

Pensieve header: Andrea Overbay's P1/P2 program. Modified from "p1 and p2.nb" by DBN.

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In[]:= (*SetDirectory["~/AcademicPensieve/People/Overbay"]*)
SetDirectory["C:\\drorbn\\AcademicPensieve\\People\\Overbay"]

Out[]= C:\\drorbn\\AcademicPensieve\\People\\Overbay

In[]:= OverbayP2Data = Get["OverbayP2Data.m"];
OP2[K_Knot] := K /. OverbayP2Data /. T \[Rule] t

In[]:= OP12[Knot[n_, k_]] := OP12[{n, k}];
OP12[knot_List] := OP12[knot] = Module[
  {initialcrossing, initialmatrix, braidword, Quad, A, F,
   HigherOrder, kerbeforesub, keraftersub, exp2, poly, poly2, tr, n, p1, p2,
   f, HO, INV, Matrix, Imatrix, alex, amp, d, z, trace, Sz, Sder, ISz, ISder,
   Higher, h, Der, w, x, g, a, test3, test4, list, firstcrossing, firstmatrix,
   rep2, rep3, rep4, rep5, rep6, qh, p, Inv, NO3, subd, subz, qhend3,
   test1, test2, q, HigherOrder3, kerbeforesub3, sub, sub3, sub4, sub5, series},
  f[{i_, n_}] :=
    If[n > 0, ConstantArray[{i, i + 1}, {n}], ConstantArray[{i + 1, i}, {-n}]];
  list = Flatten[f /@ Echo[KnotData[knot, "BraidWord"]]];
  initialcrossing = firstcrossing[Take[list, {1, 2}]];
  initialmatrix = firstmatrix[Take[list, {1, 2}]];
  braidword = Sequence[Partition[Take[list, 2 - Length[list]], 2]];
  n = KnotData[knot, "BraidIndex"];
  firstcrossing[{x_, y_}] := If[x < y, HO_{x,y}, INV_{y,x}];
  firstmatrix[{x_, y_}] := If[x < y, Matrix_{x,y}, Imatrix_{y,x}];
  alex = KnotData[knot, "AlexanderPolynomial"] [t^2];
  amp = KnotData[knot, "Amphichiral"];
  rep2[i_, j_] := Which[i == j == 0, 1, True,
    ((i!j! Coefficient[exp2, d_2^i z_2^j]) /. {z_2 \[Rule] 0, d_2 \[Rule] 0})];
  rep3[i_, j_, k_, l_] := Which[i == j == k == l == 0, 1, True,
    ((i!j!k!l! Coefficient[exp2, d_2^i z_2^j d_3^k z_3^l]) /.
     {z_2 \[Rule] 0, d_2 \[Rule] 0, z_3 \[Rule] 0, d_3 \[Rule] 0})];
  rep4[i_, j_, k_, l_, m_, n_] := Which[i == j == k == l == m == n == 0, 1, True,
    ((i!j!k!l!m!n! Coefficient[exp2, d_2^i z_2^j d_3^k z_3^l d_4^m z_4^n]) /.
     {z_2 \[Rule] 0, d_2 \[Rule] 0, z_3 \[Rule] 0, d_3 \[Rule] 0, z_4 \[Rule] 0, d_4 \[Rule] 0})];
  rep5[i_, j_, k_, l_, m_, n_, o_, p_] := Which[i == j == k == l == m == n == o == p == 0, 1,
    True, ((i!j!k!l!m!n!o!p! Coefficient[exp2, d_2^i z_2^j d_3^k z_3^l d_4^m z_4^n d_5^o]) /.
     {z_2 \[Rule] 0, d_2 \[Rule] 0, z_3 \[Rule] 0, d_3 \[Rule] 0, z_4 \[Rule] 0, d_4 \[Rule] 0, z_5 \[Rule] 0, d_5 \[Rule] 0})];
  rep6[i_, j_, k_, l_, m_, n_, o_, p_, q_, r_] := Which[i == j == k == l == m ==
    n == o == p == q == r == 0, 1, True, ((i!j!k!l!m!n!o!p!q!r!
    Coefficient[exp2, d_2^i z_2^j d_3^k z_3^l d_4^m z_4^n d_5^o d_6^q z_6^r]) /.
     {z_2 \[Rule] 0, d_2 \[Rule] 0, z_3 \[Rule] 0, d_3 \[Rule] 0, z_4 \[Rule] 0, d_4 \[Rule] 0, z_5 \[Rule] 0, d_5 \[Rule] 0, z_6 \[Rule] 0, d_6 \[Rule] 0})];
  trace2[s_] := Expand[Plus @@ (s /. Rule[{a_, b_}, c_] \[Rule] rep2[a, b] c)];
  trace3[s_] := Expand[Plus @@ (s /. Rule[{a_, b_, e_, f_}, c_] \[Rule] rep3[a, b, e, f] c)];
  trace4[s_] :=
    Expand[Plus @@ (s /. Rule[{a_, b_, e_, f_, g_, h_}, c_] \[Rule] rep4[a, b, e, f, g, h] c)];
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trace5[s_] := Expand[Plus @@ (s /. Rule[{a_, b_, e_, f_, g_, h_, i_, j_}, c_] &gt;
    rep5[a, b, e, f, g, h, i, j] c)];
trace6[s_] := Expand[Plus @@ (s /. Rule[{a_, b_, e_, f_, g_, h_, i_, j_, k_, l_}, c_] &gt;
    rep6[a, b, e, f, g, h, i, j, k, l] c)];
qh[n_] := (1 + h Coefficient[Product[1 + 2 h z_i d_i, {i, 2, n}], h, 1] +
    h^2 Coefficient[Product[1 + 2 h z_i d_i + 2 h^2 (z_i d_i + z_i^2 d_i^2), {i, 2, n}], h, 2] +
    h^3 Coefficient[Product[1 + 2 h z_i d_i + 2 h^2 (z_i d_i + z_i^2 d_i^2) + (4/3) h^3
        (z_i d_i + 3 z_i^2 d_i^2 + z_i^3 d_i^3), {i, 2, n}], h, 3] + h^4 Coefficient[Product[
        1 + 2 h z_i d_i + 2 h^2 (z_i d_i + z_i^2 d_i^2) + (4/3) h^3 (z_i d_i + 3 z_i^2 d_i^2 + z_i^3 d_i^3) +
        (2/3) h^4 (z_i d_i + 7 z_i^2 d_i^2 + 6 z_i^3 d_i^3 + z_i^4 d_i^4), {i, 2, n}], h, 4]);
p_{l_,k_}[i_, j_] := Which[i == k && j == l, t, i == l && j == k, t, i == j == l,
    0, i == j == k, 1 - t^2, i == j, 1, True, 0];
Matrix_{l_,k_} := Array[p_{l,k}, {n, n}];
Imatrix_{l_,k_} := Inverse[Matrix_{l,k}];
Sz_{l_,k_}[z_j_] := Expand[Sum[z_i Imatrix_{l,k}[[i, j]], {i, 1, n}]];
Sder_{l_,k_}[d_j_] := Expand[Sum[Matrix_{l,k}[[i, j]] d_i, {i, 1, n}]];
ISz_{l_,k_}[z_j_] := Expand[Sum[z_i Matrix_{l,k}[[i, j]], {i, 1, n}]];
ISder_{l_,k_}[d_j_] := Expand[Sum[Imatrix_{l,k}[[i, j]] d_i, {i, 1, n}]];
Higher[a_, b_, w_, x_] := 
1 + h \left(2 a b w x - \frac{2 a^2 w x}{t} + 2 a^2 t w x + 3 a^2 x^2 - \frac{a^2 x^2}{t^2} + \frac{a b x^2}{t} - 3 a b t x^2 - 2 a^2 t^2 x^2\right) +
h^2 \left(2 a b w x - \frac{2 a^2 w x}{t} + 2 a^2 t w x + 2 a^2 b w^2 x - \frac{2 a^3 w^2 x}{t} + 2 a^3 t w^2 x + 5 a^2 x^2 - \frac{a^2 x^2}{t^2} + \frac{a b x^2}{t} - 5 a b t x^2 - 4 a^2 t^2 x^2 + 4 a^3 w x^2 + 2 a b^2 w x^2 - \frac{2 a^2 b w x^2}{t} - 2 a^2 b t w x^2 - 4 a^3 t^2 w x^2 - 4 a^4 w^2 x^2 + 2 a^2 b^2 w^2 x^2 + \frac{2 a^4 w^2 x^2}{t^2} - \frac{4 a^3 b w^2 x^2}{t} + 4 a^3 b t w^2 x^2 + 2 a^4 t^2 w^2 x^2 + \frac{10}{3} a^2 b x^3 - \frac{2 a^2 b x^3}{3 t^2} + \frac{4 a^3 x^3}{3 t} + \frac{2 a b^2 x^3}{3 t} - \frac{16}{3} a^3 t x^3 - \frac{14}{3} a b^2 t x^3 + \frac{4}{3} a^2 b t^2 x^3 + 4 a^3 t^3 x^3 + 14 a^3 b w x^3 + \frac{2 a^4 w x^3}{t^3} - \frac{4 a^3 b w x^3}{t^2} - \frac{8 a^4 w x^3}{t} + \frac{2 a^2 b^2 w x^3}{t} + 10 a^4 t w x^3 - 6 a^2 b^2 t w x^3 - 10 a^3 b t^2 w x^3 - 4 a^4 t^3 w x^3 + \frac{13 a^4 x^4}{2} - 3 a^2 b^2 x^4 + \frac{a^4 x^4}{2 t^4} - \frac{a^3 b x^4}{t^3} - \frac{3 a^4 x^4}{t^2} + \frac{a^2 b^2 x^4}{2 t^2} + \frac{6 a^3 b x^4}{t} - 11 a^3 b t x^4 - 6 a^4 t^2 x^4 + \frac{9}{2} a^2 b^2 t^2 x^4 + 6 a^3 \times b t^3 x^4 + 2 a^4 t^4 x^4\right);
Inv[a_, b_, w_, x_] := 1 + h \left(b^2 w^2 + \frac{a b w^2}{t} + a b t w^2 - b^2 t^2 w^2 - 2 a b w x\right) +
h^2 \left(b^2 w^2 - \frac{a b w^2}{t} + a b t w^2 - b^2 t^2 w^2 + \frac{10}{3} a b^2 w^3 + \frac{4 a b^2 w^3}{3 t^2} - \frac{2 a^2 b w^3}{3 t} + \frac{8 b^3 w^3}{3 t} + \frac{2}{3} a^2 b t w^3 - \frac{8}{3} b^3 t w^3 - \frac{2}{3} a b^2 t^2 w^3 + a^2 b^2 w^4 + \frac{b^4 w^4}{2} + \frac{a^2 b^2 w^4}{2 t^2} + \frac{a b^3 w^4}{t} + \frac{1}{2} a^2 b^2 t^2 w^4 - b^4 t^2 w^4 -\right.

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$$ab^3t^3w^4 + \frac{1}{2}b^4t^4w^4 + 2abwx + 2a^2bw^2x - 4b^3w^2x - \frac{4ab^2w^2x}{t} - 4ab^2tw^2x + 4b^3t^2w^2x - 2a^2b^2tw^3x - 2ab^3t^2w^3x + 2ab^2wx^2 + 2a^2b^2w^2x^2\Big);$$

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HO[i_,j_] := Higher[z_i, z_j, d_i, d_j];
INV[i_,j_] := Inv[z_i, z_j, d_i, d_j];
Der[i_][f_] := f + Sum[(1/k!) D[f, {w_i, k}, {x_i, k}], {k, 1, 8}];
NO3[l_, {i_, j_}] /; i < j :=
(Der[j][Der[i][Expand[1 + h Coefficient[((L /. Flatten[Table[{z_k -> Sz[i,j][z_k], d_k -> Sder[i,j][d_k]}, {k, 1, n}]) /. {d_i -> w_i, d_j -> w_j}) * Higher[x_i, x_j, d_i, d_j], h, 1] + h^2 Coefficient[((L /. Flatten[Table[{z_k -> Sz[i,j][z_k], d_k -> Sder[i,j][d_k]}, {k, 1, n}]) /. {d_i -> w_i, d_j -> w_j}) * Higher[x_i, x_j, d_i, d_j], h, 2]]]]) /. {w_i -> d_i, w_j -> d_j, x_i -> z_i, x_j -> z_j});
NO3[l_, {i_, j_}] /; i > j :=
(Der[j][Der[i][Expand[1 + h Coefficient[((L /. Flatten[Table[{z_k -> ISz[j,i][z_k], d_k -> ISder[j,i][d_k]}, {k, 1, n}]) /. {d_i -> w_i, d_j -> w_j}) * Inv[x_j, x_i, d_j, d_i], h, 1] + h^2 Coefficient[((L /. Flatten[Table[{z_k -> ISz[j,i][z_k], d_k -> ISder[j,i][d_k]}, {k, 1, n}]) /. {d_i -> w_i, d_j -> w_j}) * Inv[x_j, x_i, d_j, d_i], h, 2]]]]) /. {w_i -> d_i, w_j -> d_j, x_i -> z_i, x_j -> z_j});
subd = Flatten[Table[d_i -> w_i, {i, 2, n}]];
subz = Flatten[Table[z_i -> x_i, {i, 2, n}]];
g[l_, {x_, y_}] := If[x < y, l.(Matrix[x,y]), l.(Imatrix[y,x])];
qhend3[f_] := Expand[(f /. subd) +
  h(Coefficient[qh[n], h, 1] /. subz) + h^2 (Coefficient[qh[n], h, 2] /. subz) +
  h^2 ((Coefficient[f, h, 1] /. subd) * (Coefficient[qh[n], h, 1] /. subz))];
Quad = Expand[Fold[g, initialmatrix, braidword]];
a[i_,j_] := If[i == j, Quad[[i, j]] - 1, Quad[[i, j]]];
A = Table[a[i,j], {i, 2, n}, {j, 2, n}];
F = Inverse[-A];
HigherOrder3 = Fold[NO3, initialcrossing, braidword];

kerbeforesub3 = ((l = qhend3[HigherOrder3];
  Do[l = Der[i][l], {i, 2, n, 1}];
  l) /. Flatten[Table[{x_i -> z_i, w_i -> d_i}, {i, 2, n}]]);
sub = Flatten[Table[z_k -> Expand[Sum[Quad[[i, k]] z_i, {i, 1, n}]], {k, 1, n}]];
keraftersub = 1 + h Expand[Coefficient[kerbeforesub3 /. sub, h, 1]] +
  h^2 Expand[Coefficient[kerbeforesub3 /. sub, h, 2]];
sub3 = Flatten[Table[{z_i -> z_i + Expand[
    Sum[F[[k, i - 1]] Quad[[1, k + 1]] z_1, {k, 1, n - 1}]], d_i ->
    d_i + Expand[Sum[F[[i - 1, l]] Quad[[l + 1, 1]] d_1, {l, 1, n - 1}]]}, {i, 2, n}]];
twopoly = 1 + h Expand[Coefficient[keraftersub /. sub3, h, 1]] +
  h^2 Expand[Coefficient[keraftersub /. sub3, h, 2]];
sub4 = Sum[(Expand[Sum[F[[i - 1, j - 1]] d_i z_j, {j, 2, n}, {i, 2, n}])]^i/i!, {i, 1, 10}];
exp2 = Expand[1 + sub4];
sub5 = Flatten[Table[{d_i -> z_i}, {i, 2, n}]];
poly2 = CoefficientRules[twopoly, sub5];
tr = trace_n[poly2];

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test1 = Together[Coefficient[tr, h, 1]];
test2 = Together[Coefficient[tr, h, 2]];
p = If[amp == True,
       Cancel[Denominator[test1] / alex], Cancel[Denominator[test1] / alex^2]];
q = If[amp == True, Cancel[Denominator[test2] / alex^3],
       Cancel[Denominator[test2] / alex^4]];
series = If[amp == True, Normal[Series[
  (((1 + h test1 + h^2 test2 + h^3 test3 + h^4 test4) (1/alex)) /. {t → t Exp[h]}) 
  (alex) /. {h →  $\frac{h}{2} - \frac{h^2}{4}$ } /. {h → -Sqrt[1 + h] + 1/Sqrt[1 + h]}, {h, 0, 2}]],
  Normal[Series[((((1 + h test1 + h^2 test2 + h^3 test3 + h^4 test4) (1/alex)) /.
  {t → t Exp[h]}) alex) /. {h →  $\frac{h}{2} - \frac{h^2}{4}$ }, {h, 0, 2}]]];
p1 = Expand[Numerator[Coefficient[series, h, 1]]/p];
p2 = Expand[Numerator[Coefficient[series, h, 2]]/q];
{p1, p2}
];
```

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In[]:= AllKnots = {Knot[3, 1], Knot[4, 1], Knot[5, 1], Knot[5, 2], Knot[6, 1], Knot[6, 2],
  Knot[6, 3], Knot[7, 1], Knot[7, 2], Knot[7, 3], Knot[7, 4], Knot[7, 5], Knot[7, 6],
  Knot[7, 7], Knot[8, 1], Knot[8, 2], Knot[8, 3], Knot[8, 4], Knot[8, 5], Knot[8, 6],
  Knot[8, 7], Knot[8, 8], Knot[8, 9], Knot[8, 10], Knot[8, 11], Knot[8, 12],
  Knot[8, 13], Knot[8, 14], Knot[8, 15], Knot[8, 16], Knot[8, 17], Knot[8, 18],
  Knot[8, 19], Knot[8, 20], Knot[8, 21], Knot[9, 1], Knot[9, 2], Knot[9, 3], Knot[9, 4],
  Knot[9, 5], Knot[9, 6], Knot[9, 7], Knot[9, 8], Knot[9, 9], Knot[9, 10], Knot[9, 11],
  Knot[9, 12], Knot[9, 13], Knot[9, 14], Knot[9, 15], Knot[9, 16], Knot[9, 17],
  Knot[9, 18], Knot[9, 19], Knot[9, 20], Knot[9, 21], Knot[9, 22], Knot[9, 23],
  Knot[9, 24], Knot[9, 25], Knot[9, 26], Knot[9, 27], Knot[9, 28], Knot[9, 29],
  Knot[9, 30], Knot[9, 31], Knot[9, 32], Knot[9, 33], Knot[9, 34], Knot[9, 35],
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  Knot[10, 95], Knot[10, 96], Knot[10, 97], Knot[10, 98], Knot[10, 99], Knot[10, 100],
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  Knot[10, 111], Knot[10, 112], Knot[10, 113], Knot[10, 114], Knot[10, 115],
  Knot[10, 116], Knot[10, 117], Knot[10, 118], Knot[10, 119], Knot[10, 120],
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  Knot[10, 141], Knot[10, 142], Knot[10, 143], Knot[10, 144], Knot[10, 145],
  Knot[10, 146], Knot[10, 147], Knot[10, 148], Knot[10, 149], Knot[10, 150],
  Knot[10, 151], Knot[10, 152], Knot[10, 153], Knot[10, 154], Knot[10, 155],
  Knot[10, 156], Knot[10, 157], Knot[10, 158], Knot[10, 159], Knot[10, 160],
  Knot[10, 161], Knot[10, 162], Knot[10, 163], Knot[10, 164], Knot[10, 165]};
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In[6]:= tab310 = Table[
  {n, k} = List @@ K;
  If[Max[First /@ KnotData[{n, k}], "BraidWord"]] <= 3,
  fname = "Data/" <> ToString[n] <> "_" <> ToString[k] <> ".m";
  Switch[FileType[fname],
    None, z = (Echo@K) &gt;> Echo@Timing[OP12@K]; Put[z, fname],
    File, z = Echo@Get[fname]
  ];
  If[z[[2, 2, 2]] != OP2[K], Print["Warning! Mismatch with OP2: ", OP2[K]]];
  z,
  ToString[K] <> " Postponed"
],
{K, AllKnots}
]

» Knot[3, 1] &gt; {2.38764, {2 + 1/t^4 - 2/t^2 - 2 t^2 + t^4, 1 - 1/t^4 + 1/t^2 + t^2 - t^4}}
» Knot[4, 1] &gt; {61.3417, {0, 1 - 1/t^2 - t^2}}
Warning! Mismatch with OP2: 5 + 1/t^4 - 4/t^2 - 4 t^2 + t^4
» Knot[5, 1] &gt; {8.93164, {6 + 2/t^8 - 4/t^6 + 5/t^4 - 6/t^2 - 6 t^2 + 5 t^4 - 4 t^6 + 2 t^8,
  61 + 1/t^16 - 4/t^14 + 8/t^12 - 12/t^10 + 13/t^8 - 18/t^6 + 32/t^4 - 49/t^2 - 49 t^2 + 32 t^4 - 18 t^6 + 13 t^8 - 12 t^10 + 8 t^12 - 4 t^14 + t^16}}
» Knot[5, 2] &gt; {101.588, {18 + 5/t^4 - 14/t^2 - 14 t^2 + 5 t^4, 80 + 3/t^8 - 14/t^6 + 31/t^4 - 59/t^2 - 59 t^2 + 31 t^4 - 14 t^6 + 3 t^8}}
» Knot[6, 1] &gt; {5066.72, {10 + 1/t^4 - 6/t^2 - 6 t^2 + t^4, -70 - 1/t^8 + 10/t^6 - 32/t^4 + 57/t^2 + 57 t^2 - 32 t^4 + 10 t^6 - t^8}}
» Knot[6, 2] &gt; {102.222, {16 + 1/t^8 - 6/t^6 + 13/t^4 - 16/t^2 - 16 t^2 + 13 t^4 - 6 t^6 + t^8,
  87 - 1/t^12 + 14/t^10 - 63/t^8 + 135/t^6 - 131/t^4 + 2/t^2 + 2 t^2 - 131 t^4 + 135 t^6 - 63 t^8 + 14 t^10 - t^12}}
» Knot[6, 3] &gt; {76.0034, {0, 41 - 1/t^8 + 10/t^6 - 30/t^4 - 30 t^2 + 10 t^4 + t^6 - t^8}}
Warning! Mismatch with OP2: 405 - 1/t^12 + 4/t^10 + 2/t^8 - 52/t^6 + 177/t^4 - 332/t^2 + 177 t^4 - 52 t^6 + 2 t^8 + 4 t^10 - t^12
» Knot[7, 1] &gt; {20.8368, {12 + 3/t^12 - 6/t^10 + 8/t^8 - 10/t^6 + 11/t^4 - 12/t^2 - 12 t^2 + 11 t^4 - 10 t^6 + 8 t^8 - 6 t^10 + 3 t^12,
  438 + 3/t^24 - 12/t^22 + 27/t^20 - 48/t^18 + 72/t^16 - 96/t^14 + 114/t^12 - 141/t^10 + 72/t^8 - 48/t^6 + 255/t^4 - 333/t^2 - 402 t^2 +
  333 t^4 - 255 t^6 + 189 t^8 - 141 t^10 + 114 t^12 - 96 t^14 + 72 t^16 - 48 t^18 + 27 t^20 - 12 t^22 + 3 t^24}}
» Knot[7, 2] &gt;
{7965.46, {60 + 14/t^4 - 44/t^2 - 44 t^2 + 14 t^4, 1593 + 42/t^8 - 248/t^6 + 705/t^4 - 1294/t^2 - 1294 t^2 + 705 t^4 - 248 t^6 + 42 t^8}}

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» Knot [7, 3] →

$$\left\{ 237.888, \left\{ 56 + \frac{9}{t^8} - \frac{26}{t^6} + \frac{41}{t^4} - \frac{52}{t^2} - 52 t^2 + 41 t^4 - 26 t^6 + 9 t^8, 3849 + \frac{23}{t^{16}} - \frac{130}{t^{14}} + \frac{372}{t^{12}} - \frac{740}{t^{10}} + \frac{1193}{t^8} - \frac{1793}{t^6} + \frac{2615}{t^4} - \frac{3462}{t^2} - 3462 t^2 + 2615 t^4 - 1793 t^6 + 1193 t^8 - 740 t^{10} + 372 t^{12} - 130 t^{14} + 23 t^{16} \right\} \right\}$$

» Knot [7, 4] → {10 735.,

$$\left\{ 112 + \frac{24}{t^4} - \frac{80}{t^2} - 80 t^2 + 24 t^4, 4994 + \frac{112}{t^8} - \frac{720}{t^6} + \frac{2177}{t^4} - \frac{4064}{t^2} - 4064 t^2 + 2177 t^4 - 720 t^6 + 112 t^8 \right\}$$

» Knot [7, 5] →

$$\left\{ 220.805, \left\{ 114 + \frac{9}{t^8} - \frac{34}{t^6} + \frac{70}{t^4} - \frac{102}{t^2} - 102 t^2 + 70 t^4 - 34 t^6 + 9 t^8, 12090 + \frac{23}{t^{16}} - \frac{168}{t^{14}} + \frac{632}{t^{12}} - \frac{1652}{t^{10}} + \frac{3389}{t^8} - \frac{5847}{t^6} + \frac{8697}{t^4} - \frac{11117}{t^2} - 11117 t^2 + 8697 t^4 - 5847 t^6 + 3389 t^8 - 1652 t^{10} + 632 t^{12} - 168 t^{14} + 23 t^{16} \right\} \right\}$$

» Knot [7, 6] → {11 945., {78 +  $\frac{1}{t^8}$  -  $\frac{10}{t^6}$  +  $\frac{36}{t^4}$  -  $\frac{66}{t^2}$  - 66 t<sup>2</sup> + 36 t<sup>4</sup> - 10 t<sup>6</sup> + t<sup>8</sup>, 499 +  $\frac{8}{t^{10}}$  -  $\frac{60}{t^8}$  +  $\frac{155}{t^6}$  -  $\frac{99}{t^4}$  -  $\frac{253}{t^2}$  - 253 t<sup>2</sup> - 99 t<sup>4</sup> + 155 t<sup>6</sup> - 60 t<sup>8</sup> + 8 t<sup>10</sup>}}

» Knot [7, 7] → {18 541.8, {22 +  $\frac{3}{t^4}$  -  $\frac{14}{t^2}$  - 14 t<sup>2</sup> + 3 t<sup>4</sup>, 929 -  $\frac{1}{t^{12}}$  +  $\frac{12}{t^{10}}$  -  $\frac{46}{t^8}$  +  $\frac{36}{t^6}$  +  $\frac{207}{t^4}$  -  $\frac{673}{t^2}$  - 673 t<sup>2</sup> + 207 t<sup>4</sup> + 36 t<sup>6</sup> - 46 t<sup>8</sup> + 12 t<sup>10</sup> - t<sup>12</sup>}}

» Knot [8, 2] → {198.579, {50 +  $\frac{2}{t^{12}}$  -  $\frac{12}{t^{10}}$  +  $\frac{28}{t^8}$  -  $\frac{40}{t^6}$  +  $\frac{47}{t^4}$  -  $\frac{50}{t^2}$  - 50 t<sup>2</sup> + 47 t<sup>4</sup> - 40 t<sup>6</sup> + 28 t<sup>8</sup> - 12 t<sup>10</sup> + 2 t<sup>12</sup>, 5698 +  $\frac{1}{t^{24}}$  -  $\frac{12}{t^{22}}$  +  $\frac{63}{t^{20}}$  -  $\frac{194}{t^{18}}$  +  $\frac{407}{t^{16}}$  -  $\frac{628}{t^{14}}$  +  $\frac{738}{t^{12}}$  -  $\frac{742}{t^{10}}$  +  $\frac{962}{t^8}$  -  $\frac{1826}{t^6}$  +  $\frac{3361}{t^4}$  -  $\frac{4979}{t^2}$  - 3361 t<sup>4</sup> - 1826 t<sup>6</sup> + 962 t<sup>8</sup> - 742 t<sup>10</sup> + 738 t<sup>12</sup> - 628 t<sup>14</sup> + 407 t<sup>16</sup> - 194 t<sup>18</sup> + 63 t<sup>20</sup> - 12 t<sup>22</sup> + t<sup>24</sup>}}

» Knot [8, 4] →

$$\left\{ 13909.4, \left\{ 20 + \frac{3}{t^8} - \frac{14}{t^6} + \frac{25}{t^4} - \frac{24}{t^2} - 24 t^2 + 25 t^4 - 14 t^6 + 3 t^8, 1773 - \frac{1}{t^{16}} + \frac{10}{t^{14}} - \frac{60}{t^{12}} + \frac{268}{t^{10}} - \frac{761}{t^8} + \frac{1205}{t^6} - \frac{697}{t^4} - \frac{852}{t^2} - 852 t^2 - 697 t^4 + 1205 t^6 - 761 t^8 + 268 t^{10} - 60 t^{12} + 10 t^{14} - t^{16} \right\} \right\}$$

» Knot [8, 5] → {450.284, {92 +  $\frac{2}{t^{12}}$  -  $\frac{12}{t^{10}}$  +  $\frac{31}{t^8}$  -  $\frac{54}{t^6}$  +  $\frac{75}{t^4}$  -  $\frac{88}{t^2}$  - 88 t<sup>2</sup> + 75 t<sup>4</sup> - 54 t<sup>6</sup> + 31 t<sup>8</sup> - 12 t<sup>10</sup> + 2 t<sup>12</sup>, 10965 +  $\frac{1}{t^{24}}$  -  $\frac{12}{t^{22}}$  +  $\frac{65}{t^{20}}$  -  $\frac{214}{t^{18}}$  +  $\frac{501}{t^{16}}$  -  $\frac{927}{t^{14}}$  +  $\frac{1492}{t^{12}}$  -  $\frac{2298}{t^{10}}$  +  $\frac{3596}{t^8}$  -  $\frac{5579}{t^6}$  +  $\frac{8009}{t^4}$  -  $\frac{10117}{t^2}$  - 10117 t<sup>2</sup> + 8009 t<sup>4</sup> - 5579 t<sup>6</sup> + 3596 t<sup>8</sup> - 2298 t<sup>10</sup> + 1492 t<sup>12</sup> - 927 t<sup>14</sup> + 501 t<sup>16</sup> - 214 t<sup>18</sup> + 65 t<sup>20</sup> - 12 t<sup>22</sup> + t<sup>24</sup>}}

» Knot [8, 6] →

$$\left\{ 13243., \left\{ 120 + \frac{5}{t^8} - \frac{30}{t^6} + \frac{73}{t^4} - \frac{108}{t^2} - 108 t^2 + 73 t^4 - 30 t^6 + 5 t^8, 6782 + \frac{3}{t^{16}} - \frac{36}{t^{14}} + \frac{182}{t^{12}} - \frac{498}{t^{10}} + \frac{915}{t^8} + \frac{1593}{t^6} + \frac{3179}{t^4} - \frac{5544}{t^2} - 5544 t^2 + 3179 t^4 - 1593 t^6 + 915 t^8 - 498 t^{10} + 182 t^{12} - 36 t^{14} + 3 t^{16} \right\} \right\}$$

» Knot [8, 7] → {413.295, {50 +  $\frac{1}{t^{12}}$  -  $\frac{6}{t^{10}}$  +  $\frac{19}{t^8}$  -  $\frac{36}{t^6}$  +  $\frac{47}{t^4}$  -  $\frac{50}{t^2}$  - 50 t<sup>2</sup> + 47 t<sup>4</sup> - 36 t<sup>6</sup> + 19 t<sup>8</sup> - 6 t<sup>10</sup> + t<sup>12</sup>, 3280 -  $\frac{1}{t^{20}}$  +  $\frac{10}{t^{18}}$  -  $\frac{58}{t^{16}}$  +  $\frac{238}{t^{14}}$  -  $\frac{692}{t^{12}}$  +  $\frac{1401}{t^{10}}$  -  $\frac{1908}{t^8}$  +  $\frac{1464}{t^6}$  +  $\frac{226}{t^4}$  -  $\frac{2319}{t^2}$  - 2319 t<sup>2</sup> + 226 t<sup>4</sup> + 1464 t<sup>6</sup> - 1908 t<sup>8</sup> + 1401 t<sup>10</sup> - 692 t<sup>12</sup> + 238 t<sup>14</sup> - 58 t<sup>16</sup> + 10 t<sup>18</sup> - t<sup>20</sup>}}

» Knot [8, 8] →

$$\left\{ 16196.4, \left\{ 56 + \frac{1}{t^8} - \frac{6}{t^6} + \frac{21}{t^4} - \frac{44}{t^2} - 44t^2 + 21t^4 - 6t^6 + t^8, 114 - \frac{1}{t^{16}} + \frac{12}{t^{14}} - \frac{82}{t^{12}} + \frac{326}{t^{10}} - \frac{790}{t^8} + \frac{1179}{t^6} - \frac{996}{t^4} + \frac{296}{t^2} + 296t^2 - 996t^4 + 1179t^6 - 790t^8 + 326t^{10} - 82t^{12} + 12t^{14} - t^{16} \right\} \right\}$$

» Knot [8, 9] → {317.51,

$$\left\{ 0, 404 + \frac{1}{t^{14}} - \frac{9}{t^{12}} + \frac{26}{t^{10}} - \frac{26}{t^8} - \frac{40}{t^6} + \frac{180}{t^4} - \frac{335}{t^2} - 335t^2 + 180t^4 - 40t^6 - 26t^8 + 26t^{10} - 9t^{12} + t^{14} \right\}$$

Warning! Mismatch with OP2:  $7338 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{58}{t^{16}} + \frac{156}{t^{14}} - \frac{236}{t^{12}} + \frac{60}{t^{10}} + \frac{735}{t^8} - \frac{2372}{t^6} + \frac{4578}{t^4} - \frac{6544}{t^2} - 6544t^2 + 4578t^4 - 2372t^6 + 735t^8 + 60t^{10} - 236t^{12} + 156t^{14} - 58t^{16} + 12t^{18} - t^{20}$

» Knot [8, 10] → {263.41,  $\left\{ 82 + \frac{1}{t^{12}} - \frac{6}{t^{10}} + \frac{20}{t^8} - \frac{42}{t^6} + \frac{64}{t^4} - \frac{78}{t^2} - 78t^2 + 64t^4 - 42t^6 + 20t^8 - 6t^{10} + t^{12}, 3287 - \frac{2}{t^{20}} + \frac{19}{t^{18}} - \frac{99}{t^{16}} + \frac{351}{t^{14}} - \frac{892}{t^{12}} + \frac{1634}{t^{10}} - \frac{2074}{t^8} + \frac{1502}{t^6} + \frac{270}{t^4} - \frac{2351}{t^2} + 270t^4 + 1502t^6 - 2074t^8 + 1634t^{10} - 892t^{12} + 351t^{14} - 99t^{16} + 19t^{18} - 2t^{20} \right\} \right\}$

» Knot [8, 11] →

$$\left\{ 7979.61, \left\{ 166 + \frac{5}{t^8} - \frac{34}{t^6} + \frac{92}{t^4} - \frac{146}{t^2} - 146t^2 + 92t^4 - 34t^6 + 5t^8, 9879 + \frac{3}{t^{16}} - \frac{38}{t^{14}} + \frac{199}{t^{12}} - \frac{552}{t^{10}} + \frac{1029}{t^8} - \frac{1949}{t^6} + \frac{4339}{t^4} - \frac{7971}{t^2} - 7971t^2 + 4339t^4 - 1949t^6 + 1029t^8 - 552t^{10} + 199t^{12} - 38t^{14} + 3t^{16} \right\} \right\}$$

» Knot [8, 13] →

$$\left\{ 12545.5, \left\{ 68 + \frac{1}{t^8} - \frac{6}{t^6} + \frac{23}{t^4} - \frac{52}{t^2} - 52t^2 + 23t^4 - 6t^6 + t^8, 433 - \frac{1}{t^{16}} + \frac{14}{t^{14}} - \frac{98}{t^{12}} + \frac{410}{t^{10}} - \frac{1057}{t^8} + \frac{1647}{t^6} - \frac{1373}{t^4} + \frac{242}{t^2} + 242t^2 - 1373t^4 + 1647t^6 - 1057t^8 + 410t^{10} - 98t^{12} + 14t^{14} - t^{16} \right\} \right\}$$

» Knot [8, 14] →

$$\left\{ 12567.7, \left\{ 250 + \frac{5}{t^8} - \frac{38}{t^6} + \frac{118}{t^4} - \frac{210}{t^2} - 210t^2 + 118t^4 - 38t^6 + 5t^8, 18714 + \frac{3}{t^{16}} - \frac{40}{t^{14}} + \frac{248}{t^{12}} - \frac{948}{t^{10}} + \frac{2618}{t^8} - \frac{5829}{t^6} + \frac{10838}{t^4} - \frac{16247}{t^2} - 16247t^2 + 10838t^4 - 5829t^6 + 2618t^8 - 948t^{10} + 248t^{12} - 40t^{14} + 3t^{16} \right\} \right\}$$

» Knot [8, 15] → {9666.42,  $\left\{ 520 + \frac{21}{t^8} - \frac{106}{t^6} + \frac{269}{t^4} - \frac{444}{t^2} - 444t^2 + 269t^4 - 106t^6 + 21t^8, 230228 + \frac{129}{t^{16}} - \frac{1271}{t^{14}} + \frac{6263}{t^{12}} - \frac{20644}{t^{10}} + \frac{50993}{t^8} - \frac{99815}{t^6} + \frac{159284}{t^4} - \frac{210051}{t^2} - 210051t^2 + 159284t^4 - 99815t^6 + 50993t^8 - 20644t^{10} + 6263t^{12} - 1271t^{14} + 129t^{16} \right\} \right\}$

» Knot [8, 16] → {370.531,  $\left\{ 142 + \frac{1}{t^{12}} - \frac{8}{t^{10}} + \frac{30}{t^8} - \frac{68}{t^6} + \frac{108}{t^4} - \frac{134}{t^2} - 134t^2 + 108t^4 - 68t^6 + 30t^8 - 8t^{10} + t^{12}, 8109 - \frac{2}{t^{20}} + \frac{25}{t^{18}} - \frac{156}{t^{16}} + \frac{621}{t^{14}} - \frac{1709}{t^{12}} + \frac{3325}{t^{10}} - \frac{4416}{t^8} + \frac{3259}{t^6} + \frac{820}{t^4} - \frac{5821}{t^2} - 820t^4 + 3259t^6 - 4416t^8 + 3325t^{10} - 1709t^{12} + 621t^{14} - 156t^{16} + 25t^{18} - 2t^{20} \right\} \right\}$

» Knot [8, 17] → {221.281,

$$\left\{ 0, 1211 + \frac{1}{t^{14}} - \frac{8}{t^{12}} + \frac{16}{t^{10}} + \frac{31}{t^8} - \frac{235}{t^6} + \frac{620}{t^4} - \frac{1031}{t^2} - 1031t^2 + 620t^4 - 235t^6 + 31t^8 + 16t^{10} - 8t^{12} + t^{14} \right\}$$

Warning! Mismatch with OP2:  $35\,247 - \frac{1}{t^{20}} + \frac{12}{t^{18}} - \frac{56}{t^{16}} + \frac{108}{t^{14}} + \frac{135}{t^{12}} - \frac{1564}{t^{10}} + \frac{5571}{t^8} - \frac{13\,056}{t^6} + \frac{22\,931}{t^4} - \frac{31\,704}{t^2} - 31\,704 t^2 + 22\,931 t^4 - 13\,056 t^6 + 5571 t^8 - 1564 t^{10} + 135 t^{12} + 108 t^{14} - 56 t^{16} + 12 t^{18} - t^{20}$

» Knot [8, 18] →

$$\left\{ 427.266, \left\{ 0, 2185 - \frac{13}{t^{10}} + \frac{115}{t^8} - \frac{463}{t^6} + \frac{1126}{t^4} - \frac{1857}{t^2} - 1857 t^2 + 1126 t^4 - 463 t^6 + 115 t^8 - 13 t^{10} \right\} \right\}$$

Warning! Mismatch with OP2:  $77\,731 + \frac{13}{t^{16}} - \frac{180}{t^{14}} + \frac{1168}{t^{12}} - \frac{4760}{t^{10}} + \frac{13\,742}{t^8} - \frac{29\,964}{t^6} + \frac{51\,208}{t^4} - \frac{70\,092}{t^2} - 70\,092 t^2 + 51\,208 t^4 - 29\,964 t^6 + 13\,742 t^8 - 4760 t^{10} + 1168 t^{12} - 180 t^{14} + 13 t^{16}$

» Knot [8, 19] →  $\left\{ 106.313, \left\{ 6 + \frac{3}{t^{12}} - \frac{6}{t^{10}} + \frac{3}{t^8} + \frac{4}{t^6} - \frac{5}{t^4} - \frac{2}{t^2} - 2 t^2 - 5 t^4 + 4 t^6 + 3 t^8 - 6 t^{10} + 3 t^{12}, 215 + \frac{3}{t^{24}} - \frac{12}{t^{22}} + \frac{18}{t^{20}} - \frac{7}{t^{18}} - \frac{17}{t^{16}} + \frac{30}{t^{14}} - \frac{25}{t^{12}} + \frac{20}{t^{10}} - \frac{40}{t^8} + \frac{65}{t^6} - \frac{10}{t^4} - \frac{130}{t^2} - 10 t^4 + 65 t^6 - 40 t^8 + 20 t^{10} - 25 t^{12} + 30 t^{14} - 17 t^{16} - 7 t^{18} + 18 t^{20} - 12 t^{22} + 3 t^{24} \right\} \right\}$

» Knot [8, 20] →  $\left\{ 154.313, \left\{ 16 + \frac{4}{t^4} - \frac{12}{t^2} - 12 t^2 + 4 t^4, 416 - \frac{7}{t^{12}} + \frac{46}{t^{10}} - \frac{120}{t^8} + \frac{138}{t^6} + \frac{14}{t^4} - \frac{278}{t^2} - 278 t^2 + 14 t^4 + 138 t^6 - 120 t^8 + 46 t^{10} - 7 t^{12} \right\} \right\}$

» Knot [8, 21] →  $\left\{ 204.781, \left\{ 72 + \frac{1}{t^8} - \frac{10}{t^6} + \frac{33}{t^4} - \frac{60}{t^2} - 60 t^2 + 33 t^4 - 10 t^6 + t^8, 2670 + \frac{1}{t^{14}} + \frac{4}{t^{12}} - \frac{60}{t^{10}} + \frac{276}{t^8} - \frac{775}{t^6} + \frac{1550}{t^4} - \frac{2331}{t^2} - 2331 t^2 + 1550 t^4 - 775 t^6 + 276 t^8 - 60 t^{10} + 4 t^{12} + t^{14} \right\} \right\}$

» Knot [9, 1] →  $\left\{ 33.6563, \left\{ 20 + \frac{4}{t^{16}} - \frac{8}{t^{14}} + \frac{11}{t^{12}} - \frac{14}{t^{10}} + \frac{16}{t^8} - \frac{18}{t^6} + \frac{19}{t^4} - \frac{20}{t^2} - 20 t^2 + 19 t^4 - 18 t^6 + 16 t^8 - 14 t^{10} + 11 t^{12} - 8 t^{14} + 4 t^{16}, 1750 + \frac{6}{t^{32}} - \frac{24}{t^{30}} + \frac{56}{t^{28}} - \frac{104}{t^{26}} + \frac{166}{t^{24}} - \frac{240}{t^{22}} + \frac{320}{t^{20}} - \frac{400}{t^{18}} + \frac{470}{t^{16}} - \frac{556}{t^{14}} + \frac{680}{t^{12}} - \frac{845}{t^{10}} + \frac{1050}{t^8} - \frac{1275}{t^6} + \frac{1496}{t^4} - \frac{1670}{t^2} - 1670 t^2 + 1496 t^4 - 1275 t^6 + 1050 t^8 - 845 t^{10} + 680 t^{12} - 556 t^{14} + 470 t^{16} - 400 t^{18} + 320 t^{20} - 240 t^{22} + 166 t^{24} - 104 t^{26} + 56 t^{28} - 24 t^{30} + 6 t^{32} \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 1]

» Knot [9, 3] →  $\left\{ 549.063, \left\{ 112 + \frac{13}{t^{12}} - \frac{38}{t^{10}} + \frac{62}{t^8} - \frac{82}{t^6} + \frac{97}{t^4} - \frac{108}{t^2} - 108 t^2 + 97 t^4 - 82 t^6 + 62 t^8 - 38 t^{10} + 13 t^{12}, 29\,633 + \frac{59}{t^{24}} - \frac{342}{t^{22}} + \frac{1037}{t^{20}} - \frac{2256}{t^{18}} + \frac{3989}{t^{16}} - \frac{6102}{t^{14}} + \frac{8457}{t^{12}} - \frac{11\,235}{t^{10}} + \frac{14\,817}{t^8} - \frac{19\,267}{t^6} + \frac{24\,063}{t^4} - \frac{28\,032}{t^2} - 28\,032 t^2 + 24\,063 t^4 - 19\,267 t^6 + 14\,817 t^8 - 11\,235 t^{10} + 8457 t^{12} - 6102 t^{14} + 3989 t^{16} - 2256 t^{18} + 1037 t^{20} - 342 t^{22} + 59 t^{24} \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 3]

» Knot [9, 4] →  $\left\{ 10\,036.7, \left\{ 180 + \frac{23}{t^8} - \frac{74}{t^6} + \frac{125}{t^4} - \frac{164}{t^2} - 164 t^2 + 125 t^4 - 74 t^6 + 23 t^8, 41\,007 + \frac{168}{t^{16}} - \frac{1064}{t^{14}} + \frac{3397}{t^{12}} - \frac{7494}{t^{10}} + \frac{13\,245}{t^8} - \frac{20\,655}{t^6} + \frac{29\,463}{t^4} - \frac{37\,560}{t^2} - 37\,560 t^2 + 29\,463 t^4 - 20\,655 t^6 + 13\,245 t^8 - 7494 t^{10} + 3397 t^{12} - 1064 t^{14} + 168 t^{16} \right\} \right\}$

Warning! Mismatch with OP2: Knot[9, 4]

» Knot[9, 6] →

$$\left\{ 508.281, \left\{ 264 + \frac{13}{t^{12}} - \frac{50}{t^{10}} + \frac{106}{t^8} - \frac{166}{t^6} + \frac{217}{t^4} - \frac{252}{t^2} - 252 t^2 + 217 t^4 - 166 t^6 + 106 t^8 - 50 t^{10} + 13 t^{12}, \right. \right.$$

$$129619 + \frac{59}{t^{24}} - \frac{448}{t^{22}} + \frac{1780}{t^{20}} - \frac{4946}{t^{18}} + \frac{10794}{t^{16}} - \frac{19788}{t^{14}} + \frac{31980}{t^{12}} - \frac{47371}{t^{10}} + \frac{65965}{t^8} -$$

$$\left. \frac{86985}{t^6} + \frac{107770}{t^4} - \frac{123616}{t^2} - 123616 t^2 + 107770 t^4 - 86985 t^6 + 65965 t^8 - \right. \\ \left. 47371 t^{10} + 31980 t^{12} - 19788 t^{14} + 10794 t^{16} - 4946 t^{18} + 1780 t^{20} - 448 t^{22} + 59 t^{24} \right\} \}$$

Warning! Mismatch with OP2: Knot[9, 6]

» Knot[9, 7] →  $\left\{ 13407.4, \left\{ 414 + \frac{23}{t^8} - \frac{102}{t^6} + \frac{234}{t^4} - \frac{362}{t^2} - 362 t^2 + 234 t^4 - 102 t^6 + 23 t^8, \right. \right.$ 

$$169719 + \frac{168}{t^{16}} - \frac{1456}{t^{14}} + \frac{6392}{t^{12}} - \frac{18984}{t^{10}} + \frac{42948}{t^8} - \frac{78779}{t^6} + \frac{120667}{t^4} - \frac{155813}{t^2} -$$

$$\left. \left. 155813 t^2 + 120667 t^4 - 78779 t^6 + 42948 t^8 - 18984 t^{10} + 6392 t^{12} - 1456 t^{14} + 168 t^{16} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 7]

» Knot[9, 9] →

$$\left\{ 447.641, \left\{ 388 + \frac{13}{t^{12}} - \frac{50}{t^{10}} + \frac{116}{t^8} - \frac{206}{t^6} + \frac{297}{t^4} - \frac{364}{t^2} - 364 t^2 + 297 t^4 - 206 t^6 + 116 t^8 - 50 t^{10} + 13 t^{12}, \right. \right.$$

$$234716 + \frac{59}{t^{24}} - \frac{448}{t^{22}} + \frac{1856}{t^{20}} - \frac{5554}{t^{18}} + \frac{13358}{t^{16}} - \frac{27310}{t^{14}} + \frac{49099}{t^{12}} - \frac{79427}{t^{10}} + \frac{117166}{t^8} -$$

$$\left. \frac{158525}{t^6} + \frac{196982}{t^4} - \frac{224610}{t^2} - 224610 t^2 + 196982 t^4 - 158525 t^6 + 117166 t^8 - \right. \\ \left. 79427 t^{10} + 49099 t^{12} - 27310 t^{14} + 13358 t^{16} - 5554 t^{18} + 1856 t^{20} - 448 t^{22} + 59 t^{24} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 9]

» Knot[9, 10] →  $\left\{ 11578.7, \left\{ 468 + \frac{40}{t^8} - \frac{152}{t^6} + \frac{298}{t^4} - \frac{420}{t^2} - 420 t^2 + 298 t^4 - 152 t^6 + 40 t^8, \right. \right.$ 

$$237464 + \frac{496}{t^{16}} - \frac{3680}{t^{14}} + \frac{13704}{t^{12}} - \frac{34792}{t^{10}} + \frac{69151}{t^8} - \frac{116396}{t^6} + \frac{171083}{t^4} - \frac{218294}{t^2} -$$

$$\left. \left. 218294 t^2 + 171083 t^4 - 116396 t^6 + 69151 t^8 - 34792 t^{10} + 13704 t^{12} - 3680 t^{14} + 496 t^{16} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 10]

» Knot[9, 11] →

$$\left\{ 10042., \left\{ 260 + \frac{2}{t^{12}} - \frac{20}{t^{10}} + \frac{75}{t^8} - \frac{150}{t^6} + \frac{211}{t^4} - \frac{248}{t^2} - 248 t^2 + 211 t^4 - 150 t^6 + 75 t^8 - 20 t^{10} + 2 t^{12}, \right. \right.$$

$$92844 + \frac{1}{t^{24}} - \frac{20}{t^{22}} + \frac{175}{t^{20}} - \frac{886}{t^{18}} + \frac{2949}{t^{16}} - \frac{7028}{t^{14}} + \frac{12910}{t^{12}} - \frac{19946}{t^{10}} + \frac{29077}{t^8} -$$

$$\left. \frac{43383}{t^6} + \frac{63831}{t^4} - \frac{84100}{t^2} - 84100 t^2 + 63831 t^4 - 43383 t^6 + 29077 t^8 - \right. \\ \left. 19946 t^{10} + 12910 t^{12} - 7028 t^{14} + 2949 t^{16} - 886 t^{18} + 175 t^{20} - 20 t^{22} + t^{24} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 11]

» Knot [9, 13] →  $\left\{ 12863.7, \left\{ 644 + \frac{40}{t^8} - \frac{172}{t^6} + \frac{378}{t^4} - \frac{568}{t^2} - 568 t^2 + 378 t^4 - 172 t^6 + 40 t^8, \right. \right.$   
 $418539 + \frac{496}{t^{16}} - \frac{4192}{t^{14}} + \frac{17765}{t^{12}} - \frac{50726}{t^{10}} + \frac{110764}{t^8} - \frac{198080}{t^6} + \frac{299319}{t^4} - \frac{384612}{t^2} -$   
 $\left. \left. 384612 t^2 + 299319 t^4 - 198080 t^6 + 110764 t^8 - 50726 t^{10} + 17765 t^{12} - 4192 t^{14} + 496 t^{16} \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 13]

» Knot [9, 16] →  $\left\{ 443.531, \left\{ 658 + \frac{13}{t^{12}} - \frac{62}{t^{10}} + \frac{165}{t^8} - \frac{316}{t^6} + \frac{481}{t^4} - \frac{610}{t^2} - 610 t^2 + 481 t^4 - 316 t^6 + 165 t^8 - 62 t^{10} + 13 t^{12}, \right. \right.$   
 $624232 + \frac{59}{t^{24}} - \frac{554}{t^{22}} + \frac{2735}{t^{20}} - \frac{9433}{t^{18}} + \frac{25475}{t^{16}} - \frac{57266}{t^{14}} + \frac{111164}{t^{12}} - \frac{190776}{t^{10}} + \frac{293705}{t^8} -$   
 $\frac{409021}{t^6} + \frac{517431}{t^4} - \frac{595632}{t^2} - 595632 t^2 + 517431 t^4 - 409021 t^6 + 293705 t^8 -$   
 $\left. \left. 190776 t^{10} + 111164 t^{12} - 57266 t^{14} + 25475 t^{16} - 9433 t^{18} + 2735 t^{20} - 554 t^{22} + 59 t^{24} \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 16]

» Knot [9, 17] →  $\left\{ 13084.9, \left\{ 104 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{40}{t^8} - \frac{86}{t^6} + \frac{115}{t^4} - \frac{112}{t^2} - 112 t^2 + 115 t^4 - 86 t^6 + 40 t^8 - 10 t^{10} + t^{12}, \right. \right.$   
 $31590 - \frac{1}{t^{20}} + \frac{24}{t^{18}} - \frac{234}{t^{16}} + \frac{1300}{t^{14}} - \frac{4658}{t^{12}} + \frac{11261}{t^{10}} - \frac{18129}{t^8} + \frac{16995}{t^6} - \frac{1646}{t^4} - \frac{20708}{t^2} -$   
 $1646 t^4 + 16995 t^6 - 18129 t^8 + 11261 t^{10} - 4658 t^{12} + 1300 t^{14} - 234 t^{16} + 24 t^{18} - t^{20} \left. \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 17]

» Knot [9, 18] →  $\left\{ 12941.3, \left\{ 826 + \frac{40}{t^8} - \frac{188}{t^6} + \frac{449}{t^4} - \frac{714}{t^2} - 714 t^2 + 449 t^4 - 188 t^6 + 40 t^8, \right. \right.$   
 $634512 + \frac{496}{t^{16}} - \frac{4528}{t^{14}} + \frac{20876}{t^{12}} - \frac{64904}{t^{10}} + \frac{152656}{t^8} - \frac{287776}{t^6} + \frac{447556}{t^4} - \frac{581629}{t^2} -$   
 $581629 t^2 + 447556 t^4 - 287776 t^6 + 152656 t^8 - 64904 t^{10} + 20876 t^{12} - 4528 t^{14} + 496 t^{16} \left. \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 18]

» Knot [9, 20] →  $\left\{ 24075.6, \left\{ 482 + \frac{2}{t^{12}} - \frac{20}{t^{10}} + \frac{81}{t^8} - \frac{194}{t^6} + \frac{332}{t^4} - \frac{442}{t^2} - 442 t^2 + 332 t^4 - 194 t^6 + 81 t^8 - 20 t^{10} + 2 t^{12}, \right. \right.$   
 $222164 + \frac{1}{t^{24}} - \frac{20}{t^{22}} + \frac{179}{t^{20}} - \frac{962}{t^{18}} + \frac{3582}{t^{16}} - \frac{10116}{t^{14}} + \frac{23136}{t^{12}} - \frac{45110}{t^{10}} + \frac{77842}{t^8} -$   
 $\frac{120895}{t^6} + \frac{168287}{t^4} - \frac{207005}{t^2} - 207005 t^2 + 168287 t^4 - 120895 t^6 + 77842 t^8 -$   
 $45110 t^{10} + 23136 t^{12} - 10116 t^{14} + 3582 t^{16} - 962 t^{18} + 179 t^{20} - 20 t^{22} + t^{24} \left. \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 20]

» Knot [9, 22] →  $\left\{ 12867.6, \left\{ 152 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{41}{t^8} - \frac{94}{t^6} + \frac{140}{t^4} - \frac{154}{t^2} - 154 t^2 + 140 t^4 - 94 t^6 + 41 t^8 - 10 t^{10} + t^{12}, \right. \right.$   
 $33677 - \frac{2}{t^{20}} + \frac{38}{t^{18}} - \frac{315}{t^{16}} + \frac{1554}{t^{14}} - \frac{5114}{t^{12}} + \frac{11635}{t^{10}} - \frac{17839}{t^8} + \frac{15665}{t^6} + \frac{422}{t^4} - \frac{22883}{t^2} -$   
 $422 t^4 + 15665 t^6 - 17839 t^8 + 11635 t^{10} - 5114 t^{12} + 1554 t^{14} - 315 t^{16} + 38 t^{18} - 2 t^{20} \left. \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 22]

» Knot [9, 23] →  $\left\{ 13759.2, \left\{ 1062 + \frac{40}{t^8} - \frac{208}{t^6} + \frac{539}{t^4} - \frac{902}{t^2} - 902 t^2 + 539 t^4 - 208 t^6 + 40 t^8, \right. \right.$   
 $1006731 + \frac{496}{t^{16}} - \frac{5040}{t^{14}} + \frac{25633}{t^{12}} - \frac{86784}{t^{10}} + \frac{218571}{t^8} - \frac{432908}{t^6} + \frac{694782}{t^4} - \frac{918113}{t^2} -$   
 $918113 t^2 + 694782 t^4 - 432908 t^6 + 218571 t^8 - 86784 t^{10} + 25633 t^{12} - 5040 t^{14} + 496 t^{16} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 23]

» Knot [9, 24] →  $\left\{ 15904., \left\{ 72 - \frac{4}{t^6} + \frac{24}{t^4} - \frac{56}{t^2} - 56 t^2 + 24 t^4 - 4 t^6, 49547 + \frac{6}{t^{18}} - \frac{67}{t^{16}} + \frac{334}{t^{14}} - \frac{922}{t^{12}} + \frac{1164}{t^{10}} + \frac{1418}{t^8} - \frac{10332}{t^6} + \right. \right.$   
 $\frac{26064}{t^4} - \frac{42438}{t^2} - 42438 t^2 + 26064 t^4 - 10332 t^6 + 1418 t^8 + 1164 t^{10} - 922 t^{12} + 334 t^{14} - 67 t^{16} + 6 t^{18} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 24]

» Knot [9, 26] →  $\left\{ 10076., \left\{ 354 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{48}{t^8} - \frac{134}{t^6} + \frac{244}{t^4} - \frac{326}{t^2} - 326 t^2 + 244 t^4 - 134 t^6 + 48 t^8 - 10 t^{10} + t^{12}, \right. \right.$   
 $54938 + \frac{2}{t^{18}} - \frac{27}{t^{16}} + \frac{210}{t^{14}} - \frac{964}{t^{12}} + \frac{2465}{t^{10}} - \frac{2545}{t^8} - \frac{4459}{t^6} + \frac{22456}{t^4} - \frac{44607}{t^2} -$   
 $44607 t^2 + 22456 t^4 - 4459 t^6 - 2545 t^8 + 2465 t^{10} - 964 t^{12} + 210 t^{14} - 27 t^{16} + 2 t^{18} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 26]

» Knot [9, 27] →  $\left\{ 9267.22, \left\{ 112 + \frac{1}{t^8} - \frac{10}{t^6} + \frac{41}{t^4} - \frac{88}{t^2} - 88 t^2 + 41 t^4 - 10 t^6 + t^8, \right. \right.$   
 $53328 - \frac{1}{t^{20}} + \frac{20}{t^{18}} - \frac{163}{t^{16}} + \frac{756}{t^{14}} - \frac{2212}{t^{12}} + \frac{3982}{t^{10}} - \frac{2931}{t^8} - \frac{5979}{t^6} + \frac{24262}{t^4} - \frac{44398}{t^2} -$   
 $24262 t^4 - 5979 t^6 - 2931 t^8 + 3982 t^{10} - 2212 t^{12} + 756 t^{14} - 163 t^{16} + 20 t^{18} - t^{20} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 27]

» Knot [9, 28] →  $\left\{ 15741., \left\{ 450 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{47}{t^8} - \frac{136}{t^6} + \frac{271}{t^4} - \frac{398}{t^2} - 398 t^2 + 271 t^4 - 136 t^6 + 47 t^8 - 10 t^{10} + t^{12}, \right. \right.$   
 $51817 - \frac{2}{t^{20}} + \frac{27}{t^{18}} - \frac{167}{t^{16}} + \frac{612}{t^{14}} - \frac{1375}{t^{12}} + \frac{1464}{t^{10}} + \frac{1842}{t^8} - \frac{11767}{t^6} + \frac{28198}{t^4} - \frac{44740}{t^2} -$   
 $28198 t^4 - 11767 t^6 + 1842 t^8 + 1464 t^{10} - 1375 t^{12} + 612 t^{14} - 167 t^{16} + 27 t^{18} - 2 t^{20} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 28]

» Knot [9, 29] →  $\left\{ 11247., \left\{ 230 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{43}{t^8} - \frac{108}{t^6} + \frac{181}{t^4} - \frac{222}{t^2} - 222 t^2 + 181 t^4 - 108 t^6 + 43 t^8 - 10 t^{10} + t^{12}, \right. \right.$   
 $60315 - \frac{4}{t^{20}} + \frac{69}{t^{18}} - \frac{532}{t^{16}} + \frac{2466}{t^{14}} - \frac{7662}{t^{12}} + \frac{16466}{t^{10}} - \frac{23513}{t^8} + \frac{17305}{t^6} + \frac{9140}{t^4} - \frac{43892}{t^2} -$   
 $9140 t^4 + 17305 t^6 - 23513 t^8 + 16466 t^{10} - 7662 t^{12} + 2466 t^{14} - 532 t^{16} + 69 t^{18} - 4 t^{20} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 29]

» Knot [9, 30] →  $\left\{ 17701.2, \left\{ 114 + \frac{2}{t^8} - \frac{14}{t^6} + \frac{47}{t^4} - \frac{92}{t^2} - 92 t^2 + 47 t^4 - 14 t^6 + 2 t^8, \right. \right.$   
 $77105 - \frac{2}{t^{20}} + \frac{31}{t^{18}} - \frac{210}{t^{16}} + \frac{822}{t^{14}} - \frac{1944}{t^{12}} + \frac{2181}{t^{10}} + \frac{2558}{t^8} - \frac{17256}{t^6} + \frac{41804}{t^4} - \frac{66537}{t^2} -$   
 $41804 t^4 - 17256 t^6 + 2558 t^8 + 2181 t^{10} - 1944 t^{12} + 822 t^{14} - 210 t^{16} + 31 t^{18} - 2 t^{20} \left. \right\}$

Warning! Mismatch with OP2: Knot [9, 30]

» Knot [9, 31] →

$$\left\{ 7779.94, \left\{ 568 + \frac{1}{t^{12}} - \frac{10}{t^{10}} + \frac{50}{t^8} - \frac{154}{t^6} + \frac{325}{t^4} - \frac{496}{t^2} - 496 t^2 + 325 t^4 - 154 t^6 + 50 t^8 - 10 t^{10} + t^{12}, \right. \right.$$

$$84162 - \frac{2}{t^{20}} + \frac{24}{t^{18}} - \frac{135}{t^{16}} + \frac{436}{t^{14}} - \frac{697}{t^{12}} - \frac{627}{t^{10}} + \frac{7242}{t^8} - \frac{23387}{t^6} + \frac{48614}{t^4} - \frac{73548}{t^2} - 73548 t^2 +$$

$$\left. \left. 48614 t^4 - 23387 t^6 + 7242 t^8 - 627 t^{10} - 697 t^{12} + 436 t^{14} - 135 t^{16} + 24 t^{18} - 2 t^{20} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 31]

» Knot [9, 32] →

$$\left\{ 12969.4, \left\{ 562 + \frac{1}{t^{12}} - \frac{12}{t^{10}} + \frac{63}{t^8} - \frac{188}{t^6} + \frac{363}{t^4} - \frac{508}{t^2} - 508 t^2 + 363 t^4 - 188 t^6 + 63 t^8 - 12 t^{10} + t^{12}, \right. \right.$$

$$125957 + \frac{3}{t^{18}} - \frac{49}{t^{16}} + \frac{347}{t^{14}} - \frac{1297}{t^{12}} + \frac{2213}{t^{10}} + \frac{1982}{t^8} - \frac{21345}{t^6} + \frac{60831}{t^4} - \frac{105664}{t^2} -$$

$$\left. \left. 105664 t^2 + 60831 t^4 - 21345 t^6 + 1982 t^8 + 2213 t^{10} - 1297 t^{12} + 347 t^{14} - 49 t^{16} + 3 t^{18} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 32]

» Knot [9, 33] →  $\left\{ 17711.5, \left\{ 140 + \frac{1}{t^8} - \frac{12}{t^6} + \frac{51}{t^4} - \frac{110}{t^2} - 110 t^2 + 51 t^4 - 12 t^6 + t^8, \right. \right.$

$$169495 + \frac{4}{t^{18}} - \frac{48}{t^{16}} + \frac{210}{t^{14}} - \frac{133}{t^{12}} - \frac{2812}{t^{10}} + \frac{15721}{t^8} - \frac{47484}{t^6} + \frac{97856}{t^4} - \frac{148061}{t^2} -$$

$$\left. \left. 148061 t^2 + 97856 t^4 - 47484 t^6 + 15721 t^8 - 2812 t^{10} - 133 t^{12} + 210 t^{14} - 48 t^{16} + 4 t^{18} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 33]

» Knot [9, 34] →  $\left\{ 16462.8, \left\{ 198 + \frac{3}{t^8} - \frac{24}{t^6} + \frac{82}{t^4} - \frac{160}{t^2} - 160 t^2 + 82 t^4 - 24 t^6 + 3 t^8, \right. \right.$

$$279429 - \frac{2}{t^{20}} + \frac{34}{t^{18}} - \frac{243}{t^{16}} + \frac{899}{t^{14}} - \frac{1343}{t^{12}} - \frac{3320}{t^{10}} + \frac{25323}{t^8} - \frac{78832}{t^6} + \frac{162282}{t^4} - \frac{244513}{t^2} -$$

$$162282 t^2 - 78832 t^4 + 25323 t^8 - 3320 t^{10} - 1343 t^{12} + 899 t^{14} - 243 t^{16} + 34 t^{18} - 2 t^{20} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 34]

» Knot [9, 36] →

$$\left\{ 8703.69, \left\{ 350 + \frac{2}{t^{12}} - \frac{20}{t^{10}} + \frac{78}{t^8} - \frac{170}{t^6} + \frac{263}{t^4} - \frac{328}{t^2} - 328 t^2 + 263 t^4 - 170 t^6 + 78 t^8 - 20 t^{10} + 2 t^{12}, \right. \right.$$

$$141075 + \frac{1}{t^{24}} - \frac{20}{t^{22}} + \frac{177}{t^{20}} - \frac{919}{t^{18}} + \frac{3197}{t^{16}} - \frac{8176}{t^{14}} + \frac{16646}{t^{12}} - \frac{29163}{t^{10}} + \frac{47115}{t^8} -$$

$$\frac{72304}{t^6} + \frac{102929}{t^4} - \frac{130019}{t^2} - 130019 t^2 + 102929 t^4 - 72304 t^6 + 47115 t^8 -$$

$$29163 t^{10} + 16646 t^{12} - 8176 t^{14} + 3197 t^{16} - 919 t^{18} + 177 t^{20} - 20 t^{22} + t^{24} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 36]

» Knot [9, 38] →  $\left\{ 14768.4, \left\{ 1668 + \frac{62}{t^8} - \frac{328}{t^6} + \frac{852}{t^4} - \frac{1420}{t^2} - 1420 t^2 + 852 t^4 - 328 t^6 + 62 t^8, \right. \right.$

$$2509142 + \frac{1182}{t^{16}} - \frac{12246}{t^{14}} + \frac{62904}{t^{12}} - \frac{213694}{t^{10}} + \frac{538946}{t^8} - \frac{1069918}{t^6} + \frac{1723338}{t^4} - \frac{2285080}{t^2} -$$

$$2285080 t^2 + 1723338 t^4 - 1069918 t^6 + 538946 t^8 - 213694 t^{10} + 62904 t^{12} - 12246 t^{14} + 1182 t^{16} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 38]

» Knot [9, 40] →

$$\left\{ 18355.3, \left\{ 986 + \frac{1}{t^{12}} - \frac{14}{t^{10}} + \frac{82}{t^8} - \frac{270}{t^6} + \frac{574}{t^4} - \frac{866}{t^2} - 866 t^2 + 574 t^4 - 270 t^6 + 82 t^8 - 14 t^{10} + t^{12}, \right. \right.$$

$$337823 - \frac{1}{t^{18}} + \frac{27}{t^{16}} - \frac{329}{t^{14}} + \frac{2398}{t^{12}} - \frac{11706}{t^{10}} + \frac{40644}{t^8} - \frac{104066}{t^6} + \frac{200988}{t^4} - \frac{296867}{t^2} -$$

$$\left. \left. 296867 t^2 + 200988 t^4 - 104066 t^6 + 40644 t^8 - 11706 t^{10} + 2398 t^{12} - 329 t^{14} + 27 t^{16} - t^{18} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 40]

» Knot [9, 42] →  $\left\{ 7406.47, \left\{ -10 + \frac{1}{t^8} - \frac{4}{t^6} + \frac{4}{t^4} + \frac{4}{t^2} + 4 t^2 + 4 t^4 - 4 t^6 + t^8, \right. \right.$

$$1150 - \frac{5}{t^{12}} + \frac{50}{t^{10}} - \frac{187}{t^8} + \frac{300}{t^6} - \frac{16}{t^4} - \frac{718}{t^2} - 718 t^2 - 16 t^4 + 300 t^6 - 187 t^8 + 50 t^{10} - 5 t^{12} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 42]

» Knot [9, 43] →  $\left\{ 14666.7, \left\{ 18 + \frac{2}{t^{12}} - \frac{12}{t^{10}} + \frac{25}{t^8} - \frac{24}{t^6} + \frac{16}{t^4} - \frac{16}{t^2} - 16 t^2 + 16 t^4 - 24 t^6 + 25 t^8 - 12 t^{10} + 2 t^{12}, \right. \right.$

$$4319 + \frac{1}{t^{24}} - \frac{12}{t^{22}} + \frac{61}{t^{20}} - \frac{169}{t^{18}} + \frac{272}{t^{16}} - \frac{209}{t^{14}} - \frac{148}{t^{12}} + \frac{693}{t^{10}} - \frac{950}{t^8} + \frac{319}{t^6} + \frac{1351}{t^4} - \frac{3368}{t^2} -$$

$$1351 t^4 + 319 t^6 - 950 t^8 + 693 t^{10} - 148 t^{12} - 209 t^{14} + 272 t^{16} - 169 t^{18} + 61 t^{20} - 12 t^{22} + t^{24} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 43]

» Knot [9, 44] →

$$\left\{ 6999.02, \left\{ 42 - \frac{2}{t^6} + \frac{13}{t^4} - \frac{32}{t^2} - 32 t^2 + 13 t^4 - 2 t^6, 1506 + \frac{3}{t^{14}} - \frac{31}{t^{12}} + \frac{126}{t^{10}} - \frac{245}{t^8} + \frac{147}{t^6} + \frac{390}{t^4} - \frac{1143}{t^2} - \right. \right.$$

$$1143 t^2 + 390 t^4 + 147 t^6 - 245 t^8 + 126 t^{10} - 31 t^{12} + 3 t^{14} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 44]

» Knot [9, 45] →

$$\left\{ 10045.4, \left\{ 214 + \frac{1}{t^8} - \frac{16}{t^6} + \frac{76}{t^4} - \frac{168}{t^2} - 168 t^2 + 76 t^4 - 16 t^6 + t^8, 24880 + \frac{2}{t^{14}} + \frac{16}{t^{12}} - \frac{316}{t^{10}} + \frac{1841}{t^8} - \right. \right.$$

$$\frac{6088}{t^6} + \frac{13476}{t^4} - \frac{21370}{t^2} - 21370 t^2 + 13476 t^4 - 6088 t^6 + 1841 t^8 - 316 t^{10} + 16 t^{12} + 2 t^{14} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 45]

» Knot [9, 46] →

$$\left\{ 7129.83, \left\{ 30 + \frac{3}{t^4} - \frac{18}{t^2} - 18 t^2 + 3 t^4, 664 + \frac{3}{t^8} - \frac{34}{t^6} + \frac{191}{t^4} - \frac{493}{t^2} - 493 t^2 + 191 t^4 - 34 t^6 + 3 t^8 \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 46]

» Knot [9, 47] →  $\left\{ 9711.73, \left\{ 44 + \frac{1}{t^{12}} - \frac{8}{t^{10}} + \frac{28}{t^8} - \frac{52}{t^6} + \frac{57}{t^4} - \frac{48}{t^2} - 48 t^2 + 57 t^4 - 52 t^6 + 28 t^8 - 8 t^{10} + t^{12}, \right. \right.$

$$16021 + \frac{5}{t^{18}} - \frac{72}{t^{16}} + \frac{466}{t^{14}} - \frac{1743}{t^{12}} + \frac{4097}{t^{10}} - \frac{6037}{t^8} + \frac{4413}{t^6} + \frac{2575}{t^4} - \frac{11715}{t^2} -$$

$$11715 t^2 + 2575 t^4 + 4413 t^6 - 6037 t^8 + 4097 t^{10} - 1743 t^{12} + 466 t^{14} - 72 t^{16} + 5 t^{18} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 47]

» Knot [9, 48] →  $\left\{ 12856.7, \left\{ 188 + \frac{1}{t^8} - \frac{14}{t^6} + \frac{67}{t^4} - \frac{148}{t^2} - 148 t^2 + 67 t^4 - 14 t^6 + t^8, \right. \right.$

$$7299 + \frac{3}{t^{12}} - \frac{42}{t^{10}} + \frac{279}{t^8} - \frac{1149}{t^6} + \frac{3177}{t^4} - \frac{5916}{t^2} - 5916 t^2 + 3177 t^4 - 1149 t^6 + 279 t^8 - 42 t^{10} + 3 t^{12} \left. \left. \right\} \right\}$$

Warning! Mismatch with OP2: Knot[9, 48]

» Knot [9, 49] →  $\left\{ 12802.3, \left\{ 242 + \frac{21}{t^8} - \frac{80}{t^6} + \frac{158}{t^4} - \frac{220}{t^2} - 220t^2 + 158t^4 - 80t^6 + 21t^8, \right. \right.$   
 $63740 + \frac{129}{t^{16}} - \frac{960}{t^{14}} + \frac{3562}{t^{12}} - \frac{8910}{t^{10}} + \frac{17424}{t^8} - \frac{29382}{t^6} + \frac{44204}{t^4} - \frac{57934}{t^2} -$   
 $\left. \left. 57934t^2 + 44204t^4 - 29382t^6 + 17424t^8 - 8910t^{10} + 3562t^{12} - 960t^{14} + 129t^{16} \right\} \right\}$

Warning! Mismatch with OP2: Knot [9, 49]

» Knot [10, 2] →  
 $\left\{ 838.141, \left\{ 102 + \frac{3}{t^{16}} - \frac{18}{t^{14}} + \frac{43}{t^{12}} - \frac{64}{t^{10}} + \frac{80}{t^8} - \frac{92}{t^6} + \frac{99}{t^4} - \frac{102}{t^2} - 102t^2 + 99t^4 - 92t^6 + 80t^8 - 64t^{10} + 43t^{12} - \right. \right.$   
 $18t^{14} + 3t^{16}, 39920 + \frac{3}{t^{32}} - \frac{36}{t^{30}} + \frac{193}{t^{28}} - \frac{630}{t^{26}} + \frac{1468}{t^{24}} - \frac{2712}{t^{22}} + \frac{4249}{t^{20}} - \frac{5850}{t^{18}} + \frac{7228}{t^{16}} - \frac{8359}{t^{14}} + \frac{9887}{t^{12}} -$   
 $\left. \left. \frac{12830}{t^{10}} + \frac{17740}{t^8} - \frac{24350}{t^6} + \frac{31583}{t^4} - \frac{37543}{t^2} - 37543t^2 + 31583t^4 - 24350t^6 + 17740t^8 - 12830t^{10} + 9887t^{12} - 8359t^{14} + 7228t^{16} - 5850t^{18} + 4249t^{20} - 2712t^{22} + 1468t^{24} - 630t^{26} + 193t^{28} - 36t^{30} + 3t^{32} \right\} \right\}$

Warning! Mismatch with OP2: Knot [10, 2]

» Knot [10, 5] →  
 $\left\{ 457.609, \left\{ 150 + \frac{2}{t^{16}} - \frac{12}{t^{14}} + \frac{38}{t^{12}} - \frac{76}{t^{10}} + \frac{112}{t^8} - \frac{136}{t^6} + \frac{147}{t^4} - \frac{150}{t^2} - 150t^2 + 147t^4 - 136t^6 + 112t^8 - 76t^{10} + \right. \right.$   
 $38t^{12} - 12t^{14} + 2t^{16}, 73038 + \frac{1}{t^{32}} - \frac{12}{t^{30}} + \frac{73}{t^{28}} - \frac{294}{t^{26}} + \frac{871}{t^{24}} - \frac{1994}{t^{22}} + \frac{3629}{t^{20}} - \frac{5336}{t^{18}} + \frac{6394}{t^{16}} - \frac{6474}{t^{14}} +$   
 $\left. \left. \frac{6581}{t^{12}} - \frac{9310}{t^{10}} + \frac{17618}{t^8} - \frac{32478}{t^6} + \frac{51009}{t^4} - \frac{66795}{t^2} - 66795t^2 + 51009t^4 - 32478t^6 + 17618t^8 - 9310t^{10} + 6581t^{12} - 6474t^{14} + 6394t^{16} - 5336t^{18} + 3629t^{20} - 1994t^{22} + 871t^{24} - 294t^{26} + 73t^{28} - 12t^{30} + t^{32} \right\} \right\}$

Warning! Mismatch with OP2: Knot [10, 5]

» Knot [10, 6]

»  $\{\{1, 1\}, \{2, -1\}, \{3, 1\}, \{1, -1\}, \{2, -1\}, \{1, -1\}, \{3, 1\}, \{2, 6\}\}$

»  $\left\{ 15969.3, \left\{ 330 + \frac{9}{t^{12}} - \frac{54}{t^{10}} + \frac{137}{t^8} - \frac{220}{t^6} + \frac{281}{t^4} - \frac{318}{t^2} - 318t^2 + 281t^4 - 220t^6 + 137t^8 - 54t^{10} + 9t^{12}, \right. \right.$   
 $192311 + \frac{23}{t^{24}} - \frac{276}{t^{22}} + \frac{1514}{t^{20}} - \frac{5128}{t^{18}} + \frac{12352}{t^{16}} - \frac{23096}{t^{14}} + \frac{35994}{t^{12}} - \frac{50819}{t^{10}} + \frac{71098}{t^8} -$   
 $\frac{101678}{t^6} + \frac{141199}{t^4} - \frac{177339}{t^2} - 177339t^2 + 141199t^4 - 101678t^6 + 71098t^8 -$   
 $50819t^{10} + 35994t^{12} - 23096t^{14} + 12352t^{16} - 5128t^{18} + 1514t^{20} - 276t^{22} + 23t^{24} \right\} \right\}$

Warning! Mismatch with OP2: Knot [10, 6]

» Knot [10, 8]

»  $\{\{1, 5\}, \{3, 1\}, \{2, -1\}, \{1, 1\}, \{3, -2\}, \{2, -1\}\}$

»  $\left\{ 13762.5, \left\{ 100 + \frac{7}{t^{12}} - \frac{34}{t^{10}} + \frac{70}{t^8} - \frac{94}{t^6} + \frac{105}{t^4} - \frac{104}{t^2} - 104t^2 + 105t^4 - 94t^6 + 70t^8 - 34t^{10} + 7t^{12}, \right. \right.$   
 $35749 + \frac{11}{t^{24}} - \frac{106}{t^{22}} + \frac{455}{t^{20}} - \frac{1168}{t^{18}} + \frac{2005}{t^{16}} - \frac{2226}{t^{14}} + \frac{999}{t^{12}} + \frac{1039}{t^{10}} - \frac{695}{t^8} - \frac{5469}{t^6} + \frac{17405}{t^4} - \frac{30126}{t^2} -$   
 $17405t^4 - 5469t^6 - 695t^8 + 1039t^{10} + 999t^{12} - 2226t^{14} + 2005t^{16} - 1168t^{18} + 455t^{20} - 106t^{22} + 11t^{24} \right\} \right\}$

Warning! Mismatch with OP2: Knot [10, 8]

» Knot [10, 9] →

$$\left\{ 455.594, \left\{ 112 + \frac{1}{t^{16}} - \frac{6}{t^{14}} + \frac{19}{t^{12}} - \frac{44}{t^{10}} + \frac{75}{t^8} - \frac{98}{t^6} + \frac{109}{t^4} - \frac{112}{t^2} - 112 t^2 + 109 t^4 - 98 t^6 + 75 t^8 - 44 t^{10} + \right. \right.$$

$$19 t^{12} - 6 t^{14} + t^{16}, 40514 - \frac{1}{t^{28}} + \frac{12}{t^{26}} - \frac{70}{t^{24}} + \frac{280}{t^{22}} - \frac{870}{t^{20}} + \frac{2222}{t^{18}} - \frac{4735}{t^{16}} + \frac{8287}{t^{14}} - \frac{11498}{t^{12}} +$$

$$\frac{11694}{t^{10}} - \frac{6150}{t^8} - \frac{5871}{t^6} + \frac{21572}{t^4} - \frac{35130}{t^2} - 35130 t^2 + 21572 t^4 - 5871 t^6 - 6150 t^8 +$$

$$\left. \left. 11694 t^{10} - 11498 t^{12} + 8287 t^{14} - 4735 t^{16} + 2222 t^{18} - 870 t^{20} + 280 t^{22} - 70 t^{24} + 12 t^{26} - t^{28} \right\} \right\}$$

Warning! Mismatch with OP2: Knot[10, 9]

» Knot [10, 12]

» {{1, -2}, {2, 1}, {1, -1}, {3, 2}, {2, 4}, {3, -1}}