Z7(z1,t)=1. Again, we verify instead that

-1+b0(t)+b2 z1^2+b4 z1^4+b6 z1^6=-(b1z1+b3z1^3+b5z1^5+b7z1^7)

(in one stroke we also have Z7(z3,t)=Z7(z5,t)=1)

```
In[ ]:= Off[Root::nup]
```

```
In[ ]:= ω = Sqrt[(4 - 11 t + 8 t^2)/t];
```

```
In[ ]:= iep3 = z^3 - (z^2 (-14 + 81 t - 130 t^2 - 134 t^3 + 728 t^4 - 1020 t^5 + 680 t^6 - 216 t^7 + 24 t^8 +
              (-1 + 2 t) (2 + 5 t - 40 t^2 + 64 t^3 - 38 t^4 + 8 t^5) ωω)) / (8 (-1 + t)^3 t^2 (-1 + 5 t - 6 t^2 + t^3)) +
        (z (-2 - 17 t + 245 t^2 - 812 t^3 + 98 t^4 + 5437 t^5 - 13 045 t^6 + 7456 t^7 + 19 604 t^8 - 46 768 t^9 +
              47 296 t^10 - 26 752 t^11 + 8608 t^12 - 1440 t^13 + 96 t^14 + t (-1 + 2 t) (7 - 23 t - 36 t^2 +
                 138 t^3 + 575 t^4 - 3055 t^5 + 5670 t^6 - 5392 t^7 + 2736 t^8 - 688 t^9 + 64 t^10) ωω)) /
         (32 (-1 + t)^3 t^5 (-1 + 5 t - 6 t^2 + t^3)^2) - (-225 + 2930 t - 16 685 t^2 + 53 762 t^3 -
           104 265 t^4 + 112 187 t^5 - 23 793 t^6 - 119 612 t^7 + 201 884 t^8 -
           171 608 t^9 + 89 696 t^10 - 29 616 t^11 + 5984 t^12 - 672 t^13 + 32 t^14 +
           (-1 + 2 t) (25 - 90 t - 629 t^2 + 5374 t^3 - 17 553 t^4 + 32 643 t^5 - 37 939 t^6 + 28 146 t^7 -
              13 104 t^8 + 3632 t^9 - 536 t^10 + 32 t^11) ωω) / (32 (-1 + t)^3 t^2 (-1 + 5 t - 6 t^2 + t^3)^3);
```

```
In[ ]:= q = (2 t - 1)^10;

p61 = 16 t^5 (-10 + 27 t + 288 t^2 - 2022 t^3 +
      5825 t^4 - 9477 t^5 + 9336 t^6 - 5494 t^7 + 1712 t^8 - 122 t^9 - 80 t^10 + 16 t^11);
p62 = (-16 t^6) (-25 + 206 t - 726 t^2 + 1459 t^3 - 1927 t^4 + 1870 t^5 - 1394 t^6 + 724 t^7 - 210 t^8 + 24 t^9);
p41 = (-4 t^3) (50 - 687 t + 4203 t^2 - 15 695 t^3 + 41 282 t^4 - 82 204 t^5 + 125 852 t^6 -
      144 150 t^7 + 117 216 t^8 - 62 520 t^9 + 18 496 t^10 - 1080 t^11 - 960 t^12 + 192 t^13);
p42 = 4 t^3 (10 - 121 t + 677 t^2 - 2521 t^3 + 7132 t^4 - 15 412 t^5 + 24 800 t^6 -
      29 742 t^7 + 27 184 t^8 - 18 840 t^9 + 9072 t^10 - 2520 t^11 + 288 t^12);
p21 = (-2 + 40 t - 360 t^2 + 2245 t^3 - 11 098 t^4 + 42 924 t^5 - 126 314 t^6 + 282 304 t^7 - 483 968 t^8 +
     638 896 t^9 - 640 864 t^10 + 470 400 t^11 - 234 144 t^12 + 65 792 t^13 - 2784 t^14 - 3840 t^15 + 768 t^16);
```

p22 = $-t^3 (65 - 774 t + 4344 t^2 - 15\,694 t^3 + 41\,224 t^4 - 82\,096 t^5 + 124\,784 t^6 - 144\,768 t^7 + 127\,840 t^8 - 83\,808 t^9 + 37\,824 t^{10} - 10\,080 t^{11} + 1152 t^{12})$;

p01 = $(1 - t) (1 - 19 t + 161 t^2 - 924 t^3 + 4066 t^4 - 13\,822 t^5 + 35\,840 t^6 - 70\,584 t^7 + 105\,400 t^8 - 118\,168 t^9 + 96\,704 t^{10} - 54\,208 t^{11} + 17\,760 t^{12} - 1440 t^{13} - 1024 t^{14} + 256 t^{15})$;

p02 = $t^3 (25 - 290 t + 1636 t^2 - 6010 t^3 + 15\,992 t^4 - 32\,064 t^5 + 48\,928 t^6 - 56\,632 t^7 + 49\,024 t^8 - 30\,752 t^9 + 13\,120 t^{10} - 3360 t^{11} + 384 t^{12})$;

p11 = $8 t^3 (t - 1) (-125 + 4005 t - 60\,169 t^2 + 570\,158 t^3 - 3\,862\,166 t^4 + 20\,045\,945 t^5 - 83\,223\,823 t^6 + 284\,217\,439 t^7 - 813\,613\,881 t^8 + 1\,978\,202\,656 t^9 - 4\,124\,892\,528 t^{10} + 7\,432\,364\,016 t^{11} - 11\,645\,707\,296 t^{12} + 15\,960\,414\,880 t^{13} - 19\,242\,695\,952 t^{14} + 20\,530\,254\,512 t^{15} - 19\,487\,643\,408 t^{16} + 16\,504\,985\,216 t^{17} - 12\,441\,863\,808 t^{18} + 8\,263\,236\,224 t^{19} - 4\,749\,495\,424 t^{20} + 2\,309\,017\,088 t^{21} - 926\,839\,040 t^{22} + 300\,215\,040 t^{23} - 76\,503\,296 t^{24} + 14\,585\,856 t^{25} - 1\,794\,048 t^{26} + 73\,728 t^{27} + 8192 t^{28})$;

p12 = $8 t^3 (1 - t) (-25 + 765 t - 11\,171 t^2 + 105\,634 t^3 - 736\,638 t^4 + 4\,055\,851 t^5 - 18\,297\,419 t^6 + 69\,029\,409 t^7 - 220\,386\,161 t^8 + 599\,953\,820 t^9 - 1\,399\,432\,680 t^{10} + 2\,804\,818\,368 t^{11} - 4\,835\,265\,904 t^{12} + 7\,165\,985\,152 t^{13} - 9\,113\,381\,872 t^{14} + 9\,916\,520\,688 t^{15} - 9\,197\,207\,856 t^{16} + 7\,238\,388\,416 t^{17} - 4\,811\,313\,152 t^{18} + 2\,688\,147\,584 t^{19} - 1\,256\,283\,520 t^{20} + 488\,377\,856 t^{21} - 156\,990\,208 t^{22} + 41\,689\,856 t^{23} - 9\,309\,952 t^{24} + 1\,799\,168 t^{25} - 280\,576 t^{26} + 24\,576 t^{27})$;

p31 = $8 t^3 (t - 1) (-125 + 4005 t - 59\,369 t^2 + 553\,998 t^3 - 3\,730\,470 t^4 + 19\,565\,545 t^5 - 83\,537\,119 t^6 + 297\,885\,767 t^7 - 901\,975\,729 t^8 + 2\,350\,136\,384 t^9 - 5\,333\,296\,784 t^{10} + 10\,652\,922\,784 t^{11} - 18\,880\,321\,184 t^{12} + 29\,852\,879\,392 t^{13} - 42\,255\,474\,560 t^{14} + 53\,630\,116\,864 t^{15} - 60\,971\,031\,168 t^{16} + 61\,759\,492\,352 t^{17} - 55\,128\,623\,872 t^{18} + 42\,657\,332\,224 t^{19} - 28\,037\,451\,008 t^{20} + 15\,314\,942\,464 t^{21} - 6\,803\,466\,496 t^{22} + 2\,405\,327\,616 t^{23} - 657\,957\,120 t^{24} + 131\,469\,312 t^{25} - 16\,441\,344 t^{26} + 663\,552 t^{27} + 73\,728 t^{28})$;

p32 = $8 t^3 (1 - t) (-25 + 765 t - 11\,171 t^2 + 107\,634 t^3 - 787\,518 t^4 + 4\,665\,067 t^5 - 22\,973\,819 t^6 + 95\,297\,577 t^7 - 336\,259\,225 t^8 + 1\,016\,942\,748 t^9 - 2\,647\,457\,192 t^{10} + 5\,940\,364\,352 t^{11} - 11\,479\,425\,312 t^{12} + 19\,070\,848\,736 t^{13} - 27\,171\,006\,848 t^{14} + 33\,097\,766\,976 t^{15} - 34\,341\,234\,112 t^{16} + 30\,212\,895\,232 t^{17} - 22\,415\,990\,528 t^{18} + 13\,930\,544\,128 t^{19} - 7\,190\,272\,256 t^{20} + 3\,053\,491\,200 t^{21} - 1\,060\,255\,488 t^{22} + 303\,176\,448 t^{23} - 73\,578\,240 t^{24} + 15\,455\,232 t^{25} - 2\,525\,184 t^{26} + 221\,184 t^{27})$;

p51 = $128 t^8 (t - 1) (-1500 + 28\,960 t - 257\,939 t^2 + 1\,404\,604 t^3 - 5\,211\,955 t^4 + 13\,795\,890 t^5 - 25\,855\,137 t^6 + 29\,614\,248 t^7 + 3\,063\,112 t^8 - 113\,012\,293 t^9 + 333\,031\,055 t^{10} - 652\,968\,101 t^{11} + 993\,241\,608 t^{12} - 1\,221\,269\,400 t^{13} + 1\,224\,164\,696 t^{14} - 994\,694\,744 t^{15} + 647\,101\,024 t^{16} - 331\,790\,224 t^{17} + 131\,533\,872 t^{18} - 39\,147\,024 t^{19} + 8\,229\,120 t^{20} - 1\,046\,016 t^{21} + 41\,472 t^{22} + 4608 t^{23})$;

p52 = $128 t^8 (1 - t) (-100 + 80 t + 20\,039 t^2 - 260\,728 t^3 + 1\,786\,957 t^4 - 8\,269\,540 t^5 + 28\,531\,279 t^6 - 77\,414\,974 t^7 + 170\,435\,054 t^8 - 309\,998\,835 t^9 + 470\,441\,223 t^{10} - 598\,385\,907 t^{11} + 638\,090\,092 t^{12} - 567\,729\,488 t^{13} + 417\,123\,064 t^{14} - 249\,429\,768 t^{15} + 119\,783\,328 t^{16} - 46\,124\,976 t^{17} + 14\,587\,824 t^{18} - 3\,960\,432 t^{19} + 919\,872 t^{20} - 157\,824 t^{21} + 13\,824 t^{22})$;

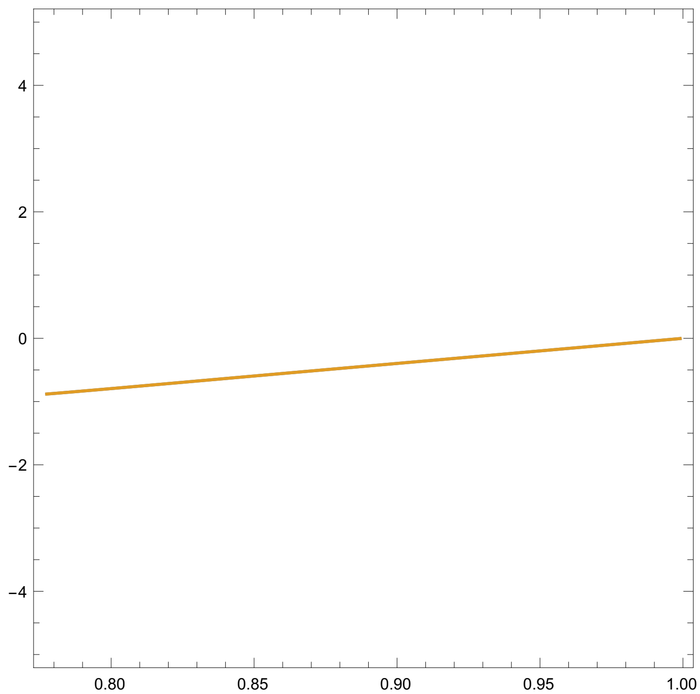
p71 = $2048 t^{13} (t - 1) (-25 + 56 t + 2520 t^2 - 25\,565 t^3 + 120\,032 t^4 - 330\,197 t^5 + 533\,239 t^6 - 339\,915 t^7 - 575\,358 t^8 + 1\,899\,107 t^9 - 2\,748\,394 t^{10} + 2\,566\,194 t^{11} - 1\,675\,233 t^{12} + 781\,067 t^{13} - 257\,689 t^{14} + 57\,232 t^{15} - 7392 t^{16} + 288 t^{17} + 32 t^{18})$;

```
p72 = 2048 t^13 (1 - t) (-1 - 50 t + 626 t^2 - 2319 t^3 - 1948 t^4 + 47711 t^5 -
      201331 t^6 + 485563 t^7 - 779658 t^8 + 878711 t^9 - 712736 t^10 + 425072 t^11 -
      193639 t^12 + 72003 t^13 - 23071 t^14 + 6068 t^15 - 1096 t^16 + 96 t^17);
```

In[ ]:=

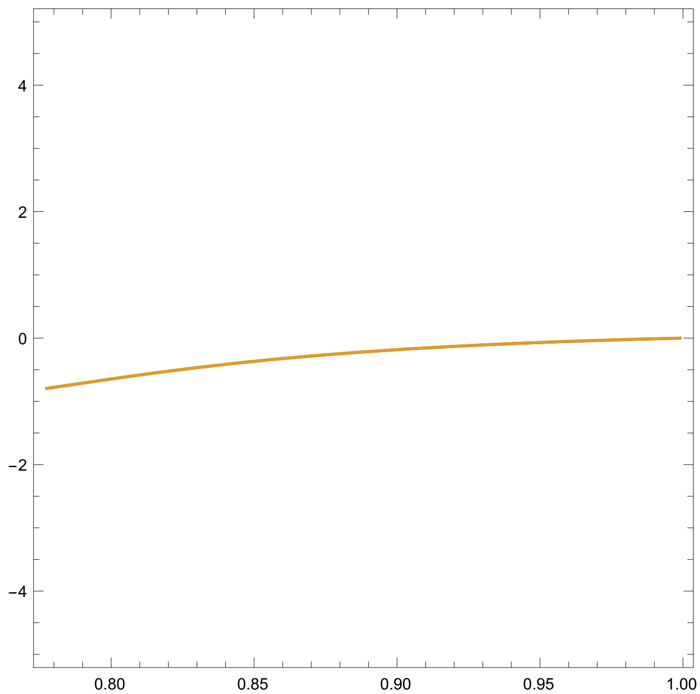
```
ContourPlot[
 Evaluate[{y == 1/q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.Table[
        (-Sqrt[Root[iep3, 1]])^j, {j, 6, 0, -2}]) /. ωω → ω,
    y == 1/q {-Sqrt[p71 + p72 ωω], Sqrt[p51 + p52 ωω], -Sqrt[p31 + p32 ωω],
        Sqrt[p11 + p12 ωω]}.Table[(-Sqrt[Root[iep3, 1]])^j, {j, 7, 1, -2}] /. ωω → ω}],
 {t, 0.777 …, .999}, {y, -5, 5}, WorkingPrecision → 80,
 PlotPoints → 80]
```

Out[ ]=



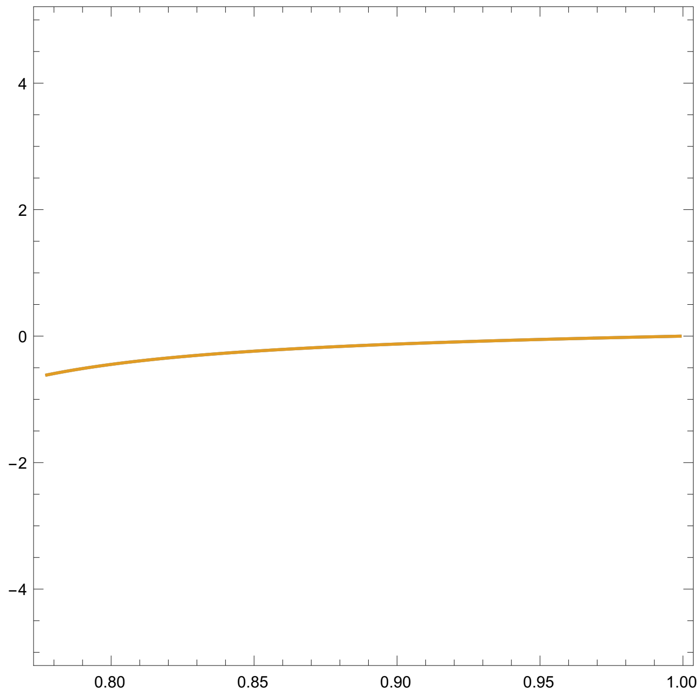
In[ ]:=
```
ContourPlot[
  Evaluate[{y == 1 / q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.Table[
          (Sqrt[Root[iep3, 2]])^j, {j, 6, 0, -2}]) /. ωω → ω,
     y == 1 / q {-Sqrt[p71 + p72 ωω], Sqrt[p51 + p52 ωω], -Sqrt[p31 + p32 ωω],
         Sqrt[p11 + p12 ωω]}.Table[(Sqrt[Root[iep3, 2]])^j, {j, 7, 1, -2}] /. ωω → ω}],
  {t, 0.777 …, .999}, {y, -5, 5}, WorkingPrecision → 80,
  PlotPoints → 80]
```

Out[ ]=



In[ ]:=
```
ContourPlot[
 Evaluate[{y == 1 / q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.Table[
         (-Sqrt[Root[iep3, 3]])^j, {j, 6, 0, -2}]) /. ωω → ω,
   y == 1 / q {-Sqrt[p71 + p72 ωω], Sqrt[p51 + p52 ωω], -Sqrt[p31 + p32 ωω],
       Sqrt[p11 + p12 ωω]}.Table[(-Sqrt[Root[iep3, 3]])^j, {j, 7, 1, -2}] /. ωω → ω}],
 {t, 0.777…, .999}, {y, -5, 5}, WorkingPrecision → 80,
 PlotPoints → 80]
```

Out[ ]=



Canonical bivariate poly for both lhs and rhs

In[ ]:=
```
qqq9 = -(-1 + 2 t)^33
  (40 960 000 t^5 - 1 943 552 000 t^6 + 45 285 478 400 t^7 - 690 435 860 480 t^8 + 7 743 927 232 256 t^9 -
    68 108 919 866 432 t^10 + 488 951 367 704 432 t^11 - 2 944 750 063 979 824 t^12 +
    15 175 970 060 479 888 t^13 - 67 929 601 432 109 680 t^14 + 267 153 306 116 315 968 t^15 -
    931 564 200 668 344 928 t^16 + 2 901 234 873 070 618 208 t^17 - 8 117 718 281 903 826 272 t^18 +
    20 504 594 864 656 612 848 t^19 - 46 938 766 854 057 281 136 t^20 +
    97 689 962 025 293 254 736 t^21 - 185 313 014 207 268 621 360 t^22 +
    321 040 887 724 083 234 272 t^23 - 508 698 685 285 134 280 192 t^24 +
    738 004 829 056 194 882 752 t^25 - 980 903 075 179 142 614 464 t^26 +
    1 194 692 400 632 446 871 424 t^27 - 1 333 127 378 402 104 336 384 t^28 +
    1 362 138 681 532 595 858 944 t^29 - 1 273 134 239 034 149 536 256 t^30 +
    1 086 950 187 535 630 619 648 t^31 - 846 062 083 308 585 042 944 t^32 +
    598 964 136 457 371 922 432 t^33 - 384 503 711 839 106 015 232 t^34 +
    223 000 519 703 744 294 912 t^35 - 116 327 416 959 585 554 432 t^36 +
```

$54 286 377 662 854 893 568\ t^{37} - 22 516 675 294 486 294 528\ t^{38} +$
$8 235 452 639 907 504 128\ t^{39} - 2 630 483 836 098 461 696\ t^{40} +$
$725 003 938 985 705 472\ t^{41} - 169 841 565 680 795 648\ t^{42} + 33 166 940 610 494 464\ t^{43} -$
$5 261 745 685 790 720\ t^{44} + 654 409 453 273 088\ t^{45} - 60 564 139 147 264\ t^{46} +$
$3 837 553 278 976\ t^{47} - 142 807 662 592\ t^{48} + 2 147 483 648\ t^{49}\Big) -$
$(-1 + 2\ t)^{33} \Big(-2 048 000\ t^3 + 98 897 920\ t^4 - 2 301 060 096\ t^5 + 34 284 058 112\ t^6 -$
$366 100 346 048\ t^7 + 2 964 161 793 936\ t^8 - 18 691 860 011 004\ t^9 +$
$91 956 453 666 440\ t^{10} - 339 027 331 297 076\ t^{11} + 773 368 922 964 576\ t^{12} +$
$485 970 715 647 896\ t^{13} - 16 256 778 555 818 192\ t^{14} + 103 527 969 481 922 696\ t^{15} -$
$460 126 867 212 055 792\ t^{16} + 1 652 565 858 521 336 564\ t^{17} -$
$5 048 648 935 221 121 816\ t^{18} + 13 450 699 414 800 590 588\ t^{19} -$
$31 703 027 459 360 917 632\ t^{20} + 66 713 310 049 532 305 456\ t^{21} -$
$126 113 618 703 213 864 096\ t^{22} + 215 088 122 456 108 451 248\ t^{23} -$
$331 958 151 583 050 360 640\ t^{24} + 464 579 532 249 156 713 728\ t^{25} -$
$590 376 046 514 544 427 072\ t^{26} + 681 745 680 377 918 777 344\ t^{27} -$
$715 612 717 391 552 582 400\ t^{28} + 682 789 851 101 715 750 656\ t^{29} -$
$592 042 736 709 950 430 720\ t^{30} + 466 409 561 118 141 895 680\ t^{31} -$
$333 820 399 437 898 950 656\ t^{32} + 217 171 088 645 076 603 904\ t^{33} -$
$128 601 163 772 556 646 400\ t^{34} + 69 502 708 363 299 216 384\ t^{35} -$
$34 419 756 121 710 096 384\ t^{36} + 15 691 832 007 097 171 968\ t^{37} -$
$6 607 933 276 682 190 848\ t^{38} + 2 568 139 456 612 139 008\ t^{39} - 913 878 080 313 819 136\ t^{40} +$
$292 975 978 453 532 672\ t^{41} - 82 638 299 907 751 936\ t^{42} + 19 910 855 360 512 000\ t^{43} -$
$3 955 441 272 881 152\ t^{44} + 620 075 182 718 976\ t^{45} - 72 266 448 633 856\ t^{46} +$
$5 709 353 713 664\ t^{47} - 257 698 037 760\ t^{48} + 4 294 967 296\ t^{49}\Big)\ y -$
$(-1 + 2\ t)^{33} \Big(-4096 + 226 304\ t - 6 104 320\ t^2 + 106 074 496\ t^3 - 1 324 324 336\ t^4 +$
$12 568 448 724\ t^5 - 93 608 240 131\ t^6 + 556 354 788 196\ t^7 - 2 649 553 376 841\ t^8 +$
$10 004 029 859 306\ t^9 - 28 951 916 123 562\ t^{10} + 59 415 590 450 564\ t^{11} -$
$77 505 287 576 674\ t^{12} + 176 745 320 100 456\ t^{13} - 1 858 385 126 219 215\ t^{14} +$
$14 082 876 445 044 376\ t^{15} - 73 553 759 124 965 153\ t^{16} + 297 320 808 330 105 826\ t^{17} -$
$990 278 962 499 888 772\ t^{18} + 2 814 306 694 136 055 344\ t^{19} -$
$6 972 020 462 350 010 132\ t^{20} + 15 272 227 070 460 526 008\ t^{21} -$
$29 882 305 705 517 548 848\ t^{22} + 52 630 072 431 602 463 600\ t^{23} -$
$83 949 745 932 641 885 408\ t^{24} + 121 888 599 331 638 854 656\ t^{25} -$
$161 772 260 127 566 524 672\ t^{26} + 196 952 719 105 805 828 224\ t^{27} -$
$220 553 400 610 110 662 912\ t^{28} + 227 577 950 035 522 799 104\ t^{29} -$
$216 519 086 804 267 177 216\ t^{30} + 189 819 896 193 008 328 704\ t^{31} -$
$153 040 708 719 458 708 736\ t^{32} + 113 097 452 158 906 555 904\ t^{33} -$
$76 262 504 269 633 038 336\ t^{34} + 46 661 088 994 199 511 040\ t^{35} -$
$25 737 575 460 889 006 080\ t^{36} + 12 705 578 545 489 403 904\ t^{37} -$
$5 568 947 040 026 361 856\ t^{38} + 2 148 594 644 742 111 232\ t^{39} - 722 991 853 128 122 368\ t^{40} +$
$210 141 777 697 439 744\ t^{41} - 52 239 057 422 385 152\ t^{42} + 10 994 821 218 959 360\ t^{43} -$
$1 936 636 476 653 568\ t^{44} + 280 320 846 856 192\ t^{45} - 32 093 069 377 536\ t^{46} +$
$2 666 906 255 360\ t^{47} - 132 070 244 352\ t^{48} + 2 147 483 648\ t^{49}\Big)\ y^2 -$

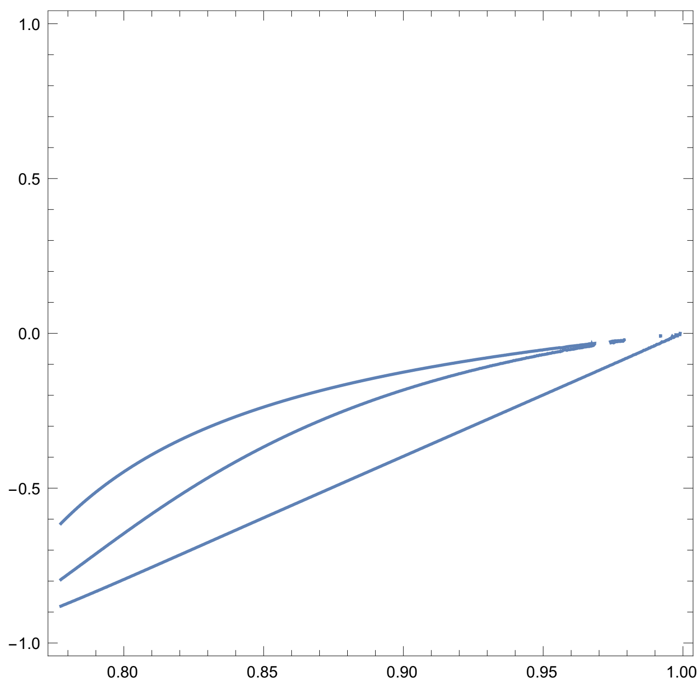
$(-1+2t)^{33}(-9728t^3+319616t^4-4262560t^5+21231272t^6+174017144t^7-$
$4358709897t^8+46221876998t^9-346041528932t^{10}+2115496257784t^{11}-$
$11537827945399t^{12}+59243824444198t^{13}-289966450760380t^{14}+$
$1328416837044532t^{15}-5559254885446588t^{16}+20912000519681028t^{17}-$
$70248423450837684t^{18}+210661040704675080t^{19}-565417341215564252t^{20}+$
$1363135099498485384t^{21}-2962035232396486768t^{22}+5817500497339138992t^{23}-$
$10346745192826359104t^{24}+16679998567994197376t^{25}-$
$24372090387510151232t^{26}+32244610031834865792t^{27}-$
$38550755854067812864t^{28}+41525171375735604480t^{29}-$
$40127474227170270208t^{30}+34581308273774562304t^{31}-$
$26352234840173588480t^{32}+17530083121667678208t^{33}-$
$9964650758102171648t^{34}+4644220093518381056t^{35}-$
$1598290785896235008t^{36}+240060898049327104t^{37}+164502136755585024t^{38}-$
$177224368158670848t^{39}+100248003193864192t^{40}-41072046192459776t^{41}+$
$12939930401505280t^{42}-3147949555056640t^{43}+576997851922432t^{44}-$
$75406338162688t^{45}+6282463412224t^{46}-251255586816t^{47})y^3-$
$(-1+2t)^{33}(128t^5-6672t^6+187232t^7-3746757t^8+58668800t^9-745763428t^{10}+$
$7849951402t^{11}-69467928703t^{12}+523633324918t^{13}-3399714007506t^{14}+$
$19188108219416t^{15}-94847507984346t^{16}+413060552367952t^{17}-$
$1592556998134424t^{18}+5457724439694136t^{19}-16682213545947196t^{20}+$
$45618158313068376t^{21}-111908238505973808t^{22}+246912778434890576t^{23}-$
$491178722971778912t^{24}+882986026840374848t^{25}-1437557480495007040t^{26}+$
$2123705498248846976t^{27}-2851318733313996032t^{28}+$
$3482789737286860288t^{29}-3871253606239122432t^{30}+3912883543987812352t^{31}-$
$3589394351929233408t^{32}+2978555229037125632t^{33}-2225509571674685440t^{34}+$
$1488208430438318080t^{35}-884019654558154752t^{36}+462290661732909056t^{37}-$
$210542393341771776t^{38}+82424345549864960t^{39}-27289732007329792t^{40}+$
$7482714041090048t^{41}-1651598350614528t^{42}+281679574859776t^{43}-$
$34798294794240t^{44}+2767837986816t^{45}-106300440576t^{46})y^4-$
$(-1+2t)^{33}(152t^8-7398t^9+165929t^{10}-2211278t^{11}+18132711t^{12}-68726802t^{13}-$
$413256616t^{14}+9534928924t^{15}-93166858152t^{16}+642663579152t^{17}-$
$3486379980012t^{18}+15547377177468t^{19}-58329088678740t^{20}+$
$186582400399240t^{21}-512787829217984t^{22}+1215033657475072t^{23}-$
$2480957459206208t^{24}+4342539884621440t^{25}-6432194348111360t^{26}+$
$7834870970099712t^{27}-7297962682238976t^{28}+3901717429653504t^{29}+$
$2127573466480640t^{30}-9119737862225920t^{31}+14631841735737344t^{32}-$
$16781407917899776t^{33}+15285877524660224t^{34}-11431014044008448t^{35}+$
$7090339839737856t^{36}-3645066435887104t^{37}+1540208050831360t^{38}-$
$526658570289152t^{39}+142198158917632t^{40}-29182012686336t^{41}+$
$4276210368512t^{42}-398358216704t^{43}+17716740096t^{44})y^5-$
$(-1+2t)^{33}(-t^{10}+60t^{11}-1743t^{12}+32654t^{13}-443355t^{14}+4648056t^{15}-$
$39146185t^{16}+272061558t^{17}-1590536844t^{18}+7934058600t^{19}-$

$34\,135\,077\,600\ t^{20} + 127\,717\,012\,800\ t^{21} - 418\,214\,409\,600\ t^{22} + 1\,204\,361\,107\,200\ t^{23} -$
$3\,061\,184\,889\,600\ t^{24} + 6\,885\,051\,486\,720\ t^{25} - 13\,725\,049\,881\,600\ t^{26} +$
$24\,268\,379\,535\,360\ t^{27} - 38\,059\,283\,988\,480\ t^{28} + 52\,891\,781\,529\,600\ t^{29} -$
$65\,022\,693\,212\,160\ t^{30} + 70\,522\,375\,372\,800\ t^{31} - 67\,228\,313\,518\,080\ t^{32} +$
$56\,050\,744\,688\,640\ t^{33} - 40\,606\,924\,800\,000\ t^{34} + 25\,349\,271\,846\,912\ t^{35} -$
$13\,487\,906\,488\,320\ t^{36} + 6\,029\,853\,065\,216\ t^{37} - 2\,221\,563\,445\,248\ t^{38} + 656\,576\,348\,160\ t^{39} -$
$149\,602\,435\,072\ t^{40} + 24\,662\,507\,520\ t^{41} - 2\,617\,245\,696\ t^{42} + 134\,217\,728\ t^{43})\ y^6;$

In[ ]:= Solve[qqq9 == 0 /. t → 4 / 5, Reals]

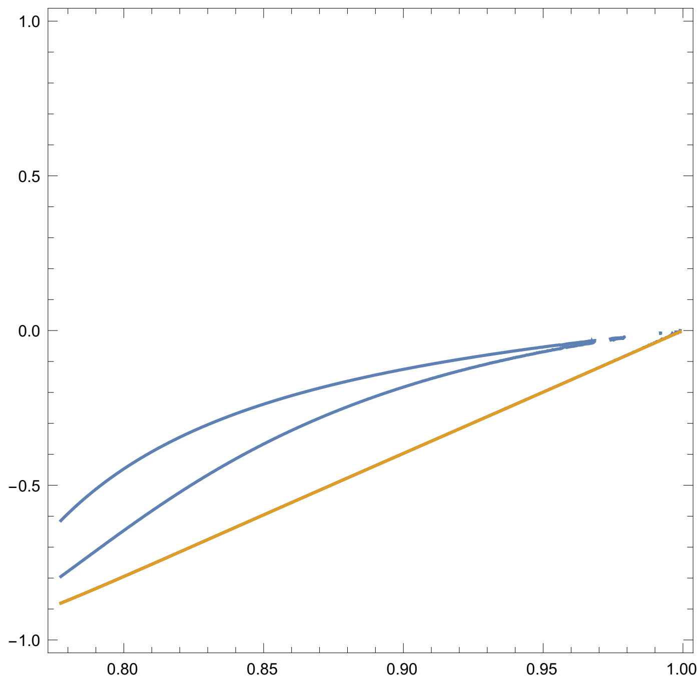
Out[ ]= {{y → -5.19 … × 10^3}, {y → -0.795 …}, {y → -0.646 …}, {y → -0.447 …}}

In[ ]:= ContourPlot[Evaluate[{qqq9 == 0}], {t, 0.777 …, .999},
{y, -1, 1}, WorkingPrecision → 100, PlotPoints → 120]

Out[ ]=


In[ ]:=
```
ContourPlot[
  Evaluate[{qqq9 == 0, y == 1/q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
        Table[(-Sqrt[Root[iep3, 1]])^j, {j, 6, 0, -2}]) /. ωω → ω}],
  {t, 0.777 …, .999}, {y, -1, 1}, WorkingPrecision → 100,
  PlotPoints → 120]
```

Out[ ]=

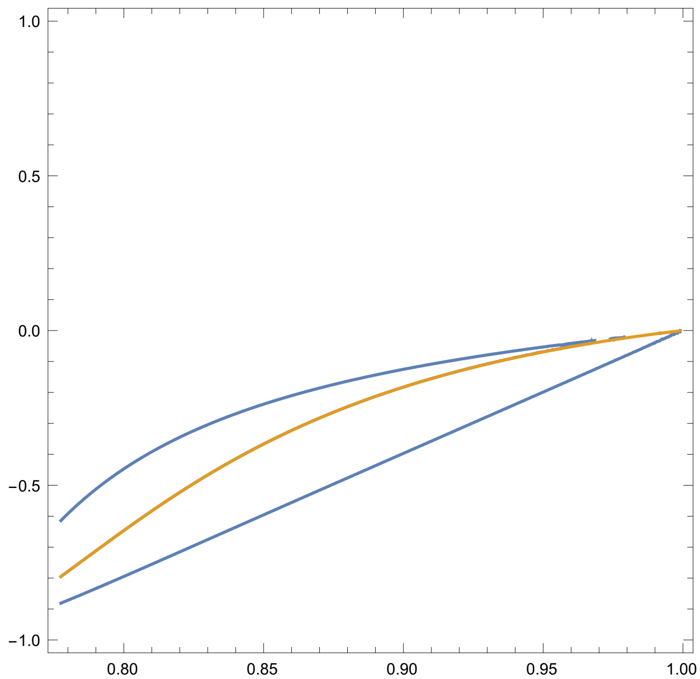


In[ ]:=
```
RootReduce[{Root[qqq9 /. t → 4/5, 2], Root[qqq9 /. t → 4/5, 3], Root[qqq9 /. t → 4/5, 4],
   1/q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
        Table[(-Sqrt[Root[iep3, 1]])^j, {j, 6, 0, -2}]) /. ωω → ω /. t → 4/5,
   1/q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
        Table[(Sqrt[Root[iep3, 2]])^j, {j, 6, 0, -2}]) /. ωω → ω /. t → 4/5,
   1/q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
        Table[(-Sqrt[Root[iep3, 3]])^j, {j, 6, 0, -2}]) /. ωω → ω /. t → 4/5}]
```

Out[ ]=
```
{-0.795 …, -0.646 …, -0.447 …, -0.795 …, -0.646 …, -0.447 …}
```

In[ ]:=
```
ContourPlot[
  Evaluate[{qqq9 == 0, y == 1 / q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
       Table[(Sqrt[Root[iep3, 2]])^j, {j, 6, 0, -2}]) /. ωω → ω}],
  {t, 0.777 …, .999}, {y, -1, 1}, WorkingPrecision → 100,
  PlotPoints → 120]
```

Out[ ]=



In[ ]:=
```
ContourPlot[
  Evaluate[{qqq9 == 0, y == 1 / q (-q + {p61 + p62 ωω, p41 + p42 ωω, p21 + p22 ωω, p01 + p02 ωω}.
        Table[(-Sqrt[Root[iep3, 3]])^j, {j, 6, 0, -2}]) /. ωω → ω}],
  {t, 0.777..., .999}, {y, -1, 1}, WorkingPrecision → 100,
  PlotPoints → 120]
```

Out[ ]=