 400488 * d^2 - 87360 * d^3 + 9376 * d^4 - 396 * d^5, 1080 - 1026 * d + 357 * d^2 - 54 * d^3 + 3 * d^4)$
 $+Nf^2 * Cf * I(2, 2, 0, 0, 1, 1, 1, 1, 0, 0, 0, 2) * \text{polyr}(-336 + 48 * d, -6 + d)$
 $+Nf^2 * Cf * I(3, 1, 0, 0, 1, 1, 1, 1, 0, 0, 2, 0) * \text{polyr}(-1008 + 256 * d - 16 * d^2, 30 - 11 * d + d^2)$
 $+Nf^2 * Cf * I(3, 1, 0, 0, 1, 1, 1, 1, 0, 2, 0, 0) * \text{polyr}(503376 - 269584 * d + 48912 * d^2 - 3184 * d^3 + 32 * d^4, -270 + 189 * d - 42 * d^2 + 3 * d^3)$
 $+Nf^2 * Cf * I(5, 1, 0, 0, 1, 1, 1, 1, 0, 6, 0, 0) * \text{polyr}(16384, 15 - 8 * d + d^2)$
 $+Nf * Cf^2 * I(1, 1, 0, 0, 2, 1, 0, 0, 1, 0, 0, 0) * \text{polyr}(-4551 + 11522 * d - 9596 * d^2 + 3010 * d^3 - 405 * d^4 + 20 * d^5, 24 - 16 * d + 2 * d^2)$
 $+Nf * Cf^2 * I(1, 1, 0, 0, 2, 2, 0, 0, 1, 2, 0, 0) * \text{polyr}(-63 + 205 * d - 238 * d^2 + 114 * d^3 - 19 * d^4 + d^5, -36 + 36 * d - 11 * d^2 + d^3)$
 $+Nf * Cf^2 * I(1, 1, 0, 0, 3, 1, 0, 0, 1, 1, 1, 0) * \text{polyr}(-126 + 284 * d - 192 * d^2 + 36 * d^3 - 2 * d^4, 12 - 8 * d + d^2)$
 $+Nf * Cf^2 * I(1, 1, 3, 0, 0, 0, 0, 0, 1, 0, 0, 0) * \text{polyr}(-142 + 385 * d - 369 * d^2 + 153 * d^3 - 29 * d^4 + 2 * d^5, 12 - 8 * d + d^2)$
 $+Nf * Cf^2 * I(1, 1, 3, 0, 0, 0, 0, 1, 1, 0, 0, 0) * \text{polyr}(284 - 770 * d + 738 * d^2 - 306 * d^3 + 58 * d^4 - 4 * d^5, 12 - 8 * d + d^2)$
 $+Nf * Cf^2 * I(1, 1, 3, 0, 0, 0, 1, 1, 0, 0, 0, 0) * \text{polyr}(162 - 436 * d + 400 * d^2 - 140 * d^3 + 14 * d^4, 18 - 9 * d + d^2)$
 $+Nf * Cf^2 * I(1, 1, 3, 0, 0, 0, 1, 1, 1, 0, 0, 0) * \text{polyr}(-50 + 150 * d - 168 * d^2 + 88 * d^3 - 22 * d^4 + 2 * d^5, 6 - 5 * d + d^2)$
 $+Nf * Cf^2 * I(1, 2, 2, 0, 0, 0, 0, 0, 1, 0, 0, 0) * \text{polyr}(4113 - 10242 * d + 8499 * d^2 - 2752 * d^3 + 411 * d^4 - 30 * d^5 + d^6, 180 - 216 * d + 91 * d^2 - 16 * d^3 + d^4)$
 $+Nf * Cf^2 * I(1, 2, 2, 0, 0, 0, 0, 1, 1, 0, 0, 0) * \text{polyr}(4203 - 11023 * d + 11466 * d^2 - 6360 * d^3 + 2079 * d^4 - 407 * d^5 + 44 * d^6 - 2 * d^7, 180 - 216 * d + 91 * d^2 - 16 * d^3 + d^4)$
 $+Nf * Cf^2 * I(1, 2, 2, 0, 0, 0, 1, 0, 1, 0, 0, 0) * \text{polyr}(-10107 + 27306 * d - 26233 * d^2 + 11216 * d^3 - 2433 * d^4 + 262 * d^5 - 11 * d^6, 180 - 216 * d + 91 * d^2 - 16 * d^3 + d^4)$
 $+Nf * Cf^2 * I(1, 2, 2, 0, 0, 0, 1, 1, 1, 0, 0, 0) * \text{polyr}(46 - 88 * d + 56 * d^2 - 16 * d^3 + 2 * d^4, -2 + d)$
 $+Nf * Cf^2 * I(1, 2, 3, 0, 0, 0, 0, 1, 0, 2, 0, 0) * \text{polyr}(144 - 304 * d + 176 * d^2 - 16 * d^3, 6 - 5 * d + d^2)$
 $+Nf * Cf^2 * I(1, 2, 3, 0, 0, 0, 1, 1, 0, 2, 0, 0) * \text{polyr}(-144 + 304 * d - 176 * d^2 + 16 * d$


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^3,6-5*d+d^2)
+Nf*Cf^2*I(2,1,0,0,1,1,0,0,1,0,0,0)*polyr(45465-127664*d+130932*d
^2-61970*d^3+14963*d^4-1814*d^5+88*d^6,-72+72*d-22*d^2+2*d^3)
+Nf*Cf^2*I(2,1,0,0,1,1,1,1,0,0,0,0)*polyr(-1972+3912*d-2544*d^2+
664*d^3-60*d^4,36-21*d+3*d^2)
+Nf*Cf^2*I(2,1,0,0,2,1,0,0,1,0,2,0)*polyr(882-2114*d+1628*d^2-444
*d^3+50*d^4-2*d^5,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(2,1,0,0,2,1,0,0,1,2,0,0)*polyr(-8946+22278*d-18428*d^2
+5844*d^3-786*d^4+38*d^5,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(2,2,0,0,1,1,0,0,1,1,1,0)*polyr(4416-13445*d+15855*d^2-
9006*d^3+2482*d^4-317*d^5+15*d^6,180-216*d+91*d^2-16*d^3+d^4)
+Nf*Cf^2*I(2,2,0,0,1,1,0,0,1,2,0,0)*polyr(-4311+15264*d-20263*d^2
+12384*d^3-3501*d^4+448*d^5-21*d^6,180-216*d+91*d^2-16*d^3+d^4)
+Nf*Cf^2*I(3,1,0,0,1,1,0,0,1,0,2,0)*polyr(-4266+10938*d-9516*d^2+
3308*d^3-490*d^4+26*d^5,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(3,1,0,0,1,1,0,0,1,1,1,0)*polyr(-102258+272928*d-256090
*d^2+104304*d^3-20838*d^4+2032*d^5-78*d^6,180-216*d+91*d^2-16*d^3
+d^4)
+Nf*Cf^2*I(3,1,0,0,1,1,0,0,1,2,0,0)*polyr(288618-795230*d+787756*
d^2-351636*d^3+78858*d^4-8750*d^5+384*d^6,180-216*d+91*d^2-16*d^3
+d^4)
+Nf*Cf^2*I(3,1,0,0,1,1,1,1,0,2,0,0)*polyr(32-96*d+96*d^2-32*d^3,-
9+3*d)
+Nf*Cf^2*I(3,1,0,0,2,1,0,0,1,1,3,0)*polyr(-2016+4544*d-3072*d^2+
576*d^3-32*d^4,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(3,2,0,0,1,1,0,0,1,0,4,0)*polyr(384-832*d+512*d^2-64*d^
3,6-5*d+d^2)
+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,1,3,0)*polyr(-8208+18624*d-12768*d^2
+2496*d^3-144*d^4,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,2,2,0)*polyr(5616-13632*d+10656*d^2-
2880*d^3+240*d^4,-36+36*d-11*d^2+d^3)
+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,4,0,0)*polyr(-6336+14016*d-9024*d^2+
1344*d^3,6-5*d+d^2)
+Nf*Cf^2*I(4,2,0,0,1,1,0,0,1,6,0,0)*polyr(384-768*d+384*d^2,6-5*d
+d^2)
+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,3,3,0)*polyr(-1536+3072*d-1536*d^2,6
-5*d+d^2)
+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,5,1,0)*polyr(3072-6144*d+3072*d^2,6-
5*d+d^2)
;

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3-loop self-energy $\Pi'_{T3}(0)$ needed for effective gauge coupling, see Eqs.(2.15),(C.15) in the paper

$$\begin{aligned}
& +Ca^3 I(1,1,4,0,0,0,0,0,0,0,0) * \text{polyr}(97837379064-240092405208*d \\
& +201706663716*d^2-49626881295*d^3-27847315264*d^4+26008790253*d^5 \\
& -10168009116*d^6+2638003064*d^7-536334188*d^8+91733974*d^9- \\
& 12920120*d^{10}+1397589*d^{11}-107772*d^{12}+5461*d^{13}-160*d^{14}+2*d^{15}, \\
& 21772800*d-51433920*d^2+53230032*d^3-31823472*d^4+12184588*d^5- \\
& 3124912*d^6+544124*d^7-63568*d^8+4772*d^9-208*d^{10}+4*d^{11}) \\
& +Ca^3 I(1,2,3,0,0,0,0,0,0,0,0) * \text{polyr}(2031435191448- \\
& 4918287310560*d+4245915161700*d^2-1392598330935*d^3-197447487271* \\
& d^4+344188010441*d^5-141199207695*d^6+31825746468*d^7-3980640980* \\
& d^8+95389938*d^9+66738662*d^{10}-14902991*d^{11}+1769265*d^{12}-133707* \\
& d^{13}+6389*d^{14}-174*d^{15}+2*d^{16}, -228614400*d+572715360*d^2- \\
& 636066216*d^3+413991504*d^4-175673382*d^5+51088458*d^6-10400670*d \\
& ^7+1483650*d^8-145458*d^9+9342*d^{10}-354*d^{11}+6*d^{12}) \\
& +Ca^3 I(2,2,0,0,1,1,0,0,0,0,0) * \text{polyr}(23763905224380- \\
& 79434847453950*d+99997476728583*d^2-54968996910244*d^3+ \\
& 5299293204042*d^4+10285929916786*d^5-6766652006555*d^6+ \\
& 2225013209704*d^7-462115592968*d^8+64286294054*d^9-6026547391*d^ \\
& 10+369125340*d^{11}-13607870*d^{12}+246726*d^{13}-1005*d^{14}, 696729600*d \\
& -1645885440*d^2+1703361024*d^3-1018351104*d^4+389906816*d^5- \\
& 99997184*d^6+17411968*d^7-2034176*d^8+152704*d^9-6656*d^{10}+128*d^ \\
& 11) \\
& +Ca^3 I(2,2,2,0,0,0,0,0,0,0,0) * \text{polyr}(-2297009330172756+ \\
& 7062371786057346*d-8607626494361445*d^2+5068575128536816*d^3- \\
& 982074096826697*d^4-651044561953058*d^5+601446813951175*d^6- \\
& 251140921841940*d^7+67728021174723*d^8-12840842720258*d^9+ \\
& 1759467674033*d^{10}-174537783016*d^{11}+12304760405*d^{12}-590131038*d \\
& ^{13}+17625453*d^{14}-268532*d^{15}+1029*d^{16}, -73156608000*d+ \\
& 234478540800*d^2-339145090560*d^3+293283005184*d^4-169303698048*d \\
& ^5+68946872256*d^6-20393577216*d^7+4439348736*d^8-711705600*d^9+ \\
& 83048832*d^{10}-6860544*d^{11}+380160*d^{12}-12672*d^{13}+192*d^{14}) \\
& +Ca^3 I(3,1,0,0,1,1,0,0,0,0,0) * \text{polyr}(-344986242296508+ \\
& 855095909876694*d-758790034778139*d^2+248366253065110*d^3+ \\
& 54688564779408*d^4-83233142833316*d^5+37087649103117*d^6- \\
& 9782798786452*d^7+1720405731596*d^8-208575273554*d^9+17374385263* \\
& d^{10}-960158978*d^{11}+32400832*d^{12}-548832*d^{13}+2303*d^{14}, 348364800 \\
& *d-822942720*d^2+851680512*d^3-509175552*d^4+194953408*d^5- \\
& 49998592*d^6+8705984*d^7-1017088*d^8+76352*d^9-3328*d^{10}+64*d^{11}) \\
& +Ca^3 I(3,2,0,0,1,1,0,0,0,0,2) * \text{polyr}(162491978124-346118330250*
\end{aligned}$$

$d+237600471489*d^2-40169737335*d^3-27666908721*d^4+18196614029*d^5-5078629238*d^6+819647082*d^7-79133718*d^8+4075536*d^9-40635*d^{10}-6659*d^{11}+299*d^{12}-3*d^{13}, 10886400*d-25716960*d^2+26615016*d^3-15911736*d^4+6092294*d^5-1562456*d^6+272062*d^7-31784*d^8+2386*d^9-104*d^{10}+2*d^{11})$
 $+Ca^3*I(4,1,0,0,1,1,0,0,0,2,0)*polyr(3088319380236-7093540627002*d+5619471496209*d^2-1527212686251*d^3-396844105729*d^4+439933792561*d^5-159890412326*d^6+34072877330*d^7-4717107270*d^8+431916312*d^9-25381787*d^{10}+871049*d^{11}-13333*d^{12}+d^{13}, 21772800*d-51433920*d^2+53230032*d^3-31823472*d^4+12184588*d^5-3124912*d^6+544124*d^7-63568*d^8+4772*d^9-208*d^{10}+4*d^{11})$
 $+Ca^3*I(5,1,0,0,1,1,0,0,0,2,2,0)*polyr(-15894595008+30158350560*d-15989824320*d^2-244947648*d^3+2910311616*d^4-1128404352*d^5+209352000*d^6-21375552*d^7+1158912*d^8-26208*d^9, 113400*d-234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^3*I(5,1,0,0,1,1,0,0,0,4,0,0)*polyr(162684918720-298548428640*d+140379559296*d^2+22588448000*d^3-38718849920*d^4+13924427968*d^5-2543498624*d^6+261928704*d^7-14723392*d^8+375456*d^9-1792*d^{10}, 113400*d-234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^3*I(7,1,0,0,1,1,0,0,0,8,0,0)*polyr(-59419607040+93658030080*d-25913262080*d^2-16783400960*d^3+10456064000*d^4-2199756800*d^5+209960960*d^6-8069120*d^7+40960*d^8, 113400*d-234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^3*I(7,3,0,-1,1,1,0,0,0,7,3,0)*polyr(-274268160+370114560*d-41287680*d^2-73728000*d^3+20643840*d^4-1474560*d^5, 113400*d-234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^3*I(8,2,0,-1,1,1,0,0,0,8,2,0)*polyr(-959938560+1295400960*d-144506880*d^2-258048000*d^3+72253440*d^4-5160960*d^5, 113400*d-234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(1,1,0,0,2,2,0,0,1,0,0,0)*polyr(96577636875678-128444475641877*d+49104434077140*d^2+6900085279260*d^3-10758394026262*d^4+3089520009301*d^5-121471020408*d^6-155350936478*d^7+51294409778*d^8-8819929803*d^9+985949620*d^{10}-76333864*d^{11}+4186374*d^{12}-161941*d^{13}+4144*d^{14}-54*d^{15}, -7315660800*d+18326891520*d^2-20354118912*d^3+13247728128*d^4-5621548224*d^5+1634830656*d^6-332821440*d^7+47476800*d^8-4654656*d^9+298944*d^{10}-11328*d^{11}+192*d^{12})$
 $+Ca^2*Nf*I(1,1,0,0,3,1,0,0,1,0,0,0)*polyr(-136527480713250+$

190014473334609*d-84760999130319*d^2-2488940416167*d^3+
 17688953513327*d^4-8428652287792*d^5+2192510458808*d^6-
 368427109566*d^7+41881557324*d^8-3225565407*d^9+162879841*d^10-
 4981739*d^11+78103*d^12-498*d^13+6*d^14, 1219276800*d-2648056320*d
 ^2+2509667712*d^3-1371398784*d^4+479791776*d^5-112541184*d^6+
 17956512*d^7-1927296*d^8+133344*d^9-5376*d^10+96*d^11)
 +Ca^2*Nf*I(1,1,0,0,3,2,0,0,1,2,0,0)*polyr(1238888682-1061776521*d
 +38285547*d^2+199188278*d^3-76666144*d^4+15907090*d^5-3638006*d^6
 +891184*d^7-148658*d^8+14591*d^9-781*d^10+18*d^11, -1555200*d+
 3451680*d^2-3309048*d^3+1800384*d^4-613130*d^5+135618*d^6-19492*d
 ^7+1756*d^8-90*d^9+2*d^10)
 +Ca^2*Nf*I(1,1,0,0,4,1,0,0,1,1,1,0)*polyr(1063550466-774334377*d-
 28613833*d^2+146988709*d^3-50147685*d^4+8038755*d^5-698067*d^6+
 32031*d^7-641*d^8+2*d^9, -80640*d+138528*d^2-97720*d^3+36848*d^4-
 8050*d^5+1022*d^6-70*d^7+2*d^8)
 +Ca^2*Nf*I(1,1,0,0,4,1,0,0,1,2,0,0)*polyr(5215511916-4156476066*d
 +137374944*d^2+725664680*d^3-303677192*d^4+61693044*d^5-7532400*d
 ^6+588744*d^7-29892*d^8+958*d^9-16*d^10, 362880*d-663696*d^2+
 509004*d^3-214676*d^4+54649*d^5-8624*d^6+826*d^7-44*d^8+d^9)
 +Ca^2*Nf*I(1,1,4,0,0,0,0,0,1,0,0,0)*polyr(1063550466-774334377*d-
 28613833*d^2+146988709*d^3-50147685*d^4+8038755*d^5-698067*d^6+
 32031*d^7-641*d^8+2*d^9, -241920*d+375264*d^2-244056*d^3+86236*d^4
 -17880*d^5+2176*d^6-144*d^7+4*d^8)
 +Ca^2*Nf*I(1,1,4,0,0,0,0,1,0,0,0,0)*polyr(2743822595484-
 4516376884272*d+2455093864473*d^2-146716284882*d^3-395281267653*d
 ^4+185722103894*d^5-35105282886*d^6+712560576*d^7+1165165370*d^8-
 305627260*d^9+43965349*d^10-4241770*d^11+284959*d^12-12842*d^13+
 344*d^14-4*d^15, -76204800*d+190905120*d^2-212022072*d^3+137997168
 *d^4-58557794*d^5+17029486*d^6-3466890*d^7+494550*d^8-48486*d^9+
 3114*d^10-118*d^11+2*d^12)
 +Ca^2*Nf*I(1,1,4,0,0,0,0,1,1,0,0,0)*polyr(4502174238-2632298715*d
 -759482391*d^2+761693226*d^3-181660224*d^4+25350582*d^5-6502002*d
 ^6+1865184*d^7-308694*d^8+28413*d^9-1407*d^10+30*d^11, -5443200*d+
 10136880*d^2-8239068*d^3+3836334*d^4-1127980*d^5+217238*d^6-27412
 *d^7+2186*d^8-100*d^9+2*d^10)
 +Ca^2*Nf*I(1,1,4,0,0,0,1,1,0,0,0,0)*polyr(19187904574638-
 40918216970799*d+29460341812473*d^2-5842380845895*d^3-
 3503020003067*d^4+2706241148200*d^5-876662607958*d^6+170572180674
 *d^7-21519489544*d^8+1770001745*d^9-90448883*d^10+2469877*d^11-
 17499*d^12-442*d^13, -685843200*d+1451429280*d^2-1373389128*d^3+
 767302020*d^4-281366304*d^5+71140016*d^6-12661488*d^7+1587096*d^8

$-137376*d^9+7824*d^{10}-264*d^{11}+4*d^{12}$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,0,0,0)*polyr(-1470765067344+$
 $883520731242*d+399838833549*d^2-394603513170*d^3+59654385673*d^4+$
 $33427768830*d^5-18464660790*d^6+4429318388*d^7-645624774*d^8+$
 $61943694*d^9-3986647*d^{10}+169518*d^{11}-4467*d^{12}+58*d^{13},-$
 $228614400*d+572715360*d^2-636066216*d^3+413991504*d^4-175673382*d$
 $^5+51088458*d^6-10400670*d^7+1483650*d^8-145458*d^9+9342*d^{10}-354$
 $*d^{11}+6*d^{12})$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,0,0,0,0)*polyr(-22934731950900+$
 $37466982361368*d-21256054505847*d^2+2307004266642*d^3+$
 $3148985446153*d^4-1935586054371*d^5+580909591189*d^6-110051940648$
 $*d^7+14105288746*d^8-1250879218*d^9+77351559*d^{10}-3406978*d^{11}+$
 $114729*d^{12}-3115*d^{13}+51*d^{14},-228614400*d+572715360*d^2-$
 $636066216*d^3+413991504*d^4-175673382*d^5+51088458*d^6-10400670*d$
 $^7+1483650*d^8-145458*d^9+9342*d^{10}-354*d^{11}+6*d^{12})$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,1,0,0,0)*polyr(-37673873604+$
 $51763322232*d-23126611623*d^2+808352324*d^3+2898840109*d^4-$
 $1205203078*d^5+246921490*d^6-31787088*d^7+3421662*d^8-452924*d^9+$
 $60725*d^{10}-5540*d^{11}+281*d^{12}-6*d^{13},-76204800*d+190905120*d^2-$
 $212022072*d^3+137997168*d^4-58557794*d^5+17029486*d^6-3466890*d^7$
 $+494550*d^8-48486*d^9+3114*d^{10}-118*d^{11}+2*d^{12})$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,0,0,0,0)*polyr(18412664038380-$
 $25370937527328*d+11012214202965*d^2+377019058986*d^3-$
 $2111235025877*d^4+910310072790*d^5-205137919790*d^6+27178782520*d$
 $^7-1793666230*d^8-55146156*d^9+27546225*d^{10}-3440830*d^{11}+259503*$
 $d^{12}-12458*d^{13}+344*d^{14}-4*d^{15},-228614400*d+572715360*d^2-$
 $636066216*d^3+413991504*d^4-175673382*d^5+51088458*d^6-10400670*d$
 $^7+1483650*d^8-145458*d^9+9342*d^{10}-354*d^{11}+6*d^{12})$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,0,1,0,0,0)*polyr(12601323352764-$
 $17493798107448*d+7835022415197*d^2+131997357168*d^3-1528980372991$
 $*d^4+717692038094*d^5-179951886934*d^6+28441724088*d^7-2930356554$
 $*d^8+191210508*d^9-6944423*d^{10}+65704*d^{11}+4141*d^{12}-114*d^{13},-$
 $228614400*d+572715360*d^2-636066216*d^3+413991504*d^4-175673382*d$
 $^5+51088458*d^6-10400670*d^7+1483650*d^8-145458*d^9+9342*d^{10}-354$
 $*d^{11}+6*d^{12})$
 $+Ca^2*Nf*I(1,2,3,0,0,0,0,1,1,0,0,0,0)*polyr(-36122540750496+$
 $49338673698942*d-21642584586525*d^2-606188422464*d^3+$
 $4382897052047*d^4-2055129530529*d^5+519787254995*d^6-82988476244*$
 $d^7+8582551186*d^8-549150592*d^9+17770613*d^{10}+53708*d^{11}-23977*d$
 $^{12}+619*d^{13}-3*d^{14},-228614400*d+572715360*d^2-636066216*d^3+$
 $413991504*d^4-175673382*d^5+51088458*d^6-10400670*d^7+1483650*d^8$

$-145458*d^9+9342*d^{10}-354*d^{11}+6*d^{12}$
 $+Ca^2*Nf*I(1,2,4,0,0,0,0,0,1,2,0,0)*polyr(638352-968568*d+245136*d^2+149448*d^3-76176*d^4+12696*d^5-912*d^6+24*d^7,100800*d-210120*d^2+186202*d^3-91717*d^4+27485*d^5-5134*d^6+584*d^7-37*d^8+d^9)$
 $+Ca^2*Nf*I(1,2,4,0,0,0,0,1,0,2,0,0)*polyr(-1236990022992+1284435471384*d-282090776256*d^2-150461627360*d^3+106576990896*d^4-29667327744*d^5+4718077968*d^6-459148848*d^7+26756448*d^8-820120*d^9+7152*d^{10}+144*d^{11},6350400*d-14850360*d^2+15193446*d^3-8967523*d^4+3385229*d^5-854919*d^6+146421*d^7-16809*d^8+1239*d^9-53*d^{10}+d^{11})$
 $+Ca^2*Nf*I(1,2,4,0,0,0,1,0,1,2,0,0)*polyr(-638352+968568*d-245136*d^2-149448*d^3+76176*d^4-12696*d^5+912*d^6-24*d^7,100800*d-210120*d^2+186202*d^3-91717*d^4+27485*d^5-5134*d^6+584*d^7-37*d^8+d^9)$
 $+Ca^2*Nf*I(1,2,4,0,0,0,1,1,0,2,0,0)*polyr(1236990022992-1284435471384*d+282090776256*d^2+150461627360*d^3-106576990896*d^4+29667327744*d^5-4718077968*d^6+459148848*d^7-26756448*d^8+820120*d^9-7152*d^{10}-144*d^{11},6350400*d-14850360*d^2+15193446*d^3-8967523*d^4+3385229*d^5-854919*d^6+146421*d^7-16809*d^8+1239*d^9-53*d^{10}+d^{11})$
 $+Ca^2*Nf*I(1,3,3,0,0,0,0,0,1,2,0,0)*polyr(540152436384-522642031056*d+88989027120*d^2+69499222080*d^3-41344950560*d^4+10410945728*d^5-1510788480*d^6+134187744*d^7-7118208*d^8+197136*d^9-1456*d^{10}-32*d^{11},19051200*d-44551080*d^2+45580338*d^3-26902569*d^4+10155687*d^5-2564757*d^6+439263*d^7-50427*d^8+3717*d^9-159*d^{10}+3*d^{11})$
 $+Ca^2*Nf*I(1,3,3,0,0,0,1,0,1,2,0,0)*polyr(-540152436384+522642031056*d-88989027120*d^2-69499222080*d^3+41344950560*d^4-10410945728*d^5+1510788480*d^6-134187744*d^7+7118208*d^8-197136*d^9+1456*d^{10}+32*d^{11},19051200*d-44551080*d^2+45580338*d^3-26902569*d^4+10155687*d^5-2564757*d^6+439263*d^7-50427*d^8+3717*d^9-159*d^{10}+3*d^{11})$
 $+Ca^2*Nf*I(2,1,0,0,2,1,0,0,1,0,0,0)*polyr(10335501719221212-23631192973912320*d+21250999403182755*d^2-8505513120035979*d^3+56573934365604*d^4+1659056417851012*d^5-931203747570839*d^6+295139897086031*d^7-63569957302986*d^8+9855947860554*d^9-1121776761579*d^{10}+93716850483*d^{11}-5656345256*d^{12}+238803776*d^{13}-6719233*d^{14}+121321*d^{15}-1582*d^{16}+18*d^{17},-98761420800*d+274846763520*d^2-345335363712*d^3+259753998528*d^4-130658411232*d^5+46462951728*d^6-12029091456*d^7+2297724864*d^8-324081216*d^9+33359904*d^{10}-2437632*d^{11}+119808*d^{12}-3552*d^{13}+48*d^{14})$

$+Ca^2*Nf*I(2,1,0,0,3,1,0,0,1,0,2,0)*polyr(102173297778-$
 $96760401201*d+14935540155*d^2+13753681064*d^3-8045630588*d^4+$
 $2095755294*d^5-330659298*d^6+34436736*d^7-2430126*d^8+114619*d^9-$
 $3361*d^10+48*d^11,-5443200*d+11044080*d^2-9626148*d^3+4747152*d^4$
 $-1463763*d^5+293307*d^6-38262*d^7+3138*d^8-147*d^9+3*d^10)$
 $+Ca^2*Nf*I(2,1,0,0,3,1,0,0,1,2,0,0)*polyr(-1294608059226+$
 $1280266656957*d-233998604145*d^2-171386240322*d^3+108569100172*d^$
 $4-29080897366*d^5+4563830454*d^6-451492548*d^7+28268022*d^8-$
 $1072287*d^9+22163*d^10-194*d^11,-6531840*d+14123808*d^2-13144248*$
 $d^3+6918192*d^4-2271738*d^5+483126*d^6-66612*d^7+5748*d^8-282*d^9$
 $+6*d^10)$
 $+Ca^2*Nf*I(2,1,0,0,4,1,0,0,1,4,0,0)*polyr(-1276704+1937136*d-$
 $490272*d^2-298896*d^3+152352*d^4-25392*d^5+1824*d^6-48*d^7,-20160$
 $*d+37992*d^2-29642*d^3+12415*d^4-3014*d^5+424*d^6-32*d^7+d^8)$
 $+Ca^2*Nf*I(2,2,0,0,1,1,0,0,1,0,0,0)*polyr(-530269980664770972+$
 $1070152557928000560*d-861880947689329227*d^2+299143319533382835*d$
 $^3+24959850634532052*d^4-74819513761064308*d^5+38743415178465915*$
 $d^6-11954364441872003*d^7+2549761164125894*d^8-394250637999374*d^$
 $9+44810569864491*d^10-3721391372755*d^11+220165315544*d^12-$
 $8795763000*d^13+212160837*d^14-2278653*d^15-3190*d^16+42*d^17,-$
 $395045683200*d+1099387054080*d^2-1381341454848*d^3+1039015994112*$
 $d^4-522633644928*d^5+185851806912*d^6-48116365824*d^7+9190899456*$
 $d^8-1296324864*d^9+133439616*d^10-9750528*d^11+479232*d^12-14208*$
 $d^13+192*d^14)$
 $+Ca^2*Nf*I(2,2,0,0,1,1,1,1,0,0,0,0)*polyr(5039424-15449085*d+$
 $20641381*d^2-15709085*d^3+7529733*d^4-2382823*d^5+506703*d^6-$
 $71847*d^7+6527*d^8-344*d^9+8*d^10,43200*d-64080*d^2+39048*d^3-$
 $12512*d^4+2224*d^5-208*d^6+8*d^7)$
 $+Ca^2*Nf*I(2,2,2,0,0,0,0,0,1,0,0,0)*polyr(24071691216713364-$
 $63154379474687484*d+66520529548495929*d^2-33819871938001920*d^3+$
 $4895813612360745*d^4+4508775995061104*d^5-3568241600188733*d^6+$
 $1396665723922328*d^7-365488940921695*d^8+69290469329248*d^9-$
 $9811999215803*d^10+1047435185200*d^11-83877172349*d^12+4945411904$
 $*d^13-206820423*d^14+5710008*d^15-88289*d^16+364*d^17+6*d^18,-$
 $1975228416000*d+6879595161600*d^2-10952084805120*d^3+$
 $10579468589568*d^4-6940394931456*d^5+3277984788864*d^6-$
 $1152379975776*d^7+307287681120*d^8-62707955328*d^9+9799784832*d^$
 $10-1163953728*d^11+103242816*d^12-6623616*d^13+290304*d^14-7776*d$
 $^15+96*d^16)$
 $+Ca^2*Nf*I(2,2,2,0,0,0,0,1,1,0,0,0)*polyr(-82320782772474+$
 $223561037334789*d-224788914908241*d^2+97799360005446*d^3-$

2617130423164*d^4-18931396334303*d^5+11160325207187*d^6-
 3706449217670*d^7+851804986460*d^8-145350945785*d^9+19050920677*d
 ^10-1951755454*d^11+156800428*d^12-9693421*d^13+435865*d^14-12610
 *d^15+174*d^16,-36578304000*d+117239270400*d^2-169572545280*d^3+
 146641502592*d^4-84651849024*d^5+34473436128*d^6-10196788608*d^7+
 2219674368*d^8-355852800*d^9+41524416*d^10-3430272*d^11+190080*d^
 12-6336*d^13+96*d^14)
 +Ca^2*Nf*I(2,2,2,0,0,0,1,1,1,0,0,0)*polyr(20509776-64577133*d+
 94582792*d^2-84313139*d^3+50887095*d^4-21957910*d^5+6955748*d^6-
 1627950*d^7+278470*d^8-33813*d^9+2756*d^10-135*d^11+3*d^12,648000
 *d-1414800*d^2+1323360*d^3-693804*d^4+223308*d^5-45240*d^6+5640*d
 ^7-396*d^8+12*d^9)
 +Ca^2*Nf*I(3,1,0,0,1,1,0,0,1,0,0,0)*polyr(1213836295620064212-
 2455010674582635288*d+1970062648072248537*d^2-670805542795406427*
 d^3-68532063686307756*d^4+175098203991148404*d^5-
 88842304311430881*d^6+27006709083848515*d^7-5680878297445978*d^8+
 866657181206998*d^9-97238884022761*d^10+7977625264171*d^11-
 466640166216*d^12+18431229480*d^13-436854383*d^14+4325901*d^15+
 23002*d^16-378*d^17,-197522841600*d+549693527040*d^2-690670727424
 *d^3+519507997056*d^4-261316822464*d^5+92925903456*d^6-
 24058182912*d^7+4595449728*d^8-648162432*d^9+66719808*d^10-
 4875264*d^11+239616*d^12-7104*d^13+96*d^14)
 +Ca^2*Nf*I(3,1,0,0,1,1,1,1,0,0,0,0)*polyr(-12856368+30999261*d-
 32451887*d^2+18999457*d^3-6855199*d^4+1589027*d^5-238037*d^6+
 22339*d^7-1197*d^8+28*d^9,21600*d-32040*d^2+19524*d^3-6256*d^4+
 1112*d^5-104*d^6+4*d^7)
 +Ca^2*Nf*I(3,1,0,0,2,1,0,0,1,0,2,0)*polyr(3619748169972-
 4188065504886*d+1264301701992*d^2+349989020946*d^3-366840306704*d
 ^4+124189959012*d^5-24128385952*d^6+2993288804*d^7-242371836*d^8+
 12493586*d^9-376744*d^10+5258*d^11-8*d^12,16329600*d-38575440*d^2
 +39922524*d^3-23867604*d^4+9138441*d^5-2343684*d^6+408093*d^7-
 47676*d^8+3579*d^9-156*d^10+3*d^11)
 +Ca^2*Nf*I(3,1,0,0,2,1,0,0,1,1,1,0)*polyr(-21415161218076+
 35719772567418*d-20636967828360*d^2+2400255722886*d^3+
 2946459497233*d^4-1824683649180*d^5+544028831583*d^6-101581714868
 *d^7+12678303982*d^8-1066793758*d^9+58755606*d^10-1958578*d^11+
 33325*d^12-224*d^13+3*d^14,-114307200*d+286357680*d^2-318033108*d
 ^3+206995752*d^4-87836691*d^5+25544229*d^6-5200335*d^7+741825*d^8
 -72729*d^9+4671*d^10-177*d^11+3*d^12)
 +Ca^2*Nf*I(3,1,0,0,3,1,0,0,1,1,3,0)*polyr(20002099392-13794174048
 *d-909890464*d^2+2576675296*d^3-798000672*d^4+115934496*d^5-

$8923104*d^6+339360*d^7-3872*d^8-64*d^9, 302400*d-630360*d^2+558606$
 $*d^3-275151*d^4+82455*d^5-15402*d^6+1752*d^7-111*d^8+3*d^9)$
 $+Ca^{2*Nf}*I(3,1,0,0,3,1,0,0,1,4,0,0)*polyr(165681941184-$
 $129998766240*d+2682363648*d^2+23165434624*d^3-9395749504*d^4+$
 $1856856000*d^5-220621056*d^6+16897536*d^7-859200*d^8+28640*d^9-$
 $512*d^10, -2721600*d+5975640*d^2-5657814*d^3+3034965*d^4-1017246*d$
 $^5+221073*d^6-31170*d^7+2751*d^8-138*d^9+3*d^10)$
 $+Ca^{2*Nf}*I(3,2,0,0,1,1,0,0,1,0,0,2)*polyr(-442792652706+$
 $402152084037*d-57341905407*d^2-50026615014*d^3+26202135340*d^4-$
 $6075007686*d^5+869113514*d^6-86959836*d^7+6298958*d^8-298935*d^9+$
 $6781*d^10-6*d^11, -3628800*d+8169120*d^2-7963992*d^3+4419024*d^4-$
 $1539762*d^5+349734*d^6-51828*d^7+4836*d^8-258*d^9+6*d^10)$
 $+Ca^{2*Nf}*I(3,2,0,0,1,1,0,0,1,0,2,0)*polyr(269592694265718-$
 $782798318864829*d+720503573692914*d^2-233156512440990*d^3-$
 $45193491794178*d^4+66771147268257*d^5-27616965552662*d^6+$
 $6703335242948*d^7-1080621868894*d^8+119946910485*d^9-9159130666*d$
 $^10+466569378*d^11-14792726*d^12+256807*d^13-2226*d^14+24*d^15,$
 $4115059200*d-10766105280*d^2+12594622608*d^3-8723979504*d^4+$
 $3990103884*d^5-1270939008*d^6+289388976*d^7-47507040*d^8+5585544*$
 $d^9-459072*d^10+25056*d^11-816*d^12+12*d^13)$
 $+Ca^{2*Nf}*I(3,2,0,0,1,1,0,0,1,1,1,0)*polyr(846079829814348-$
 $1804747033425636*d+1514666429380755*d^2-545032662562620*d^3-$
 $31897255116006*d^4+121814097927085*d^5-60823264503980*d^6+$
 $17517697134327*d^7-3398002556387*d^8+465684053598*d^9-45658212125$
 $*d^10+3176903314*d^11-152876676*d^12+4877609*d^13-99258*d^14+1379$
 $*d^15-15*d^16, -12345177600*d+34355845440*d^2-43166920464*d^3+$
 $32469249816*d^4-16332301404*d^5+5807868966*d^6-1503636432*d^7+$
 $287215608*d^8-40510152*d^9+4169988*d^10-304704*d^11+14976*d^12-$
 $444*d^13+6*d^14)$
 $+Ca^{2*Nf}*I(4,1,0,0,1,1,0,0,1,0,0,2)*polyr(-51605591488614+$
 $69612336973233*d-28664319398034*d^2-2738005786835*d^3+$
 $6890763456314*d^4-2977880780606*d^5+709627193764*d^6-107302970558$
 $*d^7+10609034982*d^8-671186931*d^9+25076638*d^10-446703*d^11+1430$
 $*d^12, 8467200*d-20270880*d^2+21305688*d^3-12965720*d^4+5065786*d^$
 $5-1329300*d^6+237510*d^7-28560*d^8+2214*d^9-100*d^10+2*d^11)$
 $+Ca^{2*Nf}*I(4,1,0,0,1,1,0,0,1,0,2,0)*polyr(972669033699786-$
 $1943869057811451*d+1384658438148234*d^2-275360037972174*d^3-$
 $195894056428506*d^4+165325204433459*d^5-61598810225418*d^6+$
 $14366211520412*d^7-2283042264186*d^8+253536712123*d^9-19581659514$
 $*d^10+1018560722*d^11-33193974*d^12+578669*d^13-3462*d^14,$
 $1371686400*d-3588701760*d^2+4198207536*d^3-2907993168*d^4+$

$1330034628*d^5-423646336*d^6+96462992*d^7-15835680*d^8+1861848*d^9-153024*d^{10}+8352*d^{11}-272*d^{12}+4*d^{13}$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,1,1,0)*polyr(5632767525425508-$
 $8672097769717734*d+4665770715669228*d^2-425894837375640*d^3-$
 $741941269791537*d^4+457497763505141*d^5-143521953848663*d^6+$
 $29163856589245*d^7-4100148995254*d^8+405636111340*d^9-27920312178$
 $*d^{10}+1283618690*d^{11}-36045037*d^{12}+502101*d^{13}-1715*d^{14}+9*d^{15},$
 $685843200*d-1794350880*d^2+2099103768*d^3-1453996584*d^4+$
 $665017314*d^5-211823168*d^6+48231496*d^7-7917840*d^8+930924*d^9-$
 $76512*d^{10}+4176*d^{11}-136*d^{12}+2*d^{13})$
 $+Ca^2*Nf*I(4,1,0,0,1,1,0,0,1,2,0,0)*polyr(-18405242434002276+$
 $32914970959694832*d-22221914163442461*d^2+5048340296313015*d^3+$
 $2189145867788091*d^4-2150990245776794*d^5+857313037317416*d^6-$
 $215428550021565*d^7+37597451210112*d^8-4701754998436*d^9+$
 $422280273035*d^{10}-26676110411*d^{11}+1125048299*d^{12}-28121698*d^{13}+$
 $283210*d^{14}+2049*d^{15}-34*d^{16},-2057529600*d+5725974240*d^2-$
 $7194486744*d^3+5411541636*d^4-2722050234*d^5+967978161*d^6-$
 $250606072*d^7+47869268*d^8-6751692*d^9+694998*d^{10}-50784*d^{11}+$
 $2496*d^{12}-74*d^{13}+d^{14})$
 $+Ca^2*Nf*I(4,1,0,0,2,1,0,0,1,1,3,0)*polyr(328341004704-$
 $302977939248*d+39662736960*d^2+44667120768*d^3-23125618496*d^4+$
 $5175920928*d^5-644840832*d^6+45824256*d^7-1674336*d^8+18576*d^9+$
 $320*d^{10},-705600*d+1571640*d^2-1513534*d^3+828221*d^4-284112*d^5+$
 $63423*d^6-9222*d^7+843*d^8-44*d^9+d^{10})$
 $+Ca^2*Nf*I(4,2,0,0,1,1,0,0,1,0,4,0)*polyr(-3874768243056+$
 $4067960000184*d-926526758760*d^2-464486084352*d^3+339849335008*d^4-$
 $96314847440*d^5+15579176880*d^6-1543152192*d^7+91656912*d^8-$
 $2870952*d^9+25976*d^{10}+512*d^{11},8164800*d-18834120*d^2+18965322*d^3-$
 $10990833*d^4+4063393*d^5-1002301*d^6+167201*d^7-18643*d^8+1331$
 $*d^9-55*d^{10}+d^{11})$
 $+Ca^2*Nf*I(4,2,0,0,1,1,0,0,1,4,0,0)*polyr(123124407479568-$
 $150137373255192*d+51062656511472*d^2+10402467039816*d^3-$
 $13858719151684*d^4+5155961231012*d^5-1090225556528*d^6+$
 $147082008288*d^7-12932260008*d^8+718113696*d^9-22658336*d^{10}+$
 $287416*d^{11}+1340*d^{12}-12*d^{13},-57153600*d+140003640*d^2-151591374$
 $*d^3+95901153*d^4-39434584*d^5+11079500*d^6-2172708*d^7+297702*d^8-$
 $27960*d^9+1716*d^{10}-62*d^{11}+d^{12})$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,1,1,2)*polyr(-12767040+7455456*d+$
 $1261312*d^2-1400800*d^3+321984*d^4-33504*d^5+1664*d^6-32*d^7,-$
 $47040*d+79688*d^2-55266*d^3+20427*d^4-4362*d^5+540*d^6-36*d^7+d^8$
 $)$

$+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,1,3,0)*polyr(222425689952736-$
 $251111007831312*d+71833355967456*d^2+22311985629840*d^3-$
 $21612673366272*d^4+7099038653664*d^5-1343023823040*d^6+$
 $161535683744*d^7-12505154208*d^8+594665264*d^9-14861088*d^10+$
 $86480*d^11+2496*d^12,-57153600*d+140003640*d^2-151591374*d^3+$
 $95901153*d^4-39434584*d^5+11079500*d^6-2172708*d^7+297702*d^8-$
 $27960*d^9+1716*d^10-62*d^11+d^12)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,2,0,2)*polyr(-10080780432192+$
 $9772508781024*d-1569884351808*d^2-1424764545088*d^3+830930402112*$
 $d^4-206597772416*d^5+29095187520*d^6-2422218176*d^7+112866048*d^8$
 $-2391904*d^9+7680*d^10,-705600*d+1571640*d^2-1513534*d^3+828221*d$
 $^4-284112*d^5+63423*d^6-9222*d^7+843*d^8-44*d^9+d^10)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,2,2,0)*polyr(-10842796450656+$
 $14397334364784*d-5101030608944*d^2-1464663420672*d^3+$
 $1782368470336*d^4-663029588768*d^5+137811361568*d^6-17756601600*d$
 $^7+1435110304*d^8-69457104*d^9+1762192*d^10-16000*d^11,6350400*d-$
 $14850360*d^2+15193446*d^3-8967523*d^4+3385229*d^5-854919*d^6+$
 $146421*d^7-16809*d^8+1239*d^9-53*d^10+d^11)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,3,1,0)*polyr(933656333376672-$
 $1109875354768944*d+356712720961440*d^2+86753282579184*d^3-$
 $102580359032944*d^4+37026316911952*d^5-7684252548864*d^6+$
 $1025154008608*d^7-89983042560*d^8+5073717040*d^9-169562912*d^10+$
 $2730096*d^11-9648*d^12+48*d^13,-57153600*d+140003640*d^2-$
 $151591374*d^3+95901153*d^4-39434584*d^5+11079500*d^6-2172708*d^7+$
 $297702*d^8-27960*d^9+1716*d^10-62*d^11+d^12)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,0,0,1,4,0,0)*polyr(12373683670368-$
 $15203442091632*d+5143404285488*d^2+1093599677696*d^3-$
 $1380162629792*d^4+487435496736*d^5-95387707040*d^6+11490618624*d^$
 $7-857289952*d^8+37397200*d^9-823056*d^10+7296*d^11-96*d^12,$
 $6350400*d-14850360*d^2+15193446*d^3-8967523*d^4+3385229*d^5-$
 $854919*d^6+146421*d^7-16809*d^8+1239*d^9-53*d^10+d^11)$
 $+Ca^2*Nf*I(5,1,0,0,1,1,1,1,0,4,0,0)*polyr(-472064+911552*d-717824$
 $*d^2+281472*d^3-58112*d^4+6080*d^5-256*d^6,-900*d+1185*d^2-616*d^$
 $3+158*d^4-20*d^5+d^6)$
 $+Ca^2*Nf*I(6,1,0,0,1,1,0,0,1,3,3,0)*polyr(1005172899840-$
 $636269690880*d-82629304320*d^2+125296015360*d^3-32906598400*d^4+$
 $3866521600*d^5-209489920*d^6+3512320*d^7+51200*d^8,113400*d-$
 $234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^$
 $8+d^9)$
 $+Ca^2*Nf*I(6,1,0,0,1,1,0,0,1,4,2,0)*polyr(132421754880-$
 $106575175680*d-1547786240*d^2+23855011840*d^3-9254440960*d^4+$

$1618677760*d^5-144701440*d^6+6092800*d^7-81920*d^8, 113400*d-$
 $234810*d^2+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(6,1,0,0,1,1,0,0,1,6,0,0)*polyr(160275087360-$
 $93070643200*d-18967767040*d^2+19898521600*d^3-4513546240*d^4+$
 $431288320*d^5-15800320*d^6+51200*d^7,-12600*d+24690*d^2-20189*d^3$
 $+8941*d^4-2318*d^5+352*d^6-29*d^7+d^8)$
 $+Ca^2*Nf*I(6,2,0,0,1,1,0,0,1,8,0,0)*polyr(89944473600-46909317120$
 $*d-12664463360*d^2+9817825280*d^3-1841561600*d^4+136110080*d^5-$
 $2908160*d^6-40960*d^7, 113400*d-234810*d^2+206391*d^3-100658*d^4+$
 $29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,5,3,0)*polyr(-535552819200+$
 $279469670400*d+75085824000*d^2-58414448640*d^3+11043471360*d^4-$
 $832880640*d^5+18923520*d^6+245760*d^7, 113400*d-234810*d^2+206391*$
 $d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,6,0,2)*polyr(101262458880-$
 $45506150400*d-17961861120*d^2+10213785600*d^3-1509457920*d^4+$
 $73973760*d^5-245760*d^6,-12600*d+24690*d^2-20189*d^3+8941*d^4-$
 $2318*d^5+352*d^6-29*d^7+d^8)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,7,1,0)*polyr(-101262458880+$
 $45506150400*d+17961861120*d^2-10213785600*d^3+1509457920*d^4-$
 $73973760*d^5+245760*d^6,-12600*d+24690*d^2-20189*d^3+8941*d^4-$
 $2318*d^5+352*d^6-29*d^7+d^8)$
 $+Ca^2*Nf*I(7,1,0,0,1,1,0,0,1,8,0,0)*polyr(910265057280-$
 $509337354240*d-116590018560*d^2+109686865920*d^3-23661772800*d^4+$
 $2150154240*d^5-74711040*d^6+245760*d^7, 113400*d-234810*d^2+206391$
 $*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(7,2,0,0,1,1,0,0,1,8,2,0)*polyr(-548536320+191692800*d+$
 $109117440*d^2-38338560*d^3+2949120*d^4,-56700*d+89055*d^2-58668*d$
 $^3+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Ca^2*Nf*I(7,2,0,0,1,1,0,0,1,9,1,0)*polyr(-1097072640+383385600*d$
 $+218234880*d^2-76677120*d^3+5898240*d^4,-56700*d+89055*d^2-58668*$
 $d^3+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Ca^2*Nf*I(8,1,-1,0,2,1,0,0,1,8,0,2)*polyr(-7679508480+2683699200$
 $*d+1527644160*d^2-536739840*d^3+41287680*d^4, 113400*d-234810*d^2+$
 $206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(8,1,-1,0,2,1,0,0,1,10,0,0)*polyr(7679508480-2683699200$
 $*d-1527644160*d^2+536739840*d^3-41287680*d^4, 113400*d-234810*d^2+$
 $206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(8,1,0,0,1,1,0,0,1,8,0,2)*polyr(7679508480-2683699200*d$
 $-1527644160*d^2+536739840*d^3-41287680*d^4, 113400*d-234810*d^2+$

$206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9$
 $+Ca^2*Nf*I(8,1,0,0,1,1,0,0,1,9,0,1)*polyr(7679508480-2683699200*d$
 $-1527644160*d^2+536739840*d^3-41287680*d^4,113400*d-234810*d^2+$
 $206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(8,1,0,0,1,1,0,0,1,9,1,0)*polyr(-3839754240+1341849600*$
 $d+763822080*d^2-268369920*d^3+20643840*d^4,-56700*d+89055*d^2-$
 $58668*d^3+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Ca^2*Nf*I(8,1,0,0,1,1,0,0,1,10,0,0)*polyr(-7679508480+2683699200$
 $*d+1527644160*d^2-536739840*d^3+41287680*d^4,-56700*d+89055*d^2-$
 $58668*d^3+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Ca^2*Nf*I(8,2,-1,0,1,1,0,0,1,8,1,1)*polyr(-7679508480+2683699200$
 $*d+1527644160*d^2-536739840*d^3+41287680*d^4,113400*d-234810*d^2+$
 $206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca^2*Nf*I(8,2,-1,0,1,1,0,0,1,9,1,0)*polyr(-7679508480+2683699200$
 $*d+1527644160*d^2-536739840*d^3+41287680*d^4,113400*d-234810*d^2+$
 $206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca*Nf^2*I(1,1,4,0,0,0,1,1,0,0,0,0)*polyr(-13819392+43103184*d-$
 $58850620*d^2+47802766*d^3-25581004*d^4+9327796*d^5-2341812*d^6+$
 $401712*d^7-45764*d^8+3260*d^9-128*d^10+2*d^11,113400*d-234810*d^2$
 $+206391*d^3-100658*d^4+29803*d^5-5486*d^6+613*d^7-38*d^8+d^9)$
 $+Ca*Nf^2*I(1,1,4,0,0,0,1,1,1,0,0,0)*polyr(49195542240-47810768940$
 $*d+8437885257*d^2+5971242357*d^3-3494842236*d^4+826172136*d^5-$
 $104723778*d^6+6788946*d^7-97260*d^8-14964*d^9+897*d^10-15*d^11,$
 $2721600*d-7790040*d^2+9187974*d^3-6037701*d^4+2482157*d^5-672609*$
 $d^6+122325*d^7-14799*d^8+1143*d^9-51*d^10+d^11)$
 $+Ca*Nf^2*I(1,2,3,0,0,0,1,0,1,0,0,0)*polyr(-8+16*d-8*d^2,-9*d+d^2)$
 $+Ca*Nf^2*I(1,2,3,0,0,0,1,1,0,0,0,0)*polyr(1261056-3772816*d+$
 $4698304*d^2-3279120*d^3+1430896*d^4-404480*d^5+74144*d^6-8528*d^7$
 $+560*d^8-16*d^9,-37800*d+65670*d^2-46907*d^3+17917*d^4-3962*d^5+$
 $508*d^6-35*d^7+d^8)$
 $+Ca*Nf^2*I(1,2,3,0,0,0,1,1,1,0,0,0)*polyr(-1355452700544+$
 $1929242519280*d-913183716324*d^2+27063226550*d^3+153956360424*d^4$
 $-77828471450*d^5+20697084640*d^6-3521445116*d^7+402959864*d^8-$
 $30951868*d^9+1520708*d^10-41562*d^11+352*d^12+6*d^13,38102400*d-$
 $133554960*d^2+201463596*d^3-175009620*d^4+98277481*d^5-37793640*d$
 $^6+10248188*d^7-1980720*d^8+271518*d^9-25800*d^10+1616*d^11-60*d$
 $12+d^13)$
 $+Ca*Nf^2*I(2,2,0,0,1,1,1,1,0,0,0,0)*polyr(-24194071489248+$
 $57606914871468*d-48166474810329*d^2+14930260925003*d^3+$
 $2320907320877*d^4-3522833942391*d^5+1356475573446*d^6-$
 $295741313602*d^7+40794170890*d^8-3581975890*d^9+186561651*d^10-$

$4397369*d^{11}-29383*d^{12}+2381*d^{13}+16*d^{14},-174182400*d+585653760*d^2-837311616*d^3+680428032*d^4-352064480*d^5+122476000*d^6-29352288*d^7+4861536*d^8-546720*d^9+39840*d^{10}-1696*d^{11}+32*d^{12})$
 $+Ca*Nf^2*I(2,2,2,0,0,0,0,1,1,0,0,0)*polyr(196-416*d+301*d^2-95*d^3+15*d^4-d^5,-50*d+45*d^2-12*d^3+d^4)$
 $+Ca*Nf^2*I(2,2,2,0,0,0,1,1,1,0,0,0)*polyr(2335532149141920-4938378751183716*d+4177475434231227*d^2-1603616771741591*d^3+34106034385036*d^4+263163005385564*d^5-140801850211329*d^6+41466430385009*d^7-8091445326752*d^8+1096632764172*d^9-103213580071*d^{10}+6478947627*d^{11}-240606540*d^{12}+3112252*d^{13}+103469*d^{14}-3397*d^{15},18289152000*d-76908787200*d^2+143405907840*d^3-158107023936*d^4+115646675808*d^5-59562642576*d^6+22335112368*d^7-6208231488*d^8+1287763584*d^9-198688608*d^{10}+22477344*d^{11}-1810176*d^{12}+98208*d^{13}-3216*d^{14}+48*d^{15})$
 $+Ca*Nf^2*I(3,1,0,0,1,1,1,1,0,0,0,0)*polyr(350626360384224-532866156313452*d+285799177220817*d^2-33636561623213*d^3-34715412583057*d^4+21068744480997*d^5-6091222083470*d^6+1093909289670*d^7-128905019322*d^8+9827006310*d^9-442071539*d^{10}+8051767*d^{11}+151067*d^{12}-6959*d^{13},-87091200*d+292826880*d^2-418655808*d^3+340214016*d^4-176032240*d^5+61238000*d^6-14676144*d^7+2430768*d^8-273360*d^9+19920*d^{10}-848*d^{11}+16*d^{12})$
 $+Ca*Nf^2*I(3,2,0,0,1,1,1,1,0,0,0,2)*polyr(-324327665088+364891391640*d-104395271490*d^2-30565108628*d^3+29242602366*d^4-9174046136*d^5+1600273284*d^6-165912624*d^7+9322548*d^8-121120*d^9-17442*d^{10}+1028*d^{11}-18*d^{12},-5443200*d+18301680*d^2-26165988*d^3+21263376*d^4-11002015*d^5+3827375*d^6-917259*d^7+151923*d^8-17085*d^9+1245*d^{10}-53*d^{11}+d^{12})$
 $+Ca*Nf^2*I(4,1,0,0,1,1,1,1,0,0,2,0)*polyr(-3076947966816+3965629387932*d-1555815451833*d^2-135769596138*d^3+335597138631*d^4-139338910284*d^5+32062974642*d^6-4718143752*d^7+459070890*d^8-29103216*d^9+1129047*d^{10}-23022*d^{11}+159*d^{12},-5443200*d+18301680*d^2-26165988*d^3+21263376*d^4-11002015*d^5+3827375*d^6-917259*d^7+151923*d^8-17085*d^9+1245*d^{10}-53*d^{11}+d^{12})$
 $+Ca*Nf^2*I(5,1,0,0,1,1,1,1,0,2,2,0)*polyr(63338049792-56319534720*d+5994038784*d^2+8484505344*d^3-3991328256*d^4+813132288*d^5-89670144*d^6+5366016*d^7-151296*d^8+1152*d^9,-113400*d+348210*d^2-441201*d^3+307049*d^4-130461*d^5+35289*d^6-6099*d^7+651*d^8-39*d^9+d^{10})$
 $+Ca*Nf^2*I(5,1,0,0,1,1,1,1,0,4,0,0)*polyr(-662883151104+582434249600*d-65992181632*d^2-77762608384*d^3+35229708416*d^4-6640923648*d^5+634368384*d^6-27160320*d^7+66176*d^8+21632*d^9,-$

$113400*d+348210*d^2-441201*d^3+307049*d^4-130461*d^5+35289*d^6-6099*d^7+651*d^8-39*d^9+d^{10}$
 $+Ca*Nf^2*I(7,1,0,0,1,1,1,1,0,8,0,0)*polyr(242898370560-151332618240*d-18216222720*d^2+26101678080*d^3-5904629760*d^4+505282560*d^5-9830400*d^6-491520*d^7,-113400*d+348210*d^2-441201*d^3+307049*d^4-130461*d^5+35289*d^6-6099*d^7+651*d^8-39*d^9+d^{10})$
 $+Ca*Nf^2*I(7,3,0,-1,1,1,1,1,0,7,3,0)*polyr(1097072640-383385600*d-218234880*d^2+76677120*d^3-5898240*d^4,-113400*d+348210*d^2-441201*d^3+307049*d^4-130461*d^5+35289*d^6-6099*d^7+651*d^8-39*d^9+d^{10})$
 $+Ca*Nf^2*I(8,2,0,-1,1,1,1,1,0,8,2,0)*polyr(3839754240-1341849600*d-763822080*d^2+268369920*d^3-20643840*d^4,-113400*d+348210*d^2-441201*d^3+307049*d^4-130461*d^5+35289*d^6-6099*d^7+651*d^8-39*d^9+d^{10})$
 $+Ca*Nf*Cf*I(1,1,0,0,2,2,0,0,1,0,0,0)*polyr(3923702748-10760313015*d+13041934389*d^2-9539369187*d^3+4772841609*d^4-1729473526*d^5+463209138*d^6-91502086*d^7+13097758*d^8-1314547*d^9+87385*d^{10}-3447*d^{11}+61*d^{12},29030400*d-50837760*d^2+38293056*d^3-16205664*d^4+4215264*d^5-690240*d^6+69504*d^7-3936*d^8+96*d^9)$
 $+Ca*Nf*Cf*I(1,1,0,0,3,1,0,0,1,0,0,0)*polyr(27523764-82221273*d+107908006*d^2-84161407*d^3+41955104*d^4-13351650*d^5+2622692*d^6-286166*d^7+9788*d^8+1291*d^9-154*d^{10}+5*d^{11},-1612800*d+2286720*d^2-1365152*d^3+445264*d^4-85760*d^5+9760*d^6-608*d^7+16*d^8)$
 $+Ca*Nf*Cf*I(1,1,0,0,3,2,0,0,1,2,0,0)*polyr(323-3889*d+5622*d^2-2426*d^3+391*d^4-21*d^5,-240*d+118*d^2-19*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,1,0,0,4,1,0,0,1,2,0,0)*polyr(249-1042*d+1072*d^2-302*d^3+23*d^4,48*d-14*d^2+d^3)$
 $+Ca*Nf*Cf*I(1,1,4,0,0,0,0,1,1,0,0,0)*polyr(498-2333*d+3186*d^2-1676*d^3+348*d^4-23*d^5,-144*d+90*d^2-17*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,1,4,0,0,0,1,1,0,0,0,0)*polyr(-1486158+3642043*d-3376660*d^2+1568637*d^3-400990*d^4+57285*d^5-4288*d^6+131*d^7,-10080*d+9756*d^2-3638*d^3+658*d^4-58*d^5+2*d^6)$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,0,0,1,0,0,0)*polyr(-377980992+1733936544*d-3456558798*d^2+3939593705*d^3-2837835633*d^4+1340855068*d^5-409685496*d^6+71358254*d^7-1788446*d^8-2502524*d^9+699894*d^{10}-99535*d^{11}+8343*d^{12}-392*d^{13}+8*d^{14},32659200*d-77150880*d^2+79845048*d^3-47735208*d^4+18276882*d^5-4687368*d^6+816186*d^7-95352*d^8+7158*d^9-312*d^{10}+6*d^{11})$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,0,1,0,0,0,0)*polyr(-4949501760+14935419360*d-18686204298*d^2+13173831219*d^3-6150776355*d^4+2250557634*d^5-763961860*d^6+243935298*d^7-64266170*d^8+12527472*$

$d^9-1708038*d^{10}+156243*d^{11}-9035*d^{12}+294*d^{13}-4*d^{14}, 32659200*d$
 $-77150880*d^2+79845048*d^3-47735208*d^4+18276882*d^5-4687368*d^6+$
 $816186*d^7-95352*d^8+7158*d^9-312*d^{10}+6*d^{11})$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,0,1,1,0,0,0)*polyr(-45442512+281330964*d-$
 $679716696*d^2+890447621*d^3-727069138*d^4+399007178*d^5-153633744$
 $*d^6+42458358*d^7-8485380*d^8+1218052*d^9-122600*d^{10}+8221*d^{11}-$
 $330*d^{12}+6*d^{13}, -5443200*d+11044080*d^2-9626148*d^3+4747152*d^4-$
 $1463763*d^5+293307*d^6-38262*d^7+3138*d^8-147*d^9+3*d^{10})$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,1,0,1,0,0,0)*polyr(3641775552-12947015376$
 $*d+20132070522*d^2-18478140623*d^3+11338349767*d^4-4970297020*d^5$
 $+1614567200*d^6-395107698*d^7+72848514*d^8-9967948*d^9+979742*d^$
 $10-65207*d^{11}+2623*d^{12}-48*d^{13}, 32659200*d-77150880*d^2+79845048*$
 $d^3-47735208*d^4+18276882*d^5-4687368*d^6+816186*d^7-95352*d^8+$
 $7158*d^9-312*d^{10}+6*d^{11})$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,1,1,0,0,0,0)*polyr(-10318674240+$
 $36403264080*d-55141733970*d^2+47766073275*d^3-26327623659*d^4+$
 $9605330678*d^5-2290526252*d^6+317645442*d^7-9044650*d^8-5888712*d$
 $^9+1311714*d^{10}-142229*d^{11}+8813*d^{12}-294*d^{13}+4*d^{14}, 32659200*d-$
 $77150880*d^2+79845048*d^3-47735208*d^4+18276882*d^5-4687368*d^6+$
 $816186*d^7-95352*d^8+7158*d^9-312*d^{10}+6*d^{11})$
 $+Ca*Nf*Cf*I(1,2,3,0,0,0,1,1,1,0,0,0)*polyr(318648-1600492*d+$
 $3397074*d^2-4018806*d^3+2955472*d^4-1429276*d^5+467164*d^6-103864$
 $*d^7+15480*d^8-1480*d^9+82*d^{10}-2*d^{11}, -37800*d+65670*d^2-46907*d$
 $^3+17917*d^4-3962*d^5+508*d^6-35*d^7+d^8)$
 $+Ca*Nf*Cf*I(1,2,4,0,0,0,0,1,0,2,0,0)*polyr(-35304+49120*d-15568*d$
 $^2+1824*d^3-72*d^4, -105*d+71*d^2-15*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,2,4,0,0,0,1,1,0,2,0,0)*polyr(35304-49120*d+15568*d^$
 $2-1824*d^3+72*d^4, -105*d+71*d^2-15*d^3+d^4)$
 $+Ca*Nf*Cf*I(1,3,3,0,0,0,0,1,2,0,0)*polyr(-123552+178608*d-63968$
 $*d^2+9536*d^3-640*d^4+16*d^5, 2520*d-2019*d^2+573*d^3-69*d^4+3*d^5$
 $)$
 $+Ca*Nf*Cf*I(1,3,3,0,0,0,1,0,1,2,0,0)*polyr(123552-178608*d+63968*$
 $d^2-9536*d^3+640*d^4-16*d^5, 2520*d-2019*d^2+573*d^3-69*d^4+3*d^5)$
 $+Ca*Nf*Cf*I(2,1,0,0,2,1,0,0,1,0,0,0)*polyr(-6437936808+$
 $13165945782*d-6810068945*d^2-4162236415*d^3+7563459161*d^4-$
 $4911962495*d^5+1928372694*d^6-513016502*d^7+96259242*d^8-12838104$
 $*d^9+1196747*d^{10}-74363*d^{11}+2773*d^{12}-47*d^{13}, -43545600*d+$
 $83514240*d^2-70149024*d^3+33881760*d^4-10374312*d^5+2089176*d^6-$
 $276816*d^7+23280*d^8-1128*d^9+24*d^{10})$
 $+Ca*Nf*Cf*I(2,1,0,0,3,1,0,0,1,0,2,0)*polyr(4731-20545*d+23494*d^2$
 $-8954*d^3+1343*d^4-69*d^5, -720*d+354*d^2-57*d^3+3*d^4)$

$+Ca*Nf*Cf*I(2,1,0,0,3,1,0,0,1,2,0,0)*polyr(536436-2625153*d+$
 $4409330*d^2-3533964*d^3+1556026*d^4-396790*d^5+58678*d^6-4732*d^7$
 $+170*d^8-d^9,25920*d-36504*d^2+20934*d^3-6249*d^4+1023*d^5-87*d^6$
 $+3*d^7)$

$+Ca*Nf*Cf*I(2,2,0,0,1,1,0,0,1,0,0,0)*polyr(130572988632-$
 $434075572410*d+621494145251*d^2-519266855093*d^3+285581314055*d^4$
 $-109709655671*d^5+30333028318*d^6-6107649938*d^7+893771926*d^8-$
 $93574504*d^9+6781855*d^10-320185*d^11+8747*d^12-103*d^13,-$
 $174182400*d+334056960*d^2-280596096*d^3+135527040*d^4-41497248*d^$
 $5+8356704*d^6-1107264*d^7+93120*d^8-4512*d^9+96*d^10)$

$+Ca*Nf*Cf*I(2,2,0,0,1,1,1,1,0,0,0,0)*polyr(-15759864+47865564*d-$
 $63810429*d^2+48681158*d^3-23478318*d^4+7497302*d^5-1612264*d^6+$
 $231570*d^7-21338*d^8+1142*d^9-27*d^10,43200*d-64080*d^2+39048*d^3$
 $-12512*d^4+2224*d^5-208*d^6+8*d^7)$

$+Ca*Nf*Cf*I(2,2,2,0,0,0,0,0,1,0,0,0)*polyr(-43781175432+$
 $158257959366*d-252867438211*d^2+238593178782*d^3-149343812868*d^4$
 $+65877975112*d^5-21188000699*d^6+5058785580*d^7-901893368*d^8+$
 $119399910*d^9-11519001*d^10+779990*d^11-34588*d^12+876*d^13-9*d^$
 $14,-870912000*d+2279923200*d^2-2659271040*d^3+1826750016*d^4-$
 $822128928*d^5+254787408*d^6-55533408*d^7+8519376*d^8-902112*d^9+$
 $62832*d^10-2592*d^11+48*d^12)$

$+Ca*Nf*Cf*I(2,2,2,0,0,0,0,0,1,1,0,0,0)*polyr(-3256586964+$
 $10941026049*d-12179934138*d^2+4084013396*d^3+3052188678*d^4-$
 $4082780055*d^5+2232802604*d^6-751292160*d^7+170383720*d^8-$
 $26697261*d^9+2863918*d^10-201460*d^11+8390*d^12-157*d^13,$
 $145152000*d-355795200*d^2+383912640*d^3-240472896*d^4+96942672*d^$
 $5-26307456*d^6+4870992*d^7-608064*d^8+49008*d^9-2304*d^10+48*d^11$
 $)$

$+Ca*Nf*Cf*I(2,2,2,0,0,0,0,0,1,1,1,0,0,0)*polyr(-64638936+212502564*d-$
 $325459149*d^2+302618125*d^3-189438682*d^4+84113662*d^5-27178960*d$
 $^6+6437160*d^7-1107634*d^8+134798*d^9-10995*d^10+539*d^11-12*d^12$
 $,648000*d-1414800*d^2+1323360*d^3-693804*d^4+223308*d^5-45240*d^6$
 $+5640*d^7-396*d^8+12*d^9)$

$+Ca*Nf*Cf*I(3,1,0,0,1,1,0,0,1,0,0,0)*polyr(-363010601160+$
 $1145603497518*d-1589641508973*d^2+1313475872469*d^3-728585761245*$
 $d^4+287622181735*d^5-83182712658*d^6+17831463426*d^7-2830556002*d$
 $^8+328409996*d^9-27065857*d^10+1500937*d^11-50233*d^12+767*d^13,-$
 $87091200*d+167028480*d^2-140298048*d^3+67763520*d^4-20748624*d^5+$
 $4178352*d^6-553632*d^7+46560*d^8-2256*d^9+48*d^10)$

$+Ca*Nf*Cf*I(3,1,0,0,1,1,1,1,0,0,0,0)*polyr(26107608-63159756*d+$
 $66085469*d^2-38385764*d^3+13569220*d^4-3015012*d^5+414398*d^6-$

$31900*d^7+844*d^8+48*d^9-3*d^{10}, 21600*d-32040*d^2+19524*d^3-6256*d^4+1112*d^5-104*d^6+4*d^7)$
 $+Ca*Nf*Cf*I(3,1,0,0,2,1,0,0,1,0,2,0)*polyr(-744939+1165698*d-498089*d^2+79916*d^3-1949*d^4-686*d^5+49*d^6, 2160*d-1782*d^2+525*d^3-66*d^4+3*d^5)$
 $+Ca*Nf*Cf*I(3,1,0,0,2,1,0,0,1,1,1,0)*polyr(-305530272+705279552*d-581336156*d^2+192834122*d^3+10377212*d^4-31652700*d^5+12265092*d^6-2529336*d^7+315284*d^8-23780*d^9+1000*d^{10}-18*d^{11}, 907200*d-1588680*d^2+1196658*d^3-506427*d^4+131727*d^5-21570*d^6+2172*d^7-123*d^8+3*d^9)$
 $+Ca*Nf*Cf*I(3,1,0,0,3,1,0,0,1,1,3,0)*polyr(41184-52672*d+12544*d^2-1088*d^3+32*d^4, -360*d+237*d^2-48*d^3+3*d^4)$
 $+Ca*Nf*Cf*I(3,1,0,0,3,1,0,0,1,4,0,0)*polyr(7968-33344*d+34304*d^2-9664*d^3+736*d^4, -360*d+237*d^2-48*d^3+3*d^4)$
 $+Ca*Nf*Cf*I(3,2,0,0,1,1,0,0,1,0,2,0)*polyr(-616697172+1357578297*d-957397944*d^2+97834365*d^3+235924692*d^4-160959346*d^5+53001708*d^6-10491778*d^7+1302000*d^8-98935*d^9+4188*d^{10}-75*d^{11}, 1814400*d-3177360*d^2+2393316*d^3-1012854*d^4+263454*d^5-43140*d^6+4344*d^7-246*d^8+6*d^9)$
 $+Ca*Nf*Cf*I(3,2,0,0,1,1,0,0,1,1,1,0)*polyr(979437312-3342227736*d+5144407540*d^2-4649403946*d^3+2739872187*d^4-1110402852*d^5+317927408*d^6-64880744*d^7+9370054*d^8-933412*d^9+60788*d^{10}-2318*d^{11}+39*d^{12}, -5443200*d+10439280*d^2-8768628*d^3+4235220*d^4-1296789*d^5+261147*d^6-34602*d^7+2910*d^8-141*d^9+3*d^{10})$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,0,2,0)*polyr(-50941323+93384747*d-56883583*d^2+17000159*d^3-2808225*d^4+260609*d^5-12629*d^6+245*d^7, -10080*d+9756*d^2-3638*d^3+658*d^4-58*d^5+2*d^6)$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,1,1,0)*polyr(-396808416+1028509452*d-1072406232*d^2+615638021*d^3-217706738*d^4+49192258*d^5-6933498*d^6+518740*d^7-150*d^8-3742*d^9+314*d^{10}-9*d^{11}, 302400*d-529560*d^2+398886*d^3-168809*d^4+43909*d^5-7190*d^6+724*d^7-41*d^8+d^9)$
 $+Ca*Nf*Cf*I(4,1,0,0,1,1,0,0,1,2,0,0)*polyr(17076948336-55889948244*d+81198246496*d^2-70160937115*d^3+40025965557*d^4-15761569156*d^5+4369338764*d^6-857358218*d^7+118214062*d^8-11186704*d^9+691052*d^{10}-25075*d^{11}+405*d^{12}, -3628800*d+6959520*d^2-5845752*d^3+2823480*d^4-864526*d^5+174098*d^6-23068*d^7+1940*d^8-94*d^9+2*d^{10})$
 $+Ca*Nf*Cf*I(4,1,0,0,2,1,0,0,1,1,3,0)*polyr(674784-1020192*d+410304*d^2-70208*d^3+5472*d^4-160*d^5, 840*d-673*d^2+191*d^3-23*d^4+d^5)$
 $+Ca*Nf*Cf*I(4,2,0,0,1,1,0,0,1,0,4,0)*polyr(12288-15872*d+3840*d^2$

$-256*d^3, 15*d-8*d^2+d^3)$
 $+Ca*Nf*Cf*I(4,2,0,0,1,1,0,0,1,4,0,0)*polyr(22966848-50397360*d+$
 $41142656*d^2-17453416*d^3+4341656*d^4-656576*d^5+58992*d^6-2856*d$
 $^7+56*d^8, 10080*d-13956*d^2+7843*d^3-2286*d^4+364*d^5-30*d^6+d^7)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,0,0,1,1,3,0)*polyr(5659104-8466144*d+$
 $3323456*d^2-558144*d^3+42976*d^4-1248*d^5, 840*d-673*d^2+191*d^3-$
 $23*d^4+d^5)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,0,0,1,2,2,0)*polyr(-14650976+22376160*d-$
 $9232960*d^2+1636672*d^3-132960*d^4+4064*d^5, 840*d-673*d^2+191*d^3$
 $-23*d^4+d^5)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,0,0,1,3,1,0)*polyr(13004928-26337696*d+$
 $18283712*d^2-5509312*d^3+441312*d^4+157920*d^5-45184*d^6+4480*d^7$
 $-160*d^8, 10080*d-13956*d^2+7843*d^3-2286*d^4+364*d^5-30*d^6+d^7)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,0,0,1,4,0,0)*polyr(9319296-37207264*d+$
 $58580864*d^2-46781344*d^3+20391616*d^4-4903456*d^5+641536*d^6-$
 $42336*d^7+1088*d^8, 7200*d-10380*d^2+6113*d^3-1880*d^4+318*d^5-28*$
 $d^6+d^7)$
 $+Ca*Nf*Cf*I(5,1,0,0,1,1,1,1,0,4,0,0)*polyr(963584-1877632*d+$
 $1489920*d^2-585984*d^3+120320*d^4-12416*d^5+512*d^6, -900*d+1185*d$
 $^2-616*d^3+158*d^4-20*d^5+d^6)$
 $+Ca*Nf*Cf*I(6,1,0,0,1,1,0,0,1,3,3,0)*polyr(-230400+256000*d-25600$
 $*d^2, 15*d-8*d^2+d^3)$
 $+Ca*Nf*Cf*I(6,1,0,0,1,1,0,0,1,4,2,0)*polyr(179200-204800*d+25600*$
 $d^2, 15*d-8*d^2+d^3)$
 $+Ca*Nf*Cf*I(6,1,0,0,1,1,0,0,1,6,0,0)*polyr(430080-1625600*d+$
 $2357760*d^2-1623040*d^3+527360*d^4-69120*d^5+2560*d^6, -900*d+1185$
 $*d^2-616*d^3+158*d^4-20*d^5+d^6)$
 $+Ca*Nf*Cf*I(6,2,0,0,1,1,0,0,1,8,0,0)*polyr(-20480+20480*d, 15*d-8*$
 $d^2+d^3)$
 $+Ca*Nf*Cf*I(7,1,0,0,1,1,0,0,1,5,3,0)*polyr(122880-122880*d, 15*d-8$
 $*d^2+d^3)$
 $+Nf^2*Cf*I(1,1,4,0,0,0,1,1,1,0,0,0)*polyr(498-1835*d+1351*d^2-325$
 $*d^3+23*d^4, -144*d+90*d^2-17*d^3+d^4)$
 $+Nf^2*Cf*I(1,2,3,0,0,0,1,0,1,0,0,0)*polyr(-2016-2208*d+13496*d^2-$
 $14728*d^3+6896*d^4-1616*d^5+184*d^6-8*d^7, 1134*d-1233*d^2+447*d^3$
 $-63*d^4+3*d^5)$
 $+Nf^2*Cf*I(1,2,3,0,0,0,1,1,0,0,0,0)*polyr(-7296+11584*d-5184*d^2+$
 $960*d^3-64*d^4, 630*d-601*d^2+185*d^3-23*d^4+d^5)$
 $+Nf^2*Cf*I(1,2,3,0,0,0,1,1,1,0,0,0)*polyr(-14760-1275552*d+$
 $1818494*d^2-981290*d^3+269060*d^4-40148*d^5+3110*d^6-98*d^7, 90720$
 $*d-113004*d^2+53772*d^3-12885*d^4+1665*d^5-111*d^6+3*d^7)$

$+Nf^2Cf*I(2,2,0,0,1,1,1,1,0,0,0,0)*polyr(-15119661+26359882*d-$
 $14513683*d^2+3733252*d^3-489155*d^4+29770*d^5-381*d^6-24*d^7,$
 $23040*d-19008*d^2+5600*d^3-704*d^4+32*d^5)$
 $+Nf^2Cf*I(2,2,2,0,0,0,1,1,1,0,0,0)*polyr(1382399967-2090751112*d$
 $+1330683646*d^2-470691632*d^3+102009644*d^4-13970768*d^5+1192050*$
 $d^6-59120*d^7+1413*d^8-8*d^9,-2419200*d+4034880*d^2-2754048*d^3+$
 $1003248*d^4-211776*d^5+26016*d^6-1728*d^7+48*d^8)$
 $+Nf^2Cf*I(3,1,0,0,1,1,1,1,0,0,0,0)*polyr(219330093-197590188*d+$
 $73449221*d^2-14457792*d^3+1601263*d^4-96892*d^5+2783*d^6-24*d^7,$
 $11520*d-9504*d^2+2800*d^3-352*d^4+16*d^5)$
 $+Nf^2Cf*I(3,2,0,0,1,1,1,1,0,0,0,2)*polyr(646-7132*d+4112*d^2-740$
 $*d^3+42*d^4,-240*d+118*d^2-19*d^3+d^4)$
 $+Nf^2Cf*I(4,1,0,0,1,1,1,1,0,0,2,0)*polyr(593559-628287*d+271898*$
 $d^2-56746*d^3+5647*d^4-215*d^5,720*d-594*d^2+175*d^3-22*d^4+d^5)$
 $+Nf^2Cf*I(5,1,0,0,1,1,1,1,0,2,2,0)*polyr(-12288+7680*d-1536*d^2,$
 $15*d-8*d^2+d^3)$
 $+Nf^2Cf*I(5,1,0,0,1,1,1,1,0,4,0,0)*polyr(-429568+110592*d-6656*d$
 $^2,15*d-8*d^2+d^3)$
 $+Nf^2Cf*I(7,1,0,0,1,1,1,1,0,8,0,0)*polyr(163840,15*d-8*d^2+d^3)$
 $+Nf*Cf^2*I(1,1,0,0,2,2,0,0,1,0,0,0)*polyr(8975974959-34618888362*$
 $d+57862640166*d^2-56500508708*d^3+36738829369*d^4-16869381566*d^5$
 $+5463634900*d^6-1214476728*d^7+176821489*d^8-15153926*d^9+476646*$
 $d^10+35548*d^11-3897*d^12+110*d^13,-406425600*d+769789440*d^2-$
 $637778304*d^3+303465408*d^4-91425024*d^5+18093888*d^6-2353536*d^7$
 $+194112*d^8-9216*d^9+192*d^10)$
 $+Nf*Cf^2*I(1,1,0,0,3,1,0,0,1,0,0,0)*polyr(16495408647-60142080225$
 $*d+94132697955*d^2-81126678403*d^3+42249381688*d^4-14054195482*d^$
 $5+3071223974*d^6-440658518*d^7+39775991*d^8-1941397*d^9+16423*d^$
 $10+2921*d^11-102*d^12,67737600*d-105719040*d^2+71056704*d^3-$
 $26892000*d^4+6273504*d^5-924480*d^6+84096*d^7-4320*d^8+96*d^9)$
 $+Nf*Cf^2*I(1,1,0,0,4,1,0,0,1,1,1,0)*polyr(536679-1921902*d+$
 $2616210*d^2-1691814*d^3+547440*d^4-95274*d^5+9102*d^6-450*d^7+9*d$
 $^8,80640*d-98208*d^2+48616*d^3-12540*d^4+1780*d^5-132*d^6+4*d^7)$
 $+Nf*Cf^2*I(1,1,0,0,4,1,0,0,1,2,0,0)*polyr(-536679+1921902*d-$
 $2616210*d^2+1691814*d^3-547440*d^4+95274*d^5-9102*d^6+450*d^7-9*d$
 $^8,80640*d-98208*d^2+48616*d^3-12540*d^4+1780*d^5-132*d^6+4*d^7)$
 $+Nf*Cf^2*I(1,1,4,0,0,0,0,0,1,0,0,0)*polyr(39495186-177620115*d+$
 $339255685*d^2-366925296*d^3+255114716*d^4-122701790*d^5+42163130*$
 $d^6-10394040*d^7+1814042*d^8-217815*d^9+17065*d^10-784*d^11+16*d^$
 $12,7257600*d-11096640*d^2+7286544*d^3-2686264*d^4+608552*d^5-$
 $86800*d^6+7616*d^7-376*d^8+8*d^9)$

$+Nf*Cf^2*I(1,1,4,0,0,0,0,1,1,0,0,0)*polyr(365544-1769460*d+$
 $3700472*d^2-4433300*d^3+3399216*d^4-1754728*d^5+620336*d^6-150056$
 $*d^7+24360*d^8-2532*d^9+152*d^10-4*d^11,-56700*d+89055*d^2-58668*$
 $d^3+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Nf*Cf^2*I(1,1,4,0,0,0,1,1,0,0,0)*polyr(-574892046+2725971483*d$
 $-5453678232*d^2+6041096055*d^3-4105874004*d^4+1801063158*d^5-$
 $523058856*d^6+101296902*d^7-12918030*d^8+1040559*d^9-47952*d^10+$
 $963*d^11,-16934400*d+32074560*d^2-26574096*d^3+12644392*d^4-$
 $3809376*d^5+753912*d^6-98064*d^7+8088*d^8-384*d^9+8*d^10)$
 $+Nf*Cf^2*I(1,1,4,0,0,0,1,1,1,0,0,0)*polyr(-182772+884730*d-$
 $1850236*d^2+2216650*d^3-1699608*d^4+877364*d^5-310168*d^6+75028*d$
 $^7-12180*d^8+1266*d^9-76*d^10+2*d^11,-56700*d+89055*d^2-58668*d^3$
 $+20995*d^4-4404*d^5+541*d^6-36*d^7+d^8)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,0,0,1,0,0,0)*polyr(-4213088721+16197596055$
 $*d-25011362007*d^2+20226243649*d^3-9626392762*d^4+3006063158*d^5-$
 $691935534*d^6+132231906*d^7-22116469*d^8+3053235*d^9-313227*d^10+$
 $21581*d^11-880*d^12+16*d^13,228614400*d-458408160*d^2+406862136*d$
 $^3-210560436*d^4+70393164*d^5-15891876*d^6+2454732*d^7-256284*d^8$
 $+17316*d^9-684*d^10+12*d^11)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,0,1,0,0,0,0)*polyr(4631381631-13749426117*$
 $d+20027067669*d^2-18542511283*d^3+11360209226*d^4-4541250962*d^5+$
 $1176553098*d^6-194774758*d^7+19516387*d^8-969177*d^9-3823*d^10+$
 $2761*d^11-92*d^12,-25401600*d+48111840*d^2-39861144*d^3+18966588*$
 $d^4-5714064*d^5+1130868*d^6-147096*d^7+12132*d^8-576*d^9+12*d^10)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,0,1,1,0,0,0)*polyr(3160368-14709768*d+$
 $29202968*d^2-32676496*d^3+23027160*d^4-10822608*d^5+3486472*d^6-$
 $773728*d^7+116312*d^8-11304*d^9+640*d^10-16*d^11,-113400*d+197010$
 $*d^2-140721*d^3+53751*d^4-11886*d^5+1524*d^6-105*d^7+3*d^8)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,1,0,1,0,0,0)*polyr(8965917945-37035357894*$
 $d+62950661964*d^2-57890733790*d^3+32357309545*d^4-11888086940*d^5$
 $+3025354992*d^6-552193452*d^7+73982635*d^8-7371918*d^9+544740*d^$
 $10-28790*d^11+979*d^12-16*d^13,228614400*d-458408160*d^2+$
 $406862136*d^3-210560436*d^4+70393164*d^5-15891876*d^6+2454732*d^7$
 $-256284*d^8+17316*d^9-684*d^10+12*d^11)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,1,1,0,0,0,0)*polyr(-1827890631+1833418818*$
 $d+807319161*d^2-1088066312*d^3-254630426*d^4+517303652*d^5-$
 $208788126*d^6+38401648*d^7-2728987*d^8-178998*d^9+49093*d^10-3544$
 $*d^11+92*d^12,-25401600*d+48111840*d^2-39861144*d^3+18966588*d^4-$
 $5714064*d^5+1130868*d^6-147096*d^7+12132*d^8-576*d^9+12*d^10)$
 $+Nf*Cf^2*I(1,2,3,0,0,0,1,1,1,0,0,0)*polyr(-3160368+14709768*d-$
 $29202968*d^2+32676496*d^3-23027160*d^4+10822608*d^5-3486472*d^6+$

$773728*d^7-116312*d^8+11304*d^9-640*d^{10}+16*d^{11},-113400*d+197010$
 $*d^2-140721*d^3+53751*d^4-11886*d^5+1524*d^6-105*d^7+3*d^8)$
 $+Nf*Cf^2*I(1,2,4,0,0,0,0,1,0,2,0,0)*polyr(-3680442+13593720*d-$
 $19395792*d^2+13523256*d^3-4931796*d^4+997416*d^5-112896*d^6+6696*$
 $d^7-162*d^8,-44100*d+70665*d^2-47674*d^3+17551*d^4-3808*d^5+487*d$
 $^6-34*d^7+d^8)$
 $+Nf*Cf^2*I(1,2,4,0,0,0,1,1,0,2,0,0)*polyr(3680442-13593720*d+$
 $19395792*d^2-13523256*d^3+4931796*d^4-997416*d^5+112896*d^6-6696*$
 $d^7+162*d^8,-44100*d+70665*d^2-47674*d^3+17551*d^4-3808*d^5+487*d$
 $^6-34*d^7+d^8)$
 $+Nf*Cf^2*I(1,3,3,0,0,0,0,0,1,2,0,0)*polyr(-4293432+16090788*d-$
 $23492216*d^2+17022792*d^3-6635272*d^4+1492112*d^5-199848*d^6+$
 $15736*d^7-672*d^8+12*d^9,352800*d-609420*d^2+452057*d^3-188082*d^$
 $4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(1,3,3,0,0,0,1,0,1,2,0,0)*polyr(4293432-16090788*d+$
 $23492216*d^2-17022792*d^3+6635272*d^4-1492112*d^5+199848*d^6-$
 $15736*d^7+672*d^8-12*d^9,352800*d-609420*d^2+452057*d^3-188082*d^$
 $4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(2,1,0,0,2,1,0,0,1,0,0,0)*polyr(184162772592-$
 $620290758204*d+1008910813097*d^2-1039540293083*d^3+730355411885*d$
 $^4-356451728309*d^5+122270677272*d^6-29746238382*d^7+5140480154*d$
 $^8-623889318*d^9+51475401*d^{10}-2678823*d^{11}+71897*d^{12}-185*d^{13}-$
 $26*d^{14},609638400*d-1256290560*d^2+1149114816*d^3-614642688*d^4+$
 $213003888*d^5-49997088*d^6+8053776*d^7-879552*d^8+62352*d^9-2592*$
 $d^{10}+48*d^{11})$
 $+Nf*Cf^2*I(2,1,0,0,3,1,0,0,1,0,2,0)*polyr(-3398967+12708725*d-$
 $18491232*d^2+13331032*d^3-5158934*d^4+1150842*d^5-152920*d^6+$
 $11952*d^7-507*d^8+9*d^9,-403200*d+571680*d^2-341288*d^3+111316*d^$
 $4-21440*d^5+2440*d^6-152*d^7+4*d^8)$
 $+Nf*Cf^2*I(2,1,0,0,3,1,0,0,1,2,0,0)*polyr(41296959-153780552*d+$
 $223735343*d^2-162428722*d^3+64018520*d^4-14726970*d^5+2048904*d^6$
 $-171414*d^7+8113*d^8-182*d^9+d^{10},-181440*d+281448*d^2-183042*d^3$
 $+64677*d^4-13410*d^5+1632*d^6-108*d^7+3*d^8)$
 $+Nf*Cf^2*I(2,2,0,0,1,1,0,0,1,0,0,0)*polyr(-337823038998+$
 $3072324753369*d-7587247184822*d^2+9205293013490*d^3-6623207718934$
 $*d^4+3101782729207*d^5-994671064862*d^6+223909071580*d^7-$
 $35523672978*d^8+3893160055*d^9-276796994*d^{10}+10492370*d^{11}+254*d$
 $^{12}-16615*d^{13}+470*d^{14},2438553600*d-5025162240*d^2+4596459264*d^$
 $3-2458570752*d^4+852015552*d^5-199988352*d^6+32215104*d^7-3518208$
 $*d^8+249408*d^9-10368*d^{10}+192*d^{11})$
 $+Nf*Cf^2*I(2,2,0,0,1,1,1,1,0,0,0,0)*polyr(5681016-16967394*d+$

$22527667*d^2-17262988*d^3+8418852*d^4-2731656*d^5+598858*d^6-87876*d^7+8284*d^8-454*d^9+11*d^{10},21600*d-32040*d^2+19524*d^3-6256*d^4+1112*d^5-104*d^6+4*d^7)$
 $+Nf*Cf^2*I(2,2,2,0,0,0,0,1,0,0,0)*polyr(121457560770-530905957713*d+1152821645527*d^2-1473943531770*d^3+1185493757238*d^4-626704792665*d^5+223203954483*d^6-53430094042*d^7+8122963046*d^8-591654691*d^9-37745155*d^{10}+15147850*d^{11}-1854046*d^{12}+124685*d^{13}-4615*d^{14}+74*d^{15},12192768000*d-33660748800*d^2+41789640960*d^3-30893042304*d^4+15163305024*d^5-5211281568*d^6+1287042528*d^7-230338080*d^8+29668320*d^9-2683872*d^{10}+161952*d^{11}-5856*d^{12}+96*d^{13})$
 $+Nf*Cf^2*I(2,2,2,0,0,0,0,1,1,0,0,0)*polyr(-86338028493+308334195573*d-472524677634*d^2+410475434948*d^3-225212765413*d^4+83861362881*d^5-23173439938*d^6+5410841040*d^7-1179360887*d^8+229292423*d^9-35030574*d^{10}+3799276*d^{11}-269847*d^{12}+11203*d^{13}-206*d^{14},-2032128000*d+5271436800*d^2-6086367360*d^3+4134445824*d^4-1838143200*d^5+562189728*d^6-120808800*d^7+18254880*d^8-1902240*d^9+130272*d^{10}-5280*d^{11}+96*d^{12})$
 $+Nf*Cf^2*I(2,2,2,0,0,0,1,1,1,0,0,0)*polyr(23748984-83799738*d+136924789*d^2-134455911*d^3+87863380*d^4-40249346*d^5+13275408*d^6-3181932*d^7+550718*d^8-67172*d^9+5483*d^{10}-269*d^{11}+6*d^{12},324000*d-707400*d^2+661680*d^3-346902*d^4+111654*d^5-22620*d^6+2820*d^7-198*d^8+6*d^9)$
 $+Nf*Cf^2*I(3,1,0,0,1,1,0,0,1,0,0,0)*polyr(-3593651026158+10074366125937*d-12452986560984*d^2+9099446920800*d^3-4560497908680*d^4+1781820413241*d^5-598682898398*d^6+175259531720*d^7-42092341646*d^8+7756412659*d^9-1044639268*d^{10}+98562904*d^{11}-6148892*d^{12}+227555*d^{13}-3782*d^{14},1219276800*d-2512581120*d^2+2298229632*d^3-1229285376*d^4+426007776*d^5-99994176*d^6+16107552*d^7-1759104*d^8+124704*d^9-5184*d^{10}+96*d^{11})$
 $+Nf*Cf^2*I(3,1,0,0,1,1,1,1,0,0,0,0)*polyr(-394872+1161234*d-1181695*d^2+386850*d^3+141178*d^4-163042*d^5+61676*d^6-12778*d^7+1550*d^8-104*d^9+3*d^{10},10800*d-16020*d^2+9762*d^3-3128*d^4+556*d^5-52*d^6+2*d^7)$
 $+Nf*Cf^2*I(3,1,0,0,2,1,0,0,1,0,2,0)*polyr(-115716249+455704278*d-715893857*d^2+579994056*d^3-267127106*d^4+74925028*d^5-13283898*d^6+1497992*d^7-104261*d^8+4086*d^9-69*d^{10},1209600*d-2118240*d^2+1595544*d^3-675236*d^4+175636*d^5-28760*d^6+2896*d^7-164*d^8+4*d^9)$
 $+Nf*Cf^2*I(3,1,0,0,2,1,0,0,1,1,1,0)*polyr(4790477187-13420151859*d+18869241641*d^2-17483078533*d^3+10912645618*d^4-4425113358*d^5+$

$1149681026*d^6-188091578*d^7+18138759*d^8-778831*d^9-20027*d^{10}+3535*d^{11}-108*d^{12}, -12700800*d+24055920*d^2-19930572*d^3+9483294*d^4-2857032*d^5+565434*d^6-73548*d^7+6066*d^8-288*d^9+6*d^{10})$
 $+Nf*Cf^2*I(3,1,0,0,3,1,0,0,1,1,3,0)*polyr(1431144-5125072*d+6976560*d^2-4511504*d^3+1459840*d^4-254064*d^5+24272*d^6-1200*d^7+24*d^8, -50400*d+79860*d^2-53171*d^3+19273*d^4-4106*d^5+514*d^6-35*d^7+d^8)$
 $+Nf*Cf^2*I(3,1,0,0,3,1,0,0,1,4,0,0)*polyr(-1431144+5125072*d-6976560*d^2+4511504*d^3-1459840*d^4+254064*d^5-24272*d^6+1200*d^7-24*d^8, -50400*d+79860*d^2-53171*d^3+19273*d^4-4106*d^5+514*d^6-35*d^7+d^8)$
 $+Nf*Cf^2*I(3,2,0,0,1,1,0,0,1,0,2,0)*polyr(25172848521-76279651785*d+112529657631*d^2-104872317739*d^3+64808183910*d^4-26358966330*d^5+7012624894*d^6-1203300726*d^7+126787173*d^8-6945485*d^9+37587*d^{10}+15729*d^{11}-580*d^{12}, -50803200*d+96223680*d^2-79722288*d^3+37933176*d^4-11428128*d^5+2261736*d^6-294192*d^7+24264*d^8-1152*d^9+24*d^{10})$
 $+Nf*Cf^2*I(3,2,0,0,1,1,0,0,1,1,1,0)*polyr(33266432826-110311455429*d+169795717417*d^2-162574334707*d^3+106442700837*d^4-48880112182*d^5+15849629770*d^6-3626173830*d^7+579453380*d^8-63043745*d^9+4427229*d^{10}-178679*d^{11}+2957*d^{12}+12*d^{13}, 152409600*d-314072640*d^2+287278704*d^3-153660672*d^4+53250972*d^5-12499272*d^6+2013444*d^7-219888*d^8+15588*d^9-648*d^{10}+12*d^{11})$
 $+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,0,2,0)*polyr(-23031481707+95887812555*d-163062038073*d^2+148096997481*d^3-80029904334*d^4+27552870606*d^5-6286934034*d^6+965283378*d^7-98847351*d^8+6484119*d^9-246789*d^{10}+4149*d^{11}, -16934400*d+32074560*d^2-26574096*d^3+12644392*d^4-3809376*d^5+753912*d^6-98064*d^7+8088*d^8-384*d^9+8*d^{10})$
 $+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,1,1,0)*polyr(13088537685-49215717048*d+79032032478*d^2-69649461126*d^3+37078433049*d^4-12661967616*d^5+2875091796*d^6-440820204*d^7+45449991*d^8-3068280*d^9+127806*d^{10}-2910*d^{11}+27*d^{12}, -2116800*d+4009320*d^2-3321762*d^3+1580549*d^4-476172*d^5+94239*d^6-12258*d^7+1011*d^8-48*d^9+d^{10})$
 $+Nf*Cf^2*I(4,1,0,0,1,1,0,0,1,2,0,0)*polyr(421746811092-1548053564292*d+2515601654314*d^2-2343126515029*d^3+1383415902624*d^4-549756316669*d^5+152747578044*d^6-30335139066*d^7+4343619964*d^8-446372758*d^9+32236682*d^{10}-1560625*d^{11}+45728*d^{12}-617*d^{13}, 25401600*d-52345440*d^2+47879784*d^3-25610112*d^4+8875162*d^5-2083212*d^6+335574*d^7-36648*d^8+2598*d^9-108*d^{10}+2*d^{11})$
 $+Nf*Cf^2*I(4,1,0,0,2,1,0,0,1,1,3,0)*polyr(70346232-268303176*d+$

$401996160*d^2-303006912*d^3+125212080*d^4-30296592*d^5+4416576*d^6-382080*d^7+18072*d^8-360*d^9,352800*d-609420*d^2+452057*d^3-188082*d^4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(4,2,0,0,1,1,0,0,1,0,4,0)*polyr(1281024-4603776*d+6292416*d^2-4080960*d^3+1311360*d^4-217344*d^5+17856*d^6-576*d^7,6300*d-9195*d^2+5497*d^3-1722*d^4+298*d^5-27*d^6+d^7)$
 $+Nf*Cf^2*I(4,2,0,0,1,1,0,0,1,4,0,0)*polyr(145937532-798750420*d+1388580512*d^2-1123429256*d^3+479676368*d^4-116356528*d^5+16211512*d^6-1187512*d^7+26420*d^8+1732*d^9-88*d^10,352800*d-609420*d^2+452057*d^3-188082*d^4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,1,3,0)*polyr(589961592-2240780472*d+3337562976*d^2-2494555104*d^3+1019274768*d^4-243742992*d^5+35154912*d^6-3014496*d^7+141624*d^8-2808*d^9,352800*d-609420*d^2+452057*d^3-188082*d^4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,2,2,0)*polyr(-1563232920+5999418552*d-9073931616*d^2+6941581920*d^3-2935528272*d^4+733499280*d^5-111451872*d^6+10143456*d^7-509400*d^8+10872*d^9,352800*d-609420*d^2+452057*d^3-188082*d^4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,3,1,0)*polyr(3669404568-13078912728*d+18958766624*d^2-14143919552*d^3+5885045744*d^4-1453290928*d^5+218913664*d^6-19824640*d^7+998072*d^8-21944*d^9+32*d^10,352800*d-609420*d^2+452057*d^3-188082*d^4+48015*d^5-7704*d^6+759*d^7-42*d^8+d^9)$
 $+Nf*Cf^2*I(5,1,0,0,1,1,0,0,1,4,0,0)*polyr(1288523064-4445981872*d+6133121936*d^2-4252975408*d^3+1590029952*d^4-339700176*d^5+42207600*d^6-2937872*d^7+100168*d^8-1088*d^9,-50400*d+79860*d^2-53171*d^3+19273*d^4-4106*d^5+514*d^6-35*d^7+d^8)$
 $+Nf*Cf^2*I(5,1,0,0,1,1,1,1,0,4,0,0)*polyr(-38912+109056*d-108544*d^2+46080*d^3-8192*d^4+512*d^5,-900*d+1185*d^2-616*d^3+158*d^4-20*d^5+d^6)$
 $+Nf*Cf^2*I(6,1,0,0,1,1,0,0,1,3,3,0)*polyr(-24019200+81984000*d-103161600*d^2+57830400*d^3-14073600*d^4+1497600*d^5-57600*d^6,6300*d-9195*d^2+5497*d^3-1722*d^4+298*d^5-27*d^6+d^7)$
 $+Nf*Cf^2*I(6,1,0,0,1,1,0,0,1,4,2,0)*polyr(-2668800+8812800*d-10483200*d^2+5260800*d^3-979200*d^4+57600*d^5,-900*d+1185*d^2-616*d^3+158*d^4-20*d^5+d^6)$
 $+Nf*Cf^2*I(6,1,0,0,1,1,0,0,1,6,0,0)*polyr(76239360-258460160*d+325844480*d^2-186488320*d^3+48360960*d^4-5772800*d^5+279040*d^6-2560*d^7,6300*d-9195*d^2+5497*d^3-1722*d^4+298*d^5-27*d^6+d^7)$
 $+Nf*Cf^2*I(6,2,0,0,1,1,0,0,1,8,0,0)*polyr(-2135040+7050240*d-$

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8386560*d^2+4208640*d^3-783360*d^4+46080*d^5,6300*d-9195*d^2+5497
*d^3-1722*d^4+298*d^5-27*d^6+d^7)
+Nf*Cf^2*I(7,1,0,0,1,1,0,0,1,5,3,0)*polyr(12810240-42301440*d+
50319360*d^2-25251840*d^3+4700160*d^4-276480*d^5,6300*d-9195*d^2+
5497*d^3-1722*d^4+298*d^5-27*d^6+d^7)
+Nf*Cf^2*I(7,1,0,0,1,1,0,0,1,7,1,0)*polyr(-25620480+84602880*d-
100638720*d^2+50503680*d^3-9400320*d^4+552960*d^5,6300*d-9195*d^2
+5497*d^3-1722*d^4+298*d^5-27*d^6+d^7)
;

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