

\$SPAD/src/input richder3s.input

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**Abstract**

$(a+bx)^m (c+dx)^n (e+fx)^p$   
There are no derivatives in the file.

## Contents

```

      *
)set break resume
)sys rm -f richder3s.output
)spool richder3s.output
)set message test on
)set message auto off
)clear all

--S 1 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(3/2)/sqrt(3+5*x)
--R
--R
--R          3      2      +-----+ +-----+
--R      (12x  - 4x  - 5x + 2)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                 +-----+
--R                                 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 1

--S 2 of 300
--r0:=-21547/759375*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--      sqrt(33)-8024546/759375*elliptic_e(asin(sqrt(5/11)*_
--      sqrt(1-2*x)),33/35)/sqrt(35)+106/1575*(1-2*x)^(3/2)*(2+3*x)^(3/2)*_
--      sqrt(3+5*x)+2/45*(1-2*x)^(5/2)*(2+3*x)^(3/2)*sqrt(3+5*x)+_
--      8878/118125*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--      21547/1771875*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 2

--S 3 of 300
--d0:=t0-D(r0,x)
--E 3

)clear all

--S 4 of 300
t0:=(1-2*x)^(5/2)*sqrt(2+3*x)/sqrt(3+5*x)
--R
--R
--R          2      +-----+ +-----+
--R      (4x  - 4x + 1)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                 +-----+
--R                                 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 4

```

```

--S 5 of 300
--r0:=-101902/50625*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--  sqrt(33)-408311/50625*elliptic_e(asin(sqrt(5/11)*_
--  sqrt(1-2*x)),33/35)/sqrt(35)+326/2625*(1-2*x)^(3/2)*_
--  sqrt(2+3*x)*sqrt(3+5*x)+2/35*(1-2*x)^(5/2)*sqrt(2+3*x)*_
--  sqrt(3+5*x)+30922/118125*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 5

--S 6 of 300
--d0:=t0-D(r0,x)
--E 6

)clear all

--S 7 of 300
t0:=(1-2*x)^(5/2)/(sqrt(2+3*x)*sqrt(3+5*x))
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R      +-----+ +-----+
--R      \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 7

--S 8 of 300
--r0:=53194/10125*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(7/5)-246694/10125*elliptic_f(asin(sqrt(3/7)*_
--  sqrt(1-2*x)),35/33)/sqrt(33)-4/75*(1-2*x)^(3/2)*sqrt(2+3*x)*_
--  sqrt(3+5*x)-1088/3375*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 8

--S 9 of 300
--d0:=t0-D(r0,x)
--E 9

)clear all

--S 10 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(3/2)*sqrt(3+5*x))
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R      +-----+ +-----+
--R      (3x + 2)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 10

```

```

--S 11 of 300
--r0:=-8314/405*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+_
--      8764/405*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
--      2*(1-2*x)^(5/2)*sqrt(3+5*x)/sqrt(2+3*x)+4/3*(1-2*x)^(3/2)*_
--      sqrt(2+3*x)*sqrt(3+5*x)+428/135*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 11

--S 12 of 300
--d0:=t0-D(r0,x)
--E 12

)clear all

--S 13 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(5/2)*sqrt(3+5*x))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R          2          +-----+ +-----+
--R      (9x  + 12x + 4)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 13

--S 14 of 300
--r0:=-3896/81*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+_
--      476/81*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
--      2/3*(1-2*x)^(5/2)*sqrt(3+5*x)/(2+3*x)^(3/2)+40/3*(1-2*x)^(3/2)*_
--      sqrt(3+5*x)/sqrt(2+3*x)+232/27*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 14

--S 15 of 300
--d0:=t0-D(r0,x)
--E 15

)clear all

--S 16 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(7/2)*sqrt(3+5*x))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R          3          2          +-----+ +-----+
--R      (27x  + 54x  + 36x + 8)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 16

```

```

--S 17 of 300
--r0:=-16564/81*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 3352/81*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/5*(1-2*x)^(5/2)*sqrt(3+5*x)/(2+3*x)^(5/2)+52/9*(1-2*x)^(3/2)*
-- sqrt(3+5*x)/(2+3*x)^(3/2)+3412/27*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 17

```

```

--S 18 of 300
--d0:=t0-D(r0,x)
--E 18

```

```
)clear all
```

```

--S 19 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(9/2)*sqrt(3+5*x))
--R
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R      4      3      2      +-----+ +-----+
--R      (81x  + 216x  + 216x  + 96x + 16)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 19

```

```

--S 20 of 300
--r0:=-703480/567*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 101240/567*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*(1-2*x)^(5/2)*sqrt(3+5*x)/(2+3*x)^(7/2)+80/21*(1-2*x)^(3/2)*
-- sqrt(3+5*x)/(2+3*x)^(5/2)+10580/189*sqrt(1-2*x)*sqrt(3+5*x)/
-- (2+3*x)^(3/2)+703480/1323*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 20

```

```

--S 21 of 300
--d0:=t0-D(r0,x)
--E 21

```

```
)clear all
```

```

--S 22 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(11/2)*sqrt(3+5*x))
--R
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R      5      4      3      2      +-----+ +-----+
--R      (243x  + 810x  + 1080x  + 720x  + 240x + 32)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)

```

--E 22

--S 23 of 300

```

--r0:=-66055016/11907*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(5/7)+9505840/11907*elliptic_f(asin(sqrt(3/7)*_
--  sqrt(1-2*x)),35/33)/sqrt(33)+2/9*(1-2*x)^(5/2)*sqrt(3+5*x)/_
--  (2+3*x)^(9/2)+20/7*(1-2*x)^(3/2)*sqrt(3+5*x)/(2+3*x)^(7/2)+_
--  7148/189*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(5/2)+_
--  950584/3969*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(3/2)+_
--  66055016/27783*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)

```

--E 23

--S 24 of 300

--d0:=t0-D(r0,x)

--E 24

)clear all

--S 25 of 300

t0:=(1-2\*x)^(5/2)/((2+3\*x)^(13/2)\*sqrt(3+5\*x))

--R

--R

--R (1)

$$\frac{(4x^2 - 4x + 1)\sqrt{-2x + 1}}{(729x^6 + 2916x^5 + 4860x^4 + 4320x^3 + 2160x^2 + 576x + 64)\sqrt{3x + 2}\sqrt{5x + 3}}$$

Type: Expression(Integer)

--E 25

--S 26 of 300

```

--r0:=-23204503328/916839*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(5/7)+3339309520/916839*elliptic_f(asin(sqrt(3/7)*_
--  sqrt(1-2*x)),35/33)/sqrt(33)+2/11*(1-2*x)^(5/2)*sqrt(3+5*x)/_
--  (2+3*x)^(11/2)+680/297*(1-2*x)^(3/2)*sqrt(3+5*x)/(2+3*x)^(9/2)+_
--  180020/6237*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(7/2)+_
--  7173272/43659*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(5/2)+_
--  333930952/305613*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(3/2)+_
--  23204503328/2139291*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)

```

--E 26

--S 27 of 300

--d0:=t0-D(r0,x)

--E 27

)clear all

--S 28 of 300

t0:=(1-2\*x)^(5/2)\*(2+3\*x)^(7/2)/(3+5\*x)^(3/2)

```

--R
--R
--R      5      4      3      2      +-----+ +-----+
--R      (108x  + 108x  - 45x  - 58x  + 4x + 8)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                  +-----+
--R                                  (5x + 3)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 28

```

```

--S 29 of 300
--r0:=703672/13921875*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--  sqrt(33)-264260033/27843750*elliptic_e(asin(sqrt(5/11)*_
--  sqrt(1-2*x)),33/35)/sqrt(35)-2/5*(1-2*x)^(5/2)*(2+3*x)^(7/2)/_
--  sqrt(3+5*x)-48/275*(1-2*x)^(3/2)*(2+3*x)^(7/2)*sqrt(3+5*x)+_
--  2020841/6496875*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--  346636/259875*(2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)-_
--  2972/7425*(2+3*x)^(7/2)*sqrt(1-2*x)*sqrt(3+5*x)-_
--  703672/32484375*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 29

```

```

--S 30 of 300
--d0:=t0-D(r0,x)
--E 30

```

)clear all

```

--S 31 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(5/2)/(3+5*x)^(3/2)
--R
--R
--R      4      3      2      +-----+ +-----+
--R      (36x  + 12x  - 23x  - 4x + 4)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                  +-----+
--R                                  (5x + 3)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 31

```

```

--S 32 of 300
--r0:=-196499/253125*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--  sqrt(33)-1509007/253125*elliptic_e(asin(sqrt(5/11)*_
--  sqrt(1-2*x)),33/35)/sqrt(35)-2/5*(1-2*x)^(5/2)*(2+3*x)^(5/2)/_
--  sqrt(3+5*x)-8/45*(1-2*x)^(3/2)*(2+3*x)^(5/2)*sqrt(3+5*x)+_
--  167228/118125*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-_
--  1972/4725*(2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--  196499/590625*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 32

```

```

--S 33 of 300

```



```

--d0:=t0-D(r0,x)
--E 33

)clear all

--S 34 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(3/2)/(3+5*x)^(3/2)
--R
--R
--R          3      2      +-----+ +-----+
--R      (12x  - 4x  - 5x + 2)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                 +-----+
--R                          (5x + 3)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 34

--S 35 of 300
--r0:=-106772/28125*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--      sqrt(33)+53279/28125*elliptic_e(asin(sqrt(5/11)*_
--      sqrt(1-2*x)),33/35)/sqrt(35)-2/5*(1-2*x)^(5/2)*(2+3*x)^(3/2)/_
--      sqrt(3+5*x)-32/175*(1-2*x)^(3/2)*(2+3*x)^(3/2)*sqrt(3+5*x)-_
--      1972/4375*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--      106772/65625*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 35

--S 36 of 300
--d0:=t0-D(r0,x)
--E 36

)clear all

--S 37 of 300
t0:=(1-2*x)^(5/2)*sqrt(2+3*x)/(3+5*x)^(3/2)
--R
--R
--R          2      +-----+ +-----+
--R      (4x  - 4x + 1)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                 +-----+
--R                          (5x + 3)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 37

--S 38 of 300
--r0:=81164/16875*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-_
--      218414/16875*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--      sqrt(33)-2/5*(1-2*x)^(5/2)*sqrt(2+3*x)/sqrt(3+5*x)-_
--      24/125*(1-2*x)^(3/2)*sqrt(2+3*x)*sqrt(3+5*x)-_
--      3028/5625*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)

```

```

--E 38

--S 39 of 300
--d0:=t0-D(r0,x)
--E 39

)clear all

--S 40 of 300
t0:=(1-2*x)^(5/2)/((3+5*x)^(3/2)*sqrt(2+3*x))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R  (1)  -----
--R          +-----+ +-----+
--R      (5x + 3)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 40

--S 41 of 300
--r0:=5594/675*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+_
-- 5656/675*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
-- 2*(1-2*x)^(5/2)*sqrt(2+3*x)/sqrt(3+5*x)-4/5*(1-2*x)^(3/2)*_
-- sqrt(2+3*x)*sqrt(3+5*x)-388/225*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 41

--S 42 of 300
--d0:=t0-D(r0,x)
--E 42

)clear all

--S 43 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(3/2)*(3+5*x)^(3/2))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R  (1)  -----
--R          2          +-----+ +-----+
--R      (15x  + 19x + 6)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 43

--S 44 of 300
--r0:=4636/45*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-_
-- 1036/45*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
-- 2*(1-2*x)^(5/2)/(sqrt(2+3*x)*sqrt(3+5*x))-44*(1-2*x)^(3/2)*_
-- sqrt(2+3*x)/sqrt(3+5*x)-272/15*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)

```

```

--E 44

--S 45 of 300
--d0:=t0-D(r0,x)
--E 45

)clear all

--S 46 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(5/2)*(3+5*x)^(3/2))
--R
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1)  -----
--R          3          2          +-----+ +-----+
--R      (45x  + 87x  + 56x + 12)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 46

--S 47 of 300
--r0:=17804/27*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 3584/27*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/3*(1-2*x)^(5/2)/((2+3*x)^(3/2)*sqrt(3+5*x))+260/9*(1-2*x)^(3/2)/
-- (sqrt(2+3*x)*sqrt(3+5*x))-5764/9*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 47

--S 48 of 300
--d0:=t0-D(r0,x)
--E 48

)clear all

--S 49 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(7/2)*(3+5*x)^(3/2))
--R
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1)  -----
--R          4          3          2          +-----+ +-----+
--R      (135x  + 351x  + 342x  + 148x + 24)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 49

--S 50 of 300
--r0:=105584/27*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 21272/27*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/5*(1-2*x)^(5/2)/((2+3*x)^(5/2)*sqrt(3+5*x))+80/9*(1-2*x)^(3/2)/
-- ((2+3*x)^(3/2)*sqrt(3+5*x))+10636/27*sqrt(1-2*x)/(sqrt(2+3*x)*_

```

```
--      sqrt(3+5*x))-105584/27*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 50
```

```
--S 51 of 300
--d0:=t0-D(r0,x)
--E 51
```

```
)clear all
```

```
--S 52 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(9/2)*(3+5*x)^(3/2))
--R
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R      5      4      3      2      +-----+ +-----+
--R      (405x  + 1323x  + 1728x  + 1128x  + 368x + 48)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 52
```

```
--S 53 of 300
--r0:=1959032/63*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
--      281920/63*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
--      2/7*(1-2*x)^(5/2)/((2+3*x)^(7/2)*sqrt(3+5*x))+36/7*(1-2*x)^(3/2)/
--      ((2+3*x)^(5/2)*sqrt(3+5*x))+7204/63*sqrt(1-2*x)/((2+3*x)^(3/2)*
--      sqrt(3+5*x))+324104/147*sqrt(1-2*x)/(sqrt(2+3*x)*sqrt(3+5*x))-
--      9795160/441*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 53
```

```
--S 54 of 300
--d0:=t0-D(r0,x)
--E 54
```

```
)clear all
```

```
--S 55 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(11/2)*(3+5*x)^(3/2))
--R
--R
--R (1)
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R -----
--R      6      5      4      3      2      +-----+ +-----+
--R      (1215x  + 4779x  + 7830x  + 6840x  + 3360x  + 880x + 96)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 55
```

```
--S 56 of 300
```

```

--r0:=683150096/3969*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(5/7)-98310640/3969*elliptic_f(asin(sqrt(3/7)*_
--  sqrt(1-2*x)),35/33)/sqrt(33)+2/9*(1-2*x)^(5/2)/((2+3*x)^(9/2)*_
--  sqrt(3+5*x))+680/189*(1-2*x)^(3/2)/((2+3*x)^(7/2)*sqrt(3+5*x))+_
--  36284/567*sqrt(1-2*x)/((2+3*x)^(5/2)*sqrt(3+5*x))+_
--  813208/1323*sqrt(1-2*x)/((2+3*x)^(3/2)*sqrt(3+5*x))+_
--  113020952/9261*sqrt(1-2*x)/(sqrt(2+3*x)*sqrt(3+5*x))-_
--  3415750480/27783*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 56

--S 57 of 300
--d0:=t0-D(r0,x)
--E 57

)clear all

--S 58 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(7/2)/(3+5*x)^(5/2)
--R
--R
--R
--R      5      4      3      2      +-----+ +-----+
--R      (108x  + 108x  - 45x  - 58x  + 4x + 8)\|- 2x + 1 \|3x + 2
--R      (1) -----
--R                                  2      +-----+
--R                                  (25x  + 30x + 9)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 58

--S 59 of 300
--r0:=-2/15*(1-2*x)^(5/2)*(2+3*x)^(7/2)/(3+5*x)^(3/2)-_
--  500501/421875*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
--  1065118/421875*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
--  sqrt(35)-442/75*(1-2*x)^(3/2)*(2+3*x)^(7/2)/sqrt(3+5*x)+_
--  373022/196875*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--  59662/7875*(2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)-_
--  524/225*(2+3*x)^(7/2)*sqrt(1-2*x)*sqrt(3+5*x)+_
--  500501/984375*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 59

--S 60 of 300
--d0:=t0-D(r0,x)
--E 60

)clear all

--S 61 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(5/2)/(3+5*x)^(5/2)
--R
--R
--R
--R      4      3      2      +-----+ +-----+

```

```

--R      (36x3 + 12x2 - 23x - 4x + 4)\|- 2x + 1 \|3x + 2
--R (1) -----
--R              2          +-----+
--R      (25x2 + 30x + 9)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 61

```

```

--S 62 of 300
--r0:=-2/15*(1-2*x)^(5/2)*(2+3*x)^(5/2)/(3+5*x)^(3/2)-
-- 33778/9375*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 49321/9375*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 62/15*(1-2*x)^(3/2)*(2+3*x)^(5/2)/sqrt(3+5*x)+
-- 22866/4375*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-
-- 284/175*(2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)+
-- 33778/21875*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 62

```

```

--S 63 of 300
--d0:=t0-D(r0,x)
--E 63

```

)clear all

```

--S 64 of 300
t0:=(1-2*x)^(5/2)*(2+3*x)^(3/2)/(3+5*x)^(5/2)
--R
--R
--R      3      2          +-----+ +-----+
--R      (12x3 - 4x2 - 5x + 2)\|- 2x + 1 \|3x + 2
--R (1) -----
--R              2          +-----+
--R      (25x2 + 30x + 9)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 64

```

```

--S 65 of 300
--r0:=-2/15*(1-2*x)^(5/2)*(2+3*x)^(3/2)/(3+5*x)^(3/2)-
-- 6902/3125*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*
-- sqrt(3/11)+9206/3125*elliptic_e(asin(sqrt(5/11)*
-- sqrt(1-2*x)),33/35)*sqrt(7/5)-178/75*(1-2*x)^(3/2)*(2+3*x)^(3/2)/
-- sqrt(3+5*x)-572/625*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+
-- 8874/3125*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 65

```

```

--S 66 of 300
--d0:=t0-D(r0,x)
--E 66

```

)clear all

```

--S 67 of 300
t0:=(1-2*x)^(5/2)*sqrt(2+3*x)/(3+5*x)^(5/2)
--R
--R
--R      2      +-----+ +-----+
--R      (4x  - 4x + 1)\|- 2x + 1 \|3x + 2
--R  (1) -----
--R      2      +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 67

--S 68 of 300
--r0:=338/1125*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 6412/1125*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 2/15*(1-2*x)^(5/2)*sqrt(2+3*x)/(3+5*x)^(3/2)-46/75*(1-2*x)^(3/2)*
-- sqrt(2+3*x)/sqrt(3+5*x)-76/375*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 68

--S 69 of 300
--d0:=t0-D(r0,x)
--E 69

)clear all

--S 70 of 300
t0:=(1-2*x)^(5/2)/((3+5*x)^(5/2)*sqrt(2+3*x))
--R
--R
--R      2      +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R  (1) -----
--R      2      +-----+ +-----+
--R      (25x  + 30x + 9)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 70

--S 71 of 300
--r0:=28/25*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(3/11)-
-- 584/25*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 2/3*(1-2*x)^(5/2)*sqrt(2+3*x)/(3+5*x)^(3/2)+152/15*(1-2*x)^(3/2)*
-- sqrt(2+3*x)/sqrt(3+5*x)+104/25*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 71

--S 72 of 300
--d0:=t0-D(r0,x)
--E 72

)clear all

```

```

--S 73 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(3/2)*(3+5*x)^(5/2))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1)  -----
--R          3          2          +-----+ +-----+
--R      (75x  + 140x  + 87x + 18)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 73

```

```

--S 74 of 300
--r0:=-6388/15*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 1288/15*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2*(1-2*x)^(5/2)/((3+5*x)^(3/2)*sqrt(2+3*x))-88/3*(1-2*x)^(3/2)*
-- sqrt(2+3*x)/(3+5*x)^(3/2)+2068/5*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 74

```

```

--S 75 of 300
--d0:=t0-D(r0,x)
--E 75

```

)clear all

```

--S 76 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(5/2)*(3+5*x)^(5/2))
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1)  -----
--R          4          3          2          +-----+ +-----+
--R      (225x  + 570x  + 541x  + 228x + 36)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 76

```

```

--S 77 of 300
--r0:=2/3*(1-2*x)^(5/2)/((2+3*x)^(3/2)*(3+5*x)^(3/2))-
-- 36968/9*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 7448/9*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 400/9*(1-2*x)^(3/2)/((3+5*x)^(3/2)*sqrt(2+3*x))-5852/9*
-- sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+36968/9*sqrt(1-2*x)*
-- sqrt(2+3*x)/sqrt(3+5*x)
--E 77

```

```

--S 78 of 300
--d0:=t0-D(r0,x)
--E 78

```



```

)clear all

--S 79 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(7/2)*(3+5*x)^(5/2))
--R
--R
--R
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R (1) -----
--R          5          4          3          2          +-----+ +-----+
--R      (675x  + 2160x  + 2763x  + 1766x  + 564x + 72)\|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 79

--S 80 of 300
--r0:=2/5*(1-2*x)^(5/2)/((2+3*x)^(5/2)*(3+5*x)^(3/2))+12*(1-2*x)^(3/2)/_
-- ((2+3*x)^(3/2)*(3+5*x)^(3/2))-96808/3*elliptic_e(asin(sqrt(5/11))*_
-- sqrt(1-2*x)),33/35)*sqrt(7/5)+19504/3*elliptic_f(asin(sqrt(3/7))*_
-- sqrt(1-2*x)),35/33)/sqrt(33)+2420/3*sqrt(1-2*x)/((3+5*x)^(3/2))*_
-- sqrt(2+3*x))-16016/3*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+_
-- 96808/3*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 80

--S 81 of 300
--d0:=t0-D(r0,x)
--E 81

)clear all

--S 82 of 300
t0:=(1-2*x)^(5/2)/((2+3*x)^(9/2)*(3+5*x)^(5/2))
--R
--R
--R (1)
--R          2          +-----+
--R      (4x  - 4x + 1)\|- 2x + 1
--R /
--R          6          5          4          3          2          +-----+
--R      (2025x  + 7830x  + 12609x  + 10824x  + 5224x  + 1344x + 144)\|3x + 2
--R *
--R      +-----+
--R      \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 82

--S 83 of 300
--r0:=2/7*(1-2*x)^(5/2)/((2+3*x)^(7/2)*(3+5*x)^(3/2))+136/21*(1-2*x)^(3/2)/_
-- ((2+3*x)^(5/2)*(3+5*x)^(3/2))-2234208/7*elliptic_e(asin(sqrt(5/11))*_
-- sqrt(1-2*x)),33/35)*sqrt(5/7)+321520/7*elliptic_f(asin(sqrt(3/7))*_
-- sqrt(1-2*x)),35/33)/sqrt(33)+12188/63*sqrt(1-2*x)/((2+3*x)^(3/2))*_

```

```

--      (3+5*x)^(3/2))+2488904/441*sqrt(1-2*x)/((3+5*x)^(3/2)*sqrt(2+3*x))-
--      5544440/147*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+11171040/49*_
--      sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 83

--S 84 of 300
--d0:=t0-D(r0,x)
--E 84

)clear all

--S 85 of 300
t0:=(2+3*x)^(5/2)*sqrt(3+5*x)/sqrt(1-2*x)
--R
--R
--R      2      +-----+ +-----+
--R      (9x  + 12x + 4)\|3x + 2 \|5x + 3
--R (1)  -----
--R      +-----+
--R      \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 85

--S 86 of 300
--r0:=1613/250*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      56041/250*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
--      104/175*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-1/7*(2+3*x)^(5/2)*_
--      sqrt(1-2*x)*sqrt(3+5*x)-4839/1750*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 86

--S 87 of 300
--d0:=t0-D(r0,x)
--E 87

)clear all

--S 88 of 300
t0:=(2+3*x)^(3/2)*sqrt(3+5*x)/sqrt(1-2*x)
--R
--R
--R      +-----+ +-----+
--R      (3x + 2)\|3x + 2 \|5x + 3
--R (1)  -----
--R      +-----+
--R      \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 88

--S 89 of 300
--r0:=-1597/150*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+_

```

```

--      161/75*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      1/5*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-23/25*sqrt(1-2*x)*
--      sqrt(2+3*x)*sqrt(3+5*x)
--E 89

--S 90 of 300
--d0:=t0-D(r0,x)
--E 90

)clear all

--S 91 of 300
t0:=sqrt(2+3*x)*sqrt(3+5*x)/sqrt(1-2*x)
--R
--R
--R      +-----+ +-----+
--R      \|3x + 2 \|5x + 3
--R (1)  -----
--R      +-----+
--R      \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 91

--S 92 of 300
--r0:=-34/9*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
--      7/9*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      1/3*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 92

--S 93 of 300
--d0:=t0-D(r0,x)
--E 93

)clear all

--S 94 of 300
t0:=sqrt(3+5*x)/(sqrt(1-2*x)*sqrt(2+3*x))
--R
--R
--R      +-----+
--R      \|5x + 3
--R (1)  -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 94

--S 95 of 300
--r0:=-elliptic_e(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(11/3)
--E 95

```

```

--S 96 of 300
--d0:=t0-D(r0,x)
--E 96

)clear all

--S 97 of 300
t0:=sqrt(3+5*x)/((2+3*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1) -----
--R          +-----+ +-----+
--R          (3x + 2)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 97

--S 98 of 300
--r0:=2/3*elliptic_e(asin(sqrt(5)*sqrt(2+3*x)),2/35)*sqrt(5/7)*_
--      sqrt(-3-5*x)/sqrt(3+5*x)-2/7*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 98

--S 99 of 300
--d0:=t0-D(r0,x)
--E 99

)clear all

--S 100 of 300
t0:=sqrt(3+5*x)/((2+3*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1) -----
--R          2          +-----+ +-----+
--R          (9x  + 12x + 4)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 100

--S 101 of 300
--r0:=-62/63*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-_
--      20/63*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
--      2/21*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(3/2)+62/147*sqrt(1-2*x)*_
--      sqrt(3+5*x)/sqrt(2+3*x)
--E 101

--S 102 of 300

```

```

--d0:=t0-D(r0,x)
--E 102

)clear all

--S 103 of 300
t0:=sqrt(3+5*x)/((2+3*x)^(7/2)*sqrt(1-2*x))
--R
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1) -----
--R          3      2      +-----+ +-----+
--R      (27x  + 54x  + 36x + 8)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 103

--S 104 of 300
--r0:=4/49*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(3/11)-
-- 584/49*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 2/35*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(5/2)+18/245*sqrt(1-2*x)*
-- sqrt(3+5*x)/(2+3*x)^(3/2)+1752/1715*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 104

--S 105 of 300
--d0:=t0-D(r0,x)
--E 105

)clear all

--S 106 of 300
t0:=(2+3*x)^(5/2)*(3+5*x)^(3/2)/sqrt(1-2*x)
--R
--R
--R          3      2      +-----+ +-----+
--R      (45x  + 87x  + 56x + 12)\|3x + 2 \|5x + 3
--R (1) -----
--R          +-----+
--R          \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 106

--S 107 of 300
--r0:=317384/10125*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 44109377/40500*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/
-- sqrt(35)-137/315*(2+3*x)^(3/2)*(3+5*x)^(3/2)*sqrt(1-2*x)-
-- 1/9*(2+3*x)^(5/2)*(3+5*x)^(3/2)*sqrt(1-2*x)-9547/5250*(3+5*x)^(3/2)*
-- sqrt(1-2*x)*sqrt(2+3*x)-663409/47250*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 107

```

```
--S 108 of 300
--d0:=t0-D(r0,x)
--E 108
```

```
)clear all
```

```
--S 109 of 300
t0:=(2+3*x)^(3/2)*(3+5*x)^(3/2)/sqrt(1-2*x)
--R
--R
--R          2          +-----+ +-----+
--R      (15x  + 19x + 6)\|3x + 2 \|5x + 3
--R      (1) -----
--R                    +-----+
--R                   \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 109
```

```
--S 110 of 300
--r0:=4517/450*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 78472/225*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 1/7*(2+3*x)^(3/2)*(3+5*x)^(3/2)*sqrt(1-2*x)-102/175*(3+5*x)^(3/2)*
-- sqrt(1-2*x)*sqrt(2+3*x)-4721/1050*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 110
```

```
--S 111 of 300
--d0:=t0-D(r0,x)
--E 111
```

```
)clear all
```

```
--S 112 of 300
t0:=(3+5*x)^(3/2)*sqrt(2+3*x)/sqrt(1-2*x)
--R
--R
--R          +-----+ +-----+
--R      (5x + 3)\|3x + 2 \|5x + 3
--R      (1) -----
--R                    +-----+
--R                   \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 112
```

```
--S 113 of 300
--r0:=-4451/270*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 448/135*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 1/5*(3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-67/45*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 113
```

```

--S 114 of 300
--d0:=t0-D(r0,x)
--E 114

)clear all

--S 115 of 300
t0:=(3+5*x)^(3/2)/(sqrt(1-2*x)*sqrt(2+3*x))
--R
--R
--R              +-----+
--R      (5x + 3)\|5x + 3
--R  (1)  -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 115

--S 116 of 300
--r0:=29/27*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 31/27*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(35)-
-- 5/9*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 116

--S 117 of 300
--d0:=t0-D(r0,x)
--E 117

)clear all

--S 118 of 300
t0:=(3+5*x)^(3/2)/((2+3*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R              +-----+
--R      (5x + 3)\|5x + 3
--R  (1)  -----
--R      +-----+ +-----+
--R      (3x + 2)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 118

--S 119 of 300
--r0:=-37/9*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 20/9*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 2/7*(3+5*x)^(3/2)*sqrt(1-2*x)/sqrt(2+3*x)+10/21*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 119

--S 120 of 300

```

```

--d0:=t0-D(r0,x)
--E 120

)clear all

--S 121 of 300
t0:=(3+5*x)^(3/2)/((2+3*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R
--R          +-----+
--R      (5x + 3)\|5x + 3
--R (1) -----
--R          2          +-----+ +-----+
--R      (9x  + 12x + 4)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 121

--S 122 of 300
--r0:=272/189*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
-- 1030/189*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 2/21*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(3/2)-202/441*_
-- sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 122

--S 123 of 300
--d0:=t0-D(r0,x)
--E 123

)clear all

--S 124 of 300
t0:=(3+5*x)^(3/2)/((2+3*x)^(7/2)*sqrt(1-2*x))
--R
--R
--R
--R          +-----+
--R      (5x + 3)\|5x + 3
--R (1) -----
--R          3      2          +-----+ +-----+
--R      (27x  + 54x  + 36x + 8)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 124

--S 125 of 300
--r0:=-808/1323*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 5594/1323*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 2/35*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(5/2)-194/2205*sqrt(1-2*x)*
-- sqrt(3+5*x)/(2+3*x)^(3/2)+5594/15435*sqrt(1-2*x)*
-- sqrt(3+5*x)/sqrt(2+3*x)
--E 125

```



```
--S 126 of 300
--d0:=t0-D(r0,x)
--E 126
```

```
)clear all
```

```
--S 127 of 300
t0:=(3+5*x)^(3/2)/((2+3*x)^(9/2)*sqrt(1-2*x))
--R 
--R 
--R              +-----+
--R          (5x + 3)\|5x + 3
--R (1) -----
--R            4      3      2      +-----+ +-----+
--R      (81x  + 216x  + 216x  + 96x + 16)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 127
```

```
--S 128 of 300
--r0:=1948/21609*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 184636/21609*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 2/49*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(7/2)-62/1715*sqrt(1-2*x)*_
-- sqrt(3+5*x)/(2+3*x)^(5/2)+974/36015*sqrt(1-2*x)*sqrt(3+5*x)/_
-- (2+3*x)^(3/2)+184636/252105*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 128
```

```
--S 129 of 300
--d0:=t0-D(r0,x)
--E 129
```

```
)clear all
```

```
--S 130 of 300
t0:=(2+3*x)^(7/2)*(3+5*x)^(5/2)/sqrt(1-2*x)
--R 
--R 
--R            5      4      3      2      +-----+ +-----+
--R      (675x  + 2160x  + 2763x  + 1766x  + 564x + 72)\|3x + 2 \|5x + 3
--R (1) -----
--R              +-----+
--R              \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 130
```

```
--S 131 of 300
--r0:=8787401429/17374500*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
-- sqrt(33)-610627101631/34749000*elliptic_e(asin(sqrt(5/11)*_
-- sqrt(1-2*x)),33/35)/sqrt(35)-14303/12870*(2+3*x)^(3/2)*(3+5*x)^(5/2)*_
-- sqrt(1-2*x)-41/143*(2+3*x)^(5/2)*(3+5*x)^(5/2)*sqrt(1-2*x)-_
-- 1/13*(2+3*x)^(7/2)*(3+5*x)^(5/2)*sqrt(1-2*x)-138809831/4504500*_
-- sqrt(1-2*x)
```

```

--      (3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-221673/50050*(3+5*x)^(5/2)*_
--      sqrt(1-2*x)*sqrt(2+3*x)-2295970088/10135125*sqrt(1-2*x)*_
--      sqrt(2+3*x)*sqrt(3+5*x)
--E 131

--S 132 of 300
--d0:=t0-D(r0,x)
--E 132

)clear all

--S 133 of 300
t0:=(2+3*x)^(5/2)*(3+5*x)^(5/2)/sqrt(1-2*x)
--R
--R
--R      4      3      2      +-----+ +-----+
--R      (225x  + 570x  + 541x  + 228x + 36)\|3x + 2 \|5x + 3
--R (1) -----
--R                                 +-----+
--R                                 \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 133

--S 134 of 300
--r0:=41741369/267300*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--      sqrt(33)-725140729/133650*elliptic_e(asin(sqrt(5/11)*_
--      sqrt(1-2*x)),33/35)/sqrt(35)-34/99*(2+3*x)^(3/2)*(3+5*x)^(5/2)*_
--      sqrt(1-2*x)-1/11*(2+3*x)^(5/2)*(3+5*x)^(5/2)*sqrt(1-2*x)-_
--      329683/34650*(3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-_
--      1053/770*(3+5*x)^(5/2)*sqrt(1-2*x)*sqrt(2+3*x)-_
--      43624697/623700*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 134

--S 135 of 300
--d0:=t0-D(r0,x)
--E 135

)clear all

--S 136 of 300
t0:=(2+3*x)^(3/2)*(3+5*x)^(5/2)/sqrt(1-2*x)
--R
--R
--R      3      2      +-----+ +-----+
--R      (75x  + 140x  + 87x + 18)\|3x + 2 \|5x + 3
--R (1) -----
--R                                 +-----+
--R                                 \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 136

```

```

--S 137 of 300
--r0:=118823/2430*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 8256877/4860*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
-- sqrt(35)-1/9*(2+3*x)^(3/2)*(3+5*x)^(5/2)*sqrt(1-2*x)-
-- 1877/630*(3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-3/7*(3+5*x)^(5/2)*_
-- sqrt(1-2*x)*sqrt(2+3*x)-62092/2835*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 137

```

```

--S 138 of 300
--d0:=t0-D(r0,x)
--E 138

```

```
)clear all
```

```

--S 139 of 300
t0:=(3+5*x)^(5/2)*sqrt(2+3*x)/sqrt(1-2*x)
--R
--R
--R      2      +-----+ +-----+
--R      (25x  + 30x + 9)\|3x + 2 \|5x + 3
--R (1) -----
--R      +-----+
--R      \|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 139

```

```

--S 140 of 300
--r0:=-17587/162*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 2531/162*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 20/21*(3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-1/7*(3+5*x)^(5/2)*_
-- sqrt(1-2*x)*sqrt(2+3*x)-2645/378*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 140

```

```

--S 141 of 300
--d0:=t0-D(r0,x)
--E 141

```

```
)clear all
```

```

--S 142 of 300
t0:=(3+5*x)^(5/2)/(sqrt(1-2*x)*sqrt(2+3*x))
--R
--R
--R      2      +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R (1) -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)

```

```

--E 142

--S 143 of 300
--r0:=-4141/162*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+_
-- 419/81*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
-- 1/3*(3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)-62/27*sqrt(1-2*x)*_
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 143

--S 144 of 300
--d0:=t0-D(r0,x)
--E 144

)clear all

--S 145 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R          2          +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R (1)  -----
--R          +-----+ +-----+
--R      (3x + 2)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 145

--S 146 of 300
--r0:=-974/81*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+_
-- 85/81*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
-- 2/7*(3+5*x)^(5/2)*sqrt(1-2*x)/sqrt(2+3*x)+10/21*(3+5*x)^(3/2)*_
-- sqrt(1-2*x)*sqrt(2+3*x)-205/189*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 146

--S 147 of 300
--d0:=t0-D(r0,x)
--E 147

)clear all

--S 148 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R          2          +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R (1)  -----
--R          2          +-----+ +-----+
--R      (9x  + 12x + 4)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)

```

```

--E 148

--S 149 of 300
--r0:=-4157/567*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 3130/567*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 2/21*(3+5*x)^(5/2)*sqrt(1-2*x)/(2+3*x)^(3/2)-38/49*(3+5*x)^(3/2)*
-- sqrt(1-2*x)/sqrt(2+3*x)+2060/1323*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 149

--S 150 of 300
--d0:=t0-D(r0,x)
--E 150

)clear all

--S 151 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(7/2)*sqrt(1-2*x))
--R
--R
--R
--R          2          +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R (1) -----
--R          3          2          +-----+ +-----+
--R      (27x  + 54x  + 36x + 8)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 151

--S 152 of 300
--r0:=-35242/3969*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 53194/3969*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
-- 334/2205*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(3/2)-2/35*(3+5*x)^(5/2)*
-- sqrt(1-2*x)/(2+3*x)^(5/2)-34154/46305*sqrt(1-2*x)*
-- sqrt(3+5*x)/sqrt(2+3*x)
--E 152

--S 153 of 300
--d0:=t0-D(r0,x)
--E 153

)clear all

--S 154 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(9/2)*sqrt(1-2*x))
--R
--R
--R
--R          2          +-----+
--R      (25x  + 30x + 9)\|5x + 3
--R (1) -----
--R          4          3          2          +-----+ +-----+
--R      (81x  + 216x  + 216x  + 96x + 16)\|- 2x + 1 \|3x + 2

```

```
--R
--R                                          Type: Expression(Integer)
--E 154
```

```
--S 155 of 300
--r0:=-203804/194481*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      816622/194481*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-
--      326/5145*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(5/2)-2/49*(3+5*x)^(5/2)*
--      sqrt(1-2*x)/(2+3*x)^(7/2)-30922/324135*sqrt(1-2*x)*sqrt(3+5*x)/
--      (2+3*x)^(3/2)+816622/2268945*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 155
```

```
--S 156 of 300
--d0:=t0-D(r0,x)
--E 156
```

```
)clear all
```

```
--S 157 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(11/2)*sqrt(1-2*x))
--R
--R
--R
--R              2          +-----+
--R          (25x  + 30x + 9)\|5x + 3
--R (1) -----
--R          5      4      3      2          +-----+ +-----+
--R      (243x  + 810x  + 1080x  + 720x  + 240x + 32)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 157
```

```
--S 158 of 300
--r0:=-86188/4084101*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      32098184/4084101*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/
--      sqrt(35)-106/3087*(3+5*x)^(3/2)*sqrt(1-2*x)/(2+3*x)^(7/2)-
--      2/63*(3+5*x)^(5/2)*sqrt(1-2*x)/(2+3*x)^(9/2)-8878/324135*sqrt(1-2*x)*
--      sqrt(3+5*x)/(2+3*x)^(5/2)-43094/6806835*sqrt(1-2*x)*sqrt(3+5*x)/
--      (2+3*x)^(3/2)+32098184/47647845*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 158
```

```
--S 159 of 300
--d0:=t0-D(r0,x)
--E 159
```

```
)clear all
```

```
--S 160 of 300
t0:=(3+5*x)^(5/2)/((2+3*x)^(13/2)*sqrt(1-2*x))
--R
--R
--R (1)
--R              2          +-----+
```

```

--R
--R (25x + 30x + 9)\|5x + 3
--R -----
--R      6      5      4      3      2      +-----+ +-----+
--R (729x + 2916x + 4860x + 4320x + 2160x + 576x + 64)\|- 2x + 1 \|3x + 2
--R
--R Type: Expression(Integer)
--E 160

```

```

--S 161 of 300
--r0:=-924247516/314475777*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
-- sqrt(5/7)+114606440/314475777*elliptic_f(asin(sqrt(3/7)*_
-- sqrt(1-2*x)),35/33)/sqrt(33)-310/14553*(3+5*x)^(3/2)*sqrt(1-2*x)/_
-- (2+3*x)^(9/2)-2/77*(3+5*x)^(5/2)*sqrt(1-2*x)/(2+3*x)^(11/2)-_
-- 21290/2139291*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(7/2)-_
-- 362666/14975037*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(5/2)+_
-- 11460644/104825259*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(3/2)+_
-- 924247516/733776813*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 161

```

```

--S 162 of 300
--d0:=t0-D(r0,x)
--E 162

```

)clear all

```

--S 163 of 300
t0:=(2+3*x)^(7/2)/(sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R      3      2      +-----+
--R (27x + 54x + 36x + 8)\|3x + 2
--R (1) -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|5x + 3
--R
--R Type: Expression(Integer)
--E 163

```

```

--S 164 of 300
--r0:=15553/3750*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_
-- 270248/1875*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)-_
-- 333/875*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-3/35*(2+3*x)^(5/2)*_
-- sqrt(1-2*x)*sqrt(3+5*x)-15553/8750*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 164

```

```

--S 165 of 300
--d0:=t0-D(r0,x)
--E 165

```

)clear all

```

--S 166 of 300

```

```

t0:=(2+3*x)^(5/2)/(sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R      2      +-----+
--R      (9x  + 12x + 4)\|3x + 2
--R  (1)  -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 166

--S 167 of 300
--r0:=-5161/750*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 518/375*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 3/25*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-74/125*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 167

--S 168 of 300
--d0:=t0-D(r0,x)
--E 168

)clear all

--S 169 of 300
t0:=(2+3*x)^(3/2)/(sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R      +-----+
--R      (3x + 2)\|3x + 2
--R  (1)  -----
--R      +-----+ +-----+
--R      \|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 169

--S 170 of 300
--r0:=-37/15*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)+
-- 7/15*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 1/5*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 170

--S 171 of 300
--d0:=t0-D(r0,x)
--E 171

)clear all

--S 172 of 300
t0:=sqrt(2+3*x)/(sqrt(1-2*x)*sqrt(3+5*x))

```



```

--R
--R
--R          +-----+
--R         \|3x + 2
--R (1)  -----
--R      +-----+ +-----+
--R     \|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 172

```

```

--S 173 of 300
--r0:=-elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)
--E 173

```

```

--S 174 of 300
--d0:=t0-D(r0,x)
--E 174

```

```
)clear all
```

```

--S 175 of 300
t0:=1/(sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x))
--R
--R
--R          1
--R (1)  -----
--R      +-----+ +-----+ +-----+
--R     \|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 175

```

```

--S 176 of 300
--r0:=-2*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)
--E 176

```

```

--S 177 of 300
--d0:=t0-D(r0,x)
--E 177

```

```
)clear all
```

```

--S 178 of 300
t0:=1/((2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R          1
--R (1)  -----
--R      +-----+ +-----+ +-----+
--R     (3x + 2)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)

```

```

--E 178

--S 179 of 300
--r0:=-2*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+_
--      6/7*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 179

--S 180 of 300
--d0:=t0-D(r0,x)
--E 180

)clear all

--S 181 of 300
t0:=1/((2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R
--R (1)
--R

$$\frac{1}{(9x^2 + 12x + 4)\sqrt{-2x + 1}\sqrt{3x + 2}\sqrt{5x + 3}}$$

--R
--R                                          Type: Expression(Integer)
--E 181

--S 182 of 300
--r0:=-148/21*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+_
--      20/21*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
--      2/7*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(3/2)+148/49*sqrt(1-2*x)*_
--      sqrt(3+5*x)/sqrt(2+3*x)
--E 182

--S 183 of 300
--d0:=t0-D(r0,x)
--E 183

)clear all

--S 184 of 300
t0:=1/((2+3*x)^(7/2)*sqrt(1-2*x)*sqrt(3+5*x))
--R
--R
--R
--R (1)
--R

$$\frac{1}{(27x^3 + 54x^2 + 36x + 8)\sqrt{-2x + 1}\sqrt{3x + 2}\sqrt{5x + 3}}$$

--R
--R                                          Type: Expression(Integer)
--E 184

--S 185 of 300
--r0:=592/147*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-_

```

```
--      20644/147*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
--      6/35*sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(5/2)+296/245*sqrt(1-2*x)*
--      sqrt(3+5*x)/(2+3*x)^(3/2)+20644/1715*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 185
```

```
--S 186 of 300
--d0:=t0-D(r0,x)
--E 186
```

```
)clear all
```

```
--S 187 of 300
t0:=(2+3*x)^(7/2)/((3+5*x)^(3/2)*sqrt(1-2*x))
```

```
--R
--R
--R      3      2      +-----+
--R      (27x  + 54x  + 36x + 8)\|3x + 2
--R (1) -----
--R      +-----+ +-----+
--R      (5x + 3)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 187
```

```
--S 188 of 300
--r0:=-61151/13750*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*
--      sqrt(7/5)+6013/6875*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/
--      sqrt(33)-2/11*(2+3*x)^(7/2)*sqrt(1-2*x)/sqrt(3+5*x)-
--      69/1375*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+6/55*(2+3*x)^(5/2)*
--      sqrt(1-2*x)*sqrt(3+5*x)-2577/6875*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 188
```

```
--S 189 of 300
--d0:=t0-D(r0,x)
--E 189
```

```
)clear all
```

```
--S 190 of 300
t0:=(2+3*x)^(5/2)/((3+5*x)^(3/2)*sqrt(1-2*x))
```

```
--R
--R
--R      2      +-----+
--R      (9x  + 12x + 4)\|3x + 2
--R (1) -----
--R      +-----+ +-----+
--R      (5x + 3)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 190
```

```
--S 191 of 300
```

```

--r0:=21/275*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(3/11)-
-- 438/275*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 2/11*(2+3*x)^(5/2)*sqrt(1-2*x)/sqrt(3+5*x)+6/55*(2+3*x)^(3/2)*
-- sqrt(1-2*x)*sqrt(3+5*x)-27/275*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 191

--S 192 of 300
--d0:=t0-D(r0,x)
--E 192

)clear all

--S 193 of 300
t0:=(2+3*x)^(3/2)/((3+5*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R          +-----+
--R      (3x + 2)\|3x + 2
--R  (1)  -----
--R          +-----+ +-----+
--R      (5x + 3)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 193

--S 194 of 300
--r0:=-31/55*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 14/55*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 2/11*(2+3*x)^(3/2)*sqrt(1-2*x)/sqrt(3+5*x)+6/55*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 194

--S 195 of 300
--d0:=t0-D(r0,x)
--E 195

)clear all

--S 196 of 300
t0:=sqrt(2+3*x)/((3+5*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R          +-----+
--R          \|3x + 2
--R  (1)  -----
--R          +-----+ +-----+
--R      (5x + 3)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 196

--S 197 of 300

```

```

--r0:=2/11*elliptic_e(asin(sqrt(5)*sqrt(2+3*x)),2/35)*sqrt(7/5)*_
--      sqrt(-3-5*x)/sqrt(3+5*x)-2/11*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 197

--S 198 of 300
--d0:=t0-D(r0,x)
--E 198

)clear all

--S 199 of 300
t0:=1/((3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x))
--R
--R
--R
--R (1)
--R      1
--R  -----
--R      +-----+ +-----+ +-----+
--R      (5x + 3)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 199

--S 200 of 300
--r0:=2*elliptic_e(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(3/11)-_
--      10/11*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 200

--S 201 of 300
--d0:=t0-D(r0,x)
--E 201

)clear all

--S 202 of 300
t0:=1/((2+3*x)^(3/2)*(3+5*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R
--R (1)
--R      1
--R  -----
--R      2      +-----+ +-----+ +-----+
--R      (15x  + 19x + 6)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 202

--S 203 of 300
--r0:=136/11*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-_
--      20/11*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
--      6/7*sqrt(1-2*x)/(sqrt(2+3*x)*sqrt(3+5*x))-680/77*sqrt(1-2*x)*_
--      sqrt(2+3*x)/sqrt(3+5*x)
--E 203

```

```
--S 204 of 300
--d0:=t0-D(r0,x)
--E 204
```

```
)clear all
```

```
--S 205 of 300
t0:=1/((2+3*x)^(5/2)*(3+5*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R (1) -----
--R          3      2      +-----+ +-----+ +-----+
--R      (45x  + 87x  + 56x + 12)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 205
```

```
--S 206 of 300
--r0:=6388/77*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
-- 920/77*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*sqrt(1-2*x)/((2+3*x)^(3/2)*sqrt(3+5*x))+288/49*sqrt(1-2*x)/
-- (sqrt(2+3*x)*sqrt(3+5*x))-31940/539*sqrt(1-2*x)*
-- sqrt(2+3*x)/sqrt(3+5*x)
--E 206
```

```
--S 207 of 300
--d0:=t0-D(r0,x)
--E 207
```

```
)clear all
```

```
--S 208 of 300
t0:=1/((2+3*x)^(7/2)*(3+5*x)^(3/2)*sqrt(1-2*x))
--R
--R
--R (1) -----
--R          4      3      2      +-----+ +-----+ +-----+
--R      (135x  + 351x  + 342x  + 148x + 24)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 208
```

```
--S 209 of 300
--r0:=-12904/539*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(3/11)+
-- 1344984/539*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
-- 6/35*sqrt(1-2*x)/((2+3*x)^(5/2)*sqrt(3+5*x))+436/245*sqrt(1-2*x)/
-- ((2+3*x)^(3/2)*sqrt(3+5*x))+60684/1715*sqrt(1-2*x)/(sqrt(2+3*x)*
-- sqrt(3+5*x))-1344984/3773*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 209
```

```

--S 210 of 300
--d0:=t0-D(r0,x)
--E 210

)clear all

--S 211 of 300
t0:=(2+3*x)^(9/2)/((3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R          4      3      2      +-----+
--R      (81x  + 216x  + 216x  + 96x + 16)\|3x + 2
--R  (1)  -----
--R          2      +-----+ +-----+
--R      (25x  + 30x + 9)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 211

--S 212 of 300
--r0:=-6515539/2268750*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(7/5)+612332/1134375*elliptic_f(asin(sqrt(3/7)*_
--  sqrt(1-2*x)),35/33)/sqrt(33)-2/33*(2+3*x)^(9/2)*sqrt(1-2*x)/_
--  (3+5*x)^(3/2)-602/1815*(2+3*x)^(7/2)*sqrt(1-2*x)/sqrt(3+5*x)+_
--  403/75625*(2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)+668/3025*_
--  (2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)-87476/378125*_
--  sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 212

--S 213 of 300
--d0:=t0-D(r0,x)
--E 213

)clear all

--S 214 of 300
t0:=(2+3*x)^(7/2)/((3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R          3      2      +-----+
--R      (27x  + 54x  + 36x + 8)\|3x + 2
--R  (1)  -----
--R          2      +-----+ +-----+
--R      (25x  + 30x + 9)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 214

--S 215 of 300
--r0:=-46159/45375*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*_
--  sqrt(7/5)+3409/45375*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
--  sqrt(33)-2/33*(2+3*x)^(7/2)*sqrt(1-2*x)/(3+5*x)^(3/2)-_

```

```

--      94/363*(2+3*x)^(5/2)*sqrt(1-2*x)/sqrt(3+5*x)+536/3025*_
--      (2+3*x)^(3/2)*sqrt(1-2*x)*sqrt(3+5*x)-487/15125*sqrt(1-2*x)*_
--      sqrt(2+3*x)*sqrt(3+5*x)
--E 215

--S 216 of 300
--d0:=t0-D(r0,x)
--E 216

)clear all

--S 217 of 300
t0:=(2+3*x)^(5/2)/((3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R      2          +-----+
--R      (9x  + 12x + 4)\|3x + 2
--R (1)  -----
--R      2          +-----+ +-----+
--R      (25x  + 30x + 9)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 217

--S 218 of 300
--r0:=-2797/9075*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
--      2828/9075*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      2/33*(2+3*x)^(5/2)*sqrt(1-2*x)/(3+5*x)^(3/2)-338/1815*(2+3*x)^(3/2)*_
--      sqrt(1-2*x)/sqrt(3+5*x)+404/3025*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 218

--S 219 of 300
--d0:=t0-D(r0,x)
--E 219

)clear all

--S 220 of 300
t0:=(2+3*x)^(3/2)/((3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R      +-----+
--R      (3x + 2)\|3x + 2
--R (1)  -----
--R      2          +-----+ +-----+
--R      (25x  + 30x + 9)\|- 2x + 1 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 220

--S 221 of 300
--r0:=272/1815*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-

```



```

--      1442/1815*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      2/33*(2+3*x)^(3/2)*sqrt(1-2*x)/(3+5*x)^(3/2)-206/1815*sqrt(1-2*x)*
--      sqrt(2+3*x)/sqrt(3+5*x)
--E 221

--S 222 of 300
--d0:=t0-D(r0,x)
--E 222

)clear all

--S 223 of 300
t0:=sqrt(2+3*x)/((3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R              +-----+
--R             \|3x + 2
--R  (1)  -----
--R              2          +-----+ +-----+
--R          (25x  + 30x + 9)\|- 2x + 1 \|5x + 3
--R
--R                                                    Type: Expression(Integer)
--E 223

--S 224 of 300
--r0:=74/363*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
--      56/363*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      2/33*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)-74/363*sqrt(1-2*x)*
--      sqrt(2+3*x)/sqrt(3+5*x)
--E 224

--S 225 of 300
--d0:=t0-D(r0,x)
--E 225

)clear all

--S 226 of 300
t0:=1/((3+5*x)^(5/2)*sqrt(1-2*x)*sqrt(2+3*x))
--R
--R
--R              1
--R  (1)  -----
--R              2          +-----+ +-----+ +-----+
--R          (25x  + 30x + 9)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                                    Type: Expression(Integer)
--E 226

--S 227 of 300
--r0:=116/363*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      124/363*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(35)-

```

```

--      10/33*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+620/363*_
--      sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 227

--S 228 of 300
--d0:=t0-D(r0,x)
--E 228

)clear all

--S 229 of 300
t0:=1/((2+3*x)^(3/2)*(3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R
--R      (1)
--R      -----
--R      3      2      +-----+ +-----+ +-----+
--R      (75x  + 140x  + 87x + 18)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 229

--S 230 of 300
--r0:=-17804/363*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
--      2560/363*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
--      6/7*sqrt(1-2*x)/((3+5*x)^(3/2)*sqrt(2+3*x))-1340/231*sqrt(1-2*x)*
--      sqrt(2+3*x)/(3+5*x)^(3/2)+89020/2541*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 230

--S 231 of 300
--d0:=t0-D(r0,x)
--E 231

)clear all

--S 232 of 300
t0:=1/((2+3*x)^(5/2)*(3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R
--R      (1)
--R      -----
--R      4      3      2      +-----+ +-----+ +-----+
--R      (225x  + 570x  + 541x  + 228x + 36)\|- 2x + 1 \|3x + 2 \|5x + 3
--R
--R                                          Type: Expression(Integer)
--E 232

--S 233 of 300
--r0:=-1255552/2541*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*
--      sqrt(5/7)+180680/2541*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/
--      sqrt(33)+2/7*sqrt(1-2*x)/((2+3*x)^(3/2)*(3+5*x)^(3/2))+
--      428/49*sqrt(1-2*x)/((3+5*x)^(3/2)*sqrt(2+3*x))-

```

```

--      94420/1617*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+
--      6277760/17787*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 233

```

```

--S 234 of 300
--d0:=t0-D(r0,x)
--E 234

```

```
)clear all
```

```

--S 235 of 300
t0:=1/((2+3*x)^(7/2)*(3+5*x)^(5/2)*sqrt(1-2*x))
--R
--R
--R (1)
--R

$$\frac{1}{(675x^5 + 2160x^4 + 2763x^3 + 1766x^2 + 564x + 72)\sqrt{-2x + 1}\sqrt{3x + 2}\sqrt{5x + 3}}$$

--R
--R                                         Type: Expression(Integer)
--E 235

```

```

--S 236 of 300
--r0:=10156288/17787*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      352875016/17787*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
--      sqrt(35)+6/35*sqrt(1-2*x)/((2+3*x)^(5/2)*(3+5*x)^(3/2))+
--      576/245*sqrt(1-2*x)/((2+3*x)^(3/2)*(3+5*x)^(3/2))+
--      120324/1715*sqrt(1-2*x)/((3+5*x)^(3/2)*sqrt(2+3*x))-
--      5307272/11319*sqrt(1-2*x)*sqrt(2+3*x)/(3+5*x)^(3/2)+
--      352875016/124509*sqrt(1-2*x)*sqrt(2+3*x)/sqrt(3+5*x)
--E 236

```

```

--S 237 of 300
--d0:=t0-D(r0,x)
--E 237

```

```
)clear all
```

```

--S 238 of 300
t0:=(2+3*x)^(7/2)*sqrt(3+5*x)/(1-2*x)^(3/2)
--R
--R
--R (1)
--R

$$\frac{(-27x^3 - 54x^2 - 36x - 8)\sqrt{3x + 2}\sqrt{5x + 3}}{(2x - 1)\sqrt{-2x + 1}}$$

--R
--R                                         Type: Expression(Integer)
--E 238

```

```

--S 239 of 300
--r0:=-2663/375*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)*sqrt(11/3)+
-- 4071079/1500*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
-- (2+3*x)^(7/2)*sqrt(3+5*x)/sqrt(1-2*x)+2517/350*(2+3*x)^(3/2)*
-- sqrt(1-2*x)*sqrt(3+5*x)+12/7*(2+3*x)^(5/2)*sqrt(1-2*x)*sqrt(3+5*x)+
-- 29293/875*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 239

--S 240 of 300
--d0:=t0-D(r0,x)
--E 240

)clear all

--S 241 of 300
t0:=(2+3*x)^(5/2)*sqrt(3+5*x)/(1-2*x)^(3/2)
--R
--R
--R          2          +-----+ +-----+
--R      (- 9x  - 12x - 4)\|3x + 2 \|5x + 3
--R (1)  -----
--R          +-----+
--R      (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 241

--S 242 of 300
--r0:=7279/75*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 2933/150*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- (2+3*x)^(5/2)*sqrt(3+5*x)/sqrt(1-2*x)+9/5*(2+3*x)^(3/2)*sqrt(1-2*x)*
-- sqrt(3+5*x)+419/50*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 242

--S 243 of 300
--d0:=t0-D(r0,x)
--E 243

)clear all

--S 244 of 300
t0:=(2+3*x)^(3/2)*sqrt(3+5*x)/(1-2*x)^(3/2)
--R
--R
--R          +-----+ +-----+
--R      (- 3x - 2)\|3x + 2 \|5x + 3
--R (1)  -----
--R          +-----+
--R      (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 244

```

```

--S 245 of 300
--r0:=139/6*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 14/3*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- (2+3*x)^(3/2)*sqrt(3+5*x)/sqrt(1-2*x)+2*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 245

--S 246 of 300
--d0:=t0-D(r0,x)
--E 246

)clear all

--S 247 of 300
t0:=sqrt(2+3*x)*sqrt(3+5*x)/(1-2*x)^(3/2)
--R
--R
--R          +-----+ +-----+
--R          \|3x + 2 \|5x + 3
--R (1)  - ----
--R          +-----+
--R          (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 247

--S 248 of 300
--r0:=-elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(35)+
-- sqrt(2+3*x)*sqrt(3+5*x)/sqrt(1-2*x)
--E 248

--S 249 of 300
--d0:=t0-D(r0,x)
--E 249

)clear all

--S 250 of 300
t0:=sqrt(3+5*x)/((1-2*x)^(3/2)*sqrt(2+3*x))
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1)  - ----
--R          +-----+ +-----+
--R          (2x - 1)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 250

```

```

--S 251 of 300
--r0:=elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 2/7*sqrt(2+3*x)*sqrt(3+5*x)/sqrt(1-2*x)
--E 251

--S 252 of 300
--d0:=t0-D(r0,x)
--E 252

)clear all

--S 253 of 300
t0:=sqrt(3+5*x)/((1-2*x)^(3/2)*(2+3*x)^(3/2))
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1)  - ----
--R          2          +-----+ +-----+
--R          (6x  + x - 2)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 253

--S 254 of 300
--r0:=4/7*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
-- 10/7*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*sqrt(3+5*x)/(sqrt(1-2*x)*sqrt(2+3*x))-12/49*sqrt(1-2*x)*
-- sqrt(3+5*x)/sqrt(2+3*x)
--E 254

--S 255 of 300
--d0:=t0-D(r0,x)
--E 255

)clear all

--S 256 of 300
t0:=sqrt(3+5*x)/((1-2*x)^(3/2)*(2+3*x)^(5/2))
--R
--R
--R          +-----+
--R          \|5x + 3
--R (1)  - ----
--R          3      2          +-----+ +-----+
--R          (18x  + 15x  - 4x - 4)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 256

--S 257 of 300
--r0:=-38/147*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-

```

```

--      80/147*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
--      2/7*sqrt(3+5*x)/((2+3*x)^(3/2)*sqrt(1-2*x))-8/49*sqrt(1-2*x)*
--      sqrt(3+5*x)/(2+3*x)^(3/2)+38/343*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 257

--S 258 of 300
--d0:=t0-D(r0,x)
--E 258

)clear all

--S 259 of 300
t0:=sqrt(3+5*x)/((1-2*x)^(3/2)*(2+3*x)^(7/2))
--R
--R
--R
--R
--R      +-----+
--R      \|5x + 3
--R      (1)  -----
--R      4      3      2      +-----+ +-----+
--R      (54x  + 81x  + 18x  - 20x - 8)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)
--E 259

--S 260 of 300
--r0:=-52/1029*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
--      5636/1029*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
--      2/7*sqrt(3+5*x)/((2+3*x)^(5/2)*sqrt(1-2*x))-36/245*sqrt(1-2*x)*
--      sqrt(3+5*x)/(2+3*x)^(5/2)-26/1715*sqrt(1-2*x)*sqrt(3+5*x)/
--      (2+3*x)^(3/2)+5636/12005*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 260

--S 261 of 300
--d0:=t0-D(r0,x)
--E 261

)clear all

--S 262 of 300
t0:=(2+3*x)^(7/2)*(3+5*x)^(3/2)/(1-2*x)^(3/2)
--R
--R
--R
--R      4      3      2      +-----+ +-----+
--R      (- 135x  - 351x  - 342x  - 148x - 24)\|3x + 2 \|5x + 3
--R      (1)  -----
--R
--R      +-----+
--R      (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 262

--S 263 of 300

```

```

--r0:=-6478333/13500*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 112543103/6750*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
-- sqrt(35)+(2+3*x)^(7/2)*(3+5*x)^(3/2)/sqrt(1-2*x)+1397/210*_
-- (2+3*x)^(3/2)*(3+5*x)^(3/2)*sqrt(1-2*x)+5/3*(2+3*x)^(5/2)*_
-- (3+5*x)^(3/2)*sqrt(1-2*x)+24358/875*(3+5*x)^(3/2)*sqrt(1-2*x)*_
-- sqrt(2+3*x)+6770629/31500*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 263

```

```

--S 264 of 300
--d0:=t0-D(r0,x)
--E 264

```

```
)clear all
```

```

--S 265 of 300
t0:=(2+3*x)^(5/2)*(3+5*x)^(3/2)/(1-2*x)^(3/2)
--R
--R
--R          3      2      +-----+ +-----+
--R      (- 45x  - 87x  - 56x - 12)\|3x + 2 \|5x + 3
--R (1) -----
--R                                +-----+
--R                          (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 265

```

```

--S 266 of 300
--r0:=-18551/150*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 1289089/300*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
-- (2+3*x)^(5/2)*(3+5*x)^(3/2)/sqrt(1-2*x)+12/7*(2+3*x)^(3/2)*_
-- (3+5*x)^(3/2)*sqrt(1-2*x)+2511/350*(3+5*x)^(3/2)*sqrt(1-2*x)*_
-- sqrt(2+3*x)+9694/175*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 266

```

```

--S 267 of 300
--d0:=t0-D(r0,x)
--E 267

```

```
)clear all
```

```

--S 268 of 300
t0:=(2+3*x)^(3/2)*(3+5*x)^(3/2)/(1-2*x)^(3/2)
--R
--R
--R          2      +-----+ +-----+
--R      (- 15x  - 19x - 6)\|3x + 2 \|5x + 3
--R (1) -----
--R                                +-----+
--R                          (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)

```



```

--E 268

--S 269 of 300
--r0:=4621/30*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 931/30*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- (2+3*x)^(3/2)*(3+5*x)^(3/2)/sqrt(1-2*x)+9/5*(3+5*x)^(3/2)*
-- sqrt(1-2*x)*sqrt(2+3*x)+139/10*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 269

--S 270 of 300
--d0:=t0-D(r0,x)
--E 270

)clear all

--S 271 of 300
t0:=(3+5*x)^(3/2)*sqrt(2+3*x)/(1-2*x)^(3/2)
--R
--R
--R
--R      +-----+ +-----+
--R      (- 5x - 3)\|3x + 2 \|5x + 3
--R (1) -----
--R      +-----+
--R      (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 271

--S 272 of 300
--r0:=-67/9*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 133/18*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(35)+
-- (3+5*x)^(3/2)*sqrt(2+3*x)/sqrt(1-2*x)+10/3*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 272

--S 273 of 300
--d0:=t0-D(r0,x)
--E 273

)clear all

--S 274 of 300
t0:=(3+5*x)^(3/2)/((1-2*x)^(3/2)*sqrt(2+3*x))
--R
--R
--R
--R      +-----+
--R      (- 5x - 3)\|5x + 3
--R (1) -----
--R      +-----+ +-----+
--R      (2x - 1)\|- 2x + 1 \|3x + 2
--R
--R                                          Type: Expression(Integer)

```

--E 274

--S 275 of 300

```
--r0:=34/3*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
-- 5/3*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*(3+5*x)^(3/2)*sqrt(2+3*x)/sqrt(1-2*x)+5/7*sqrt(1-2*x)*
-- sqrt(2+3*x)*sqrt(3+5*x)
```

--E 275

--S 276 of 300

--d0:=t0-D(r0,x)

--E 276

)clear all

--S 277 of 300

t0:=(3+5\*x)^(3/2)/((1-2\*x)^(3/2)\*(2+3\*x)^(3/2))

--R

--R

```
--R          +-----+
--R      (- 5x - 3)\|5x + 3
--R (1)  -----
--R          2          +-----+ +-----+
--R      (6x  + x - 2)\|- 2x + 1 \|3x + 2
```

Type: Expression(Integer)

--E 277

--S 278 of 300

```
--r0:=31/21*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)+
-- 10/21*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*(3+5*x)^(3/2)/(sqrt(1-2*x)*sqrt(2+3*x))+4/49*sqrt(1-2*x)*
-- sqrt(3+5*x)/sqrt(2+3*x)
```

--E 278

--S 279 of 300

--d0:=t0-D(r0,x)

--E 279

)clear all

--S 280 of 300

t0:=(3+5\*x)^(3/2)/((1-2\*x)^(3/2)\*(2+3\*x)^(5/2))

--R

--R

```
--R          +-----+
--R      (- 5x - 3)\|5x + 3
--R (1)  -----
--R          3      2          +-----+ +-----+
--R      (18x  + 15x  - 4x - 4)\|- 2x + 1 \|3x + 2
```

Type: Expression(Integer)

```

--E 280

--S 281 of 300
--r0:=458/441*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(5/7)-
-- 970/441*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- 2/7*(3+5*x)^(3/2)/((2+3*x)^(3/2)*sqrt(1-2*x))+8/147*sqrt(1-2*x)*
-- sqrt(3+5*x)/(2+3*x)^(3/2)-458/1029*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 281

--S 282 of 300
--d0:=t0-D(r0,x)
--E 282

)clear all

--S 283 of 300
t0:=(3+5*x)^(3/2)/((1-2*x)^(3/2)*(2+3*x)^(7/2))
--R
--R
--R
--R
--R (1)
--R

$$\frac{(-5x - 3)\sqrt{5x + 3}}{(54x^4 + 81x^3 + 18x^2 - 20x - 8)\sqrt{-2x + 1}\sqrt{3x + 2}}$$

--R
--R Type: Expression(Integer)
--E 283

--S 284 of 300
--r0:=-916/1029*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 338/1029*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+
-- 2/7*(3+5*x)^(3/2)/((2+3*x)^(5/2)*sqrt(1-2*x))+12/245*sqrt(1-2*x)*
-- sqrt(3+5*x)/(2+3*x)^(5/2)-458/1715*sqrt(1-2*x)*sqrt(3+5*x)/
-- (2+3*x)^(3/2)+338/12005*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 284

--S 285 of 300
--d0:=t0-D(r0,x)
--E 285

)clear all

--S 286 of 300
t0:=(3+5*x)^(3/2)/((1-2*x)^(3/2)*(2+3*x)^(9/2))
--R
--R
--R
--R
--R (1)
--R

$$\frac{(-5x - 3)\sqrt{5x + 3}}{(162x^5 + 351x^4 + 216x^3 - 24x^2 - 64x - 16)\sqrt{-2x + 1}\sqrt{3x + 2}}$$


```

```
--R                                          Type: Expression(Integer)
--E 286
```

```
--S 287 of 300
--r0:=-10876/50421*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)-
-- 189368/50421*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
-- sqrt(35)+2/7*(3+5*x)^(3/2)/((2+3*x)^(7/2)*sqrt(1-2*x))+16/343*_
-- sqrt(1-2*x)*sqrt(3+5*x)/(2+3*x)^(7/2)-2818/12005*sqrt(1-2*x)*_
-- sqrt(3+5*x)/(2+3*x)^(5/2)-5438/84035*sqrt(1-2*x)*sqrt(3+5*x)/_
-- (2+3*x)^(3/2)+189368/588245*sqrt(1-2*x)*sqrt(3+5*x)/sqrt(2+3*x)
--E 287
```

```
--S 288 of 300
--d0:=t0-D(r0,x)
--E 288
```

```
)clear all
```

```
--S 289 of 300
t0:=(2+3*x)^(7/2)*(3+5*x)^(5/2)/(1-2*x)^(3/2)
--R
--R
--R          5      4      3      2      +-----+ +-----+
--R      (- 675x  - 2160x  - 2763x  - 1766x  - 564x - 72)\|3x + 2 \|5x + 3
--R      (1) -----
--R                                     +-----+
--R                                  (2x - 1)\|- 2x + 1
--R                                          Type: Expression(Integer)
--E 289
```

```
--S 290 of 300
--r0:=-128715331/44550*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/_
-- sqrt(33)+17888580643/178200*elliptic_e(asin(sqrt(5/11)*_
-- sqrt(1-2*x)),33/35)/sqrt(35)+(2+3*x)^(7/2)*(3+5*x)^(5/2)/_
-- sqrt(1-2*x)+419/66*(2+3*x)^(3/2)*(3+5*x)^(5/2)*sqrt(1-2*x)+_
-- 18/11*(2+3*x)^(5/2)*(3+5*x)^(5/2)*sqrt(1-2*x)+4066493/23100*_
-- (3+5*x)^(3/2)*sqrt(1-2*x)*sqrt(2+3*x)+9741/385*(3+5*x)^(5/2)*_
-- sqrt(1-2*x)*sqrt(2+3*x)+269045681/207900*sqrt(1-2*x)*_
-- sqrt(2+3*x)*sqrt(3+5*x)
--E 290
```

```
--S 291 of 300
--d0:=t0-D(r0,x)
--E 291
```

```
)clear all
```

```
--S 292 of 300
t0:=(2+3*x)^(5/2)*(3+5*x)^(5/2)/(1-2*x)^(3/2)
--R
```

```

--R
--R          4      3      2      +-----+ +-----+
--R      (- 225x  - 570x  - 541x  - 228x - 36)\|3x + 2 \|5x + 3
--R      (1) -----
--R                                  +-----+
--R                                  (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 292

```

```

--S 293 of 300
--r0:=-1228883/1620*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
-- 42696881/1620*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/_
-- sqrt(35)+(2+3*x)^(5/2)*(3+5*x)^(5/2)/sqrt(1-2*x)+5/3*(2+3*x)^(3/2)*_
-- (3+5*x)^(5/2)*sqrt(1-2*x)+4853/105*(3+5*x)^(3/2)*sqrt(1-2*x)*_
-- sqrt(2+3*x)+93/14*(3+5*x)^(5/2)*sqrt(1-2*x)*sqrt(2+3*x)+_
-- 1284329/3780*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 293

```

```

--S 294 of 300
--d0:=t0-D(r0,x)
--E 294

```

)clear all

```

--S 295 of 300
t0:=(2+3*x)^(3/2)*(3+5*x)^(5/2)/(1-2*x)^(3/2)
--R
--R
--R          3      2      +-----+ +-----+
--R      (- 75x  - 140x  - 87x - 18)\|3x + 2 \|5x + 3
--R      (1) -----
--R                                  +-----+
--R                                  (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 295

```

```

--S 296 of 300
--r0:=-1762/9*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+_
-- 244879/36*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)/sqrt(35)+_
-- (2+3*x)^(3/2)*(3+5*x)^(5/2)/sqrt(1-2*x)+167/14*(3+5*x)^(3/2)*_
-- sqrt(1-2*x)*sqrt(2+3*x)+12/7*(3+5*x)^(5/2)*sqrt(1-2*x)*sqrt(2+3*x)+_
-- 3683/42*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 296

```

```

--S 297 of 300
--d0:=t0-D(r0,x)
--E 297

```

)clear all

```

--S 298 of 300
t0:=(3+5*x)^(5/2)*sqrt(2+3*x)/(1-2*x)^(3/2)
--R
--R
--R          2      +-----+ +-----+
--R      (- 25x  - 30x - 9)\|3x + 2 \|5x + 3
--R (1)  -----
--R          +-----+
--R      (2x - 1)\|- 2x + 1
--R
--R                                          Type: Expression(Integer)
--E 298

--S 299 of 300
--r0:=6599/27*elliptic_e(asin(sqrt(5/11)*sqrt(1-2*x)),33/35)*sqrt(7/5)-
-- 2659/54*elliptic_f(asin(sqrt(3/7)*sqrt(1-2*x)),35/33)/sqrt(33)+
-- (3+5*x)^(5/2)*sqrt(2+3*x)/sqrt(1-2*x)+3*(3+5*x)^(3/2)*sqrt(1-2*x)*
-- sqrt(2+3*x)+397/18*sqrt(1-2*x)*sqrt(2+3*x)*sqrt(3+5*x)
--E 299

--S 300 of 300
--d0:=t0-D(r0,x)
--E 300

)spool
)lisp (bye)

```

## References

- [1] nothing