

$\$SPAD/src/input$ richder12d.input

Albert Rich and Timothy Daly

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Abstract

$(d+e x)^m (f+g x)^n (a+b x+c x^2)^p$ There are:

- 255 integrals in this file.
- 255 supplied "optimal results".
- 128 matching answers.
- 152 cases where Axiom answer differs from Rubi
- 52 cases where Axiom supplied 2 results.
- 0 cases that Axiom failed to integrate.
- 26 that contain expressions Axiom does not recognize.

Contents

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      *
)set break resume
)sys rm -f richder12d.output
)spool richder12d.output
)set message test on
)set message auto off
)clear all

--S 1 of 764
t0:=(b+2*c*x)*sqrt(d+e*x)*sqrt(a+b*x+c*x^2)
--E 1

--S 2 of 764
--r0:=4/7*(a+b*x+c*x^2)^(3/2)*sqrt(d+e*x)-2/105*(8*c^2*d^2+b^2*e^2-
-- c*e*(11*b*d-10*a*e)-3*c*e*(2*c*d-b*e)*x)*sqrt(d+e*x)*sqrt(a+b*x+
-- c*x^2)/(c*e^2)-1/105*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2)*(c*(5*c*e*(b*d-2*a*e)^2-
-- (2*c*d-b*e)*(4*b*c*d^2-b^2*d*e-2*a*c*d*e-a*b*e^2))+2*c*d-b*e)*_
-- (4*c^2*d^2-b^2*e^2-4*c*e*(b*d-2*a*e))*(b-sqrt(b^2-4*a*c))*_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-
-- 4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-
-- 4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*e^3*sqrt(a+b*x+_
-- c*x^2))-1/105*(2*c*d-b*e)*(4*c^2*d^2-b^2*e^2-4*c*e*(b*d-2*a*e))*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*e^4*sqrt(a+b*x+c*x^2))
--E 2

--S 3 of 764
--d0:=D(m0,x)
--E 3

)clear all

--S 4 of 764
t0:=(b+2*c*x)*sqrt(a+b*x+c*x^2)/sqrt(d+e*x)
--E 4

--S 5 of 764
--r0:=-2/15*(8*c*d-7*b*e-6*c*e*x)*sqrt(d+e*x)*sqrt(a+b*x+c*x^2)/e^2-
-- 1/15*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-
-- e*(b-sqrt(b^2-4*a*c))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-
-- e*(b+sqrt(b^2-4*a*c))))*(2*c*(7*b^2*d*e+4*a*c*d*e-8*b*(c*d^2+a*e^2))+_
-- (16*c^2*d^2+b^2*e^2-4*c*e*(4*b*d-3*a*e))*(b-sqrt(b^2-4*a*c))*_

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-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/_
-- (2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))/(c^(3/2)*e^3*sqrt(2)*sqrt(a+b*x+_
-- c*x^2))-1/15*(16*c^2*d^2+b^2*e^2-4*c*e*(4*b*d-3*a*e))*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))* (2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(c^(3/2)*e^4*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 5

--S 6 of 764
--d0:=D(m0,x)
--E 6

)clear all

--S 7 of 764
t0:=(b+2*c*x)*sqrt(a+b*x+c*x^2)/(d+e*x)^(3/2)
--E 7

--S 8 of 764
--r0:=2/3*(8*c*d-3*b*e+2*c*e*x)*sqrt(a+b*x+c*x^2)/(e^2*sqrt(d+e*x))-_
-- 1/3*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))*sqrt(2)*(b*e*(b-4*sqrt(b^2-4*a*c))+c*(-4*a*e+_
-- 8*d*sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (e^3*sqrt(c)*sqrt(a+b*x+c*x^2))+4/3*(2*c*d-b*e)*elliptic_e(asin(_
-- sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c))))), _
-- (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(e^4*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 8

--S 9 of 764
--d0:=D(m0,x)
--E 9

)clear all

--S 10 of 764
t0:=(b+2*c*x)*sqrt(a+b*x+c*x^2)/(d+e*x)^(5/2)
--E 10

--S 11 of 764

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--r0:=2/3*(8*c*d-b*e+6*c*e*x)*sqrt(a+b*x+c*x^2)/(e^2*(d+e*x)^(3/2))-
-- 2/3*(16*c^2*d^2+b^2*e^2-4*c*e*(4*b*d-3*a*e))*sqrt(a+b*x+c*x^2)/
-- (e^2*(c*d^2-b*d*e+a*e^2)*sqrt(d+e*x))-1/3*elliptic_f(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*(2*c*(7*b^2*d*e+_
-- 4*a*c*d*e-8*b*(c*d^2+a*e^2))+(16*c^2*d^2+b^2*e^2-4*c*e*(4*b*d-_
-- 3*a*e))*(b-sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/_
-- (2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (e^3*(c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2))-
-- 1/3*(16*c^2*d^2+b^2*e^2-4*c*e*(4*b*d-3*a*e))*elliptic_e(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-_
-- 4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-_
-- 4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-_
-- 4*a*c)))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e^4*(c*d^2-b*d*e+a*e^2))*_
-- sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2)
--E 11

--S 12 of 764
--d0:=D(m0,x)
--E 12

)clear all

--S 13 of 764
t0:=(b+2*c*x)*sqrt(a+b*x+c*x^2)/(d+e*x)^(7/2)
--E 13

--S 14 of 764
--r0:=2/15*(16*c^2*d^2-b^2*e^2-4*c*e*(4*b*d-5*a*e))*sqrt(a+b*x+c*x^2)/_
-- (e^2*(c*d^2-b*d*e+a*e^2)*(d+e*x)^(3/2))-2/5*(8*c*d+b*e+10*c*e*x)*_
-- sqrt(a+b*x+c*x^2)/(e^2*(d+e*x)^(5/2))+4/15*(2*c*d-b*e)*(4*c^2*d^2-_
-- b^2*e^2-4*c*e*(b*d-2*a*e))*sqrt(a+b*x+c*x^2)/(e^2*(c*d^2-b*d*e+a*_
-- e^2)^2*sqrt(d+e*x))+1/15*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+_
-- e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*_
-- a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))))*sqrt(2)*(-c*(b^3*d*e^2-4*a*_
-- c*e*(c*d^2+5*a*e^2)+4*b*c*d*(2*c*d^2+5*a*e^2)-b^2*(11*c*d^2*e-a*e^3))+_
-- (2*c*d-b*e)*(4*c^2*d^2-b^2*e^2-4*c*e*(b*d-2*a*e))*(b-sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))/(e^3*(c*d^2-b*d*e+a*e^2)^2*sqrt(c)*_
-- sqrt(a+b*x+c*x^2))+1/15*(2*c*d-b*e)*(4*c^2*d^2-b^2*e^2-4*c*e*(b*d-_
-- 2*a*e))*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*_
-- (b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e^4*(c*d^2-b*d*e+a*e^2)^2*_
-- sqrt(c)*sqrt(a+b*x+c*x^2)

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--E 14

--S 15 of 764
--d0:=D(m0,x)
--E 15

)clear all

--S 16 of 764
t0:=(b+2*c*x)*(a+b*x+c*x^2)^(3/2)/sqrt(d+e*x)
--E 16

--S 17 of 764
--r0:=-2/63*(16*c*d-15*b*e-14*c*e*x)*(a+b*x+c*x^2)^(3/2)*sqrt(d+e*x)/e^2-
-- 2/315*(128*c^3*d^3-b^3*e^3+3*b*c*e^2*(37*b*d-36*a*e)-12*c^2*d*_
-- e*(20*b*d-11*a*e)-3*c*e*(32*c^2*d^2+b^2*e^2-4*c*e*(8*b*d-7*a*e))*x*_
-- sqrt(d+e*x)*sqrt(a+b*x+c*x^2)/(c*e^4)-1/315*elliptic_f(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2)*(-c*((4*b*c*_
-- d^2-b^2*d*e-2*a*c*d*e-a*b*e^2)*(32*c^2*d^2+b^2*e^2-4*c*e*(8*b*d-_
-- 7*a*e))+5*c*e*(b*d-2*a*e)*(15*b^2*d*e+4*a*c*d*e-16*b*(c*d^2+a*e^2))+_
-- (128*c^4*d^4-b^4*e^4-4*c^3*d^2*e*(64*b*d-57*a*e)-b^2*c*e^3*(7*b*d-_
-- 15*a*e)+3*c^2*e^2*(45*b^2*d^2-76*a*b*d*e+28*a^2*e^2))*(b-sqrt(b^2-_
-- 4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-_
-- 4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-_
-- 4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*e^5*sqrt(a+b*x+_
-- c*x^2))-1/315*(128*c^4*d^4-b^4*e^4-4*c^3*d^2*e*(64*b*d-57*a*e)-_
-- b^2*c*e^3*(7*b*d-15*a*e)+3*c^2*e^2*(45*b^2*d^2-76*a*b*d*e+28*a^2*_
-- e^2))*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*_
-- (b+sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*_
-- (b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*_
-- (b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*e^6*sqrt(a+b*x+c*x^2))
--E 17

--S 18 of 764
--d0:=D(m0,x)
--E 18

)clear all

--S 19 of 764
t0:=(b+2*c*x)*(a+b*x+c*x^2)^(3/2)/(d+e*x)^(3/2)
--E 19

--S 20 of 764
--r0:=2/7*(16*c*d-7*b*e+2*c*e*x)*(a+b*x+c*x^2)^(3/2)/(e^2*sqrt(d+e*x))+_
-- 2/35*(128*c^2*d^2+51*b^2*e^2-4*c*e*(44*b*d-5*a*e)-48*c*e*(2*c*d-_
-- b*e)*x)*sqrt(d+e*x)*sqrt(a+b*x+c*x^2)/e^4+1/35*elliptic_f(asin(_

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-- sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))),_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- (-2*c*(51*b^3*d*e^2-8*a*c*e*(8*c*d^2+5*a*e^2)+4*b*c*d*(32*c*d^2+_
-- 45*a*e^2)-2*b^2*(88*c*d^2*e+27*a*e^3))+(2*c*d-b*e)*(128*c^2*d^2+_
-- 3*b^2*e^2-4*c*e*(32*b*d-29*a*e))*(b-sqrt(b^2-4*a*c))*sqrt(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*e^5*sqrt(2)*sqrt(a+b*x+c*x^2))+_
-- 1/35*(2*c*d-b*e)*(128*c^2*d^2+3*b^2*e^2-4*c*e*(32*b*d-29*a*e))*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(c^(3/2)*e^6*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 20

--S 21 of 764
--d0:=D(m0,x)
--E 21

)clear all

--S 22 of 764
t0:=(b+2*c*x)*(a+b*x+c*x^2)^(3/2)/(d+e*x)^(5/2)
--E 22

--S 23 of 764
--r0:=2/15*(16*c*d-5*b*e+6*c*e*x)*(a+b*x+c*x^2)^(3/2)/(e^2*(d+e*x)^(3/2))-_
-- 2/15*(128*c^2*d^2+15*b^2*e^2-4*c*e*(28*b*d-9*a*e)+16*c*e*(2*c*d-_
-- b*e)*x)*sqrt(a+b*x+c*x^2)/(e^4*sqrt(d+e*x))-1/15*elliptic_f(_
-- asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))),_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*_
-- sqrt(2)*(b^2*e^2*(8*b-23*sqrt(b^2-4*a*c))-64*c^2*d*(-a*e+2*d*_
-- sqrt(b^2-4*a*c))-4*c*e*(4*b^2*d+8*a*b*e-32*b*d*sqrt(b^2-4*a*c))+_
-- 9*a*e*sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (e^5*sqrt(c)*sqrt(a+b*x+c*x^2))-1/15*(128*c^2*d^2+23*b^2*e^2-_
-- 4*c*e*(32*b*d-9*a*e))*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e^6*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 23

--S 24 of 764
--d0:=D(m0,x)
--E 24

```

```

)clear all

--S 25 of 764
t0:=(b+2*c*x)*(a+b*x+c*x^2)^(3/2)/(d+e*x)^(7/2)
--E 25

--S 26 of 764
--r0:=2/15*(16*c*d-3*b*e+10*c*e*x)*(a+b*x+c*x^2)^(3/2)/(e^2*(d+e*x)^(5/2))-
-- 2/15*(128*c^2*d^2+3*b^2*e^2-20*c*e*(4*b*d-a*e)+48*c*e*(2*c*d-b*e)*x)*_
-- sqrt(a+b*x+c*x^2)/(e^4*(d+e*x)^(3/2))+2/15*(2*c*d-b*e)*(128*c^2*d^2+_
-- 3*b^2*e^2-4*c*e*(32*b*d-29*a*e))*sqrt(a+b*x+c*x^2)/(e^4*(c*d^2-_
-- b*d*e+a*e^2)*sqrt(d+e*x))+1/15*elliptic_f(asin(sqrt(2)*sqrt(c)*_
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*(-2*c*(51*b^3*d*e^2-_
-- 8*a*c*e*(8*c*d^2+5*a*e^2)+4*b*c*d*(32*c*d^2+45*a*e^2)-2*b^2*(88*c*_
-- d^2*e+27*a*e^3))+2*c*d-b*e)*(128*c^2*d^2+3*b^2*e^2-4*c*e*(32*b*d-_
-- 29*a*e))*(b-sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/_
-- (2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (e^5*(c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2))+_
-- 1/15*(2*c*d-b*e)*(128*c^2*d^2+3*b^2*e^2-4*c*e*(32*b*d-29*a*e))*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(e^6*(c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*_
-- sqrt(a+b*x+c*x^2))
--E 26

--S 27 of 764
--d0:=D(m0,x)
--E 27

)clear all

--S 28 of 764
t0:=(b+2*c*x)*(d+e*x)^(5/2)/sqrt(a+b*x+c*x^2)
--E 28

--S 29 of 764
--r0:=2/7*(2*c*d-b*e)*(d+e*x)^(3/2)*sqrt(a+b*x+c*x^2)/c+4/7*(d+e*x)^(5/2)*_
-- sqrt(a+b*x+c*x^2)+4/21*(3*c^2*d^2+2*b^2*e^2-c*e*(3*b*d+5*a*e))*_
-- sqrt(d+e*x)*sqrt(a+b*x+c*x^2)/c^2-1/21*elliptic_f(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))),(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*(2*c*(4*b^3*_
-- d*e^2+2*a*c*e*(27*c*d^2-5*a*e^2)-b*c*d*(3*c*d^2+25*a*e^2)-b^2*_
-- (9*c*d^2*e-4*a*e^3))+2*c*d-b*e)*(3*c^2*d^2+8*b^2*e^2-c*e*(3*b*d+_
-- 29*a*e))*(b-sqrt(b^2-4*a*c))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_

```



```

-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))/_
-- (c^(7/2)*e*sqrt(2)*sqrt(a+b*x+c*x^2))-1/21*(2*c*d-b*e)*(3*c^2*d^2+_
-- 8*b^2*e^2-c*e*(3*b*d+29*a*e))*elliptic_e(asin(sqrt(2)*sqrt(c)*_
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c)))*(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*_
-- e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(7/2)*_
-- e^2*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 29

--S 30 of 764
--d0:=D(m0,x)
--E 30

)clear all

--S 31 of 764
t0:=(b+2*c*x)*(d+e*x)^(3/2)/sqrt(a+b*x+c*x^2)
--E 31

--S 32 of 764
--r0:=4/5*(d+e*x)^(3/2)*sqrt(a+b*x+c*x^2)+2/5*(2*c*d-b*e)*sqrt(d+e*x)*_
-- sqrt(a+b*x+c*x^2)/c+1/5*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2)*(c*(b*c*d^2+b^2*d*e-8*a*c*_
-- d*e+a*b*e^2)-(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/_
-- (2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))/(c^(5/2)*e*sqrt(a+b*x+c*x^2))-_
-- 1/5*(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*elliptic_e(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*_
-- (b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(2)*(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*_
-- e^2*sqrt(a+b*x+c*x^2))
--E 32

--S 33 of 764
--d0:=D(m0,x)
--E 33

)clear all

--S 34 of 764
t0:=(b+2*c*x)*sqrt(d+e*x)/sqrt(a+b*x+c*x^2)
--E 34

```

```

--S 35 of 764
--r0:=4/3*sqrt(d+e*x)*sqrt(a+b*x+c*x^2)+1/3*elliptic_f(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))), (2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*(b*e*(b-_
-- sqrt(b^2-4*a*c))+2*c*(-2*a*e+d*sqrt(b^2-4*a*c))*sqrt(2*c*d-e*_
-- (b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*e*sqrt(2)*sqrt(a+b*x+c*x^2))-_
-- 1/3*(2*c*d-b*e)*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*e^2*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 35

```

```

--S 36 of 764
--d0:=D(m0,x)
--E 36

```

)clear all

```

--S 37 of 764
t0:=(b+2*c*x)/(sqrt(d+e*x)*sqrt(a+b*x+c*x^2))
--E 37

```

```

--S 38 of 764
--r0:=elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))))*sqrt(2)*sqrt(b^2-4*a*c)*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(2*c*d-b*e+_
-- e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(e*sqrt(c)*sqrt(a+b*x+c*x^2))-_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e^2*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 38

```

```

--S 39 of 764
--d0:=D(m0,x)
--E 39

```

)clear all

```

--S 40 of 764
t0:=(b+2*c*x)/((d+e*x)^(3/2)*sqrt(a+b*x+c*x^2))
--E 40

```

```

--S 41 of 764
--r0:=2*(2*c*d-b*e)*sqrt(a+b*x+c*x^2)/((c*d^2-b*d*e+a*e^2)*sqrt(d+e*x))-
-- elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+
-- sqrt(b^2-4*a*c))) * (b*e*(b-sqrt(b^2-4*a*c))+c*(-4*a*e+2*d*sqrt(b^2-
-- 4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-
-- 4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-
-- 4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e*(c*d^2-b*d*e+a*e^2)*
-- sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2)+(2*c*d-b*e)*
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+
-- sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-
-- sqrt(b^2-4*a*c))) * (2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+
-- sqrt(b^2-4*a*c)))/(e^2*(c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*
-- sqrt(a+b*x+c*x^2))
--E 41

--S 42 of 764
--d0:=D(m0,x)
--E 42

)clear all

--S 43 of 764
t0:=(b+2*c*x)/((d+e*x)^(5/2)*sqrt(a+b*x+c*x^2))
--E 43

--S 44 of 764
--r0:=2/3*(2*c*d-b*e)*sqrt(a+b*x+c*x^2)/((c*d^2-b*d*e+a*e^2)*(d+e*x)^(3/2))+
-- 4/3*(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*sqrt(a+b*x+c*x^2)/((c*d^2-
-- b*d*e+a*e^2)^2*sqrt(d+e*x))-1/3*elliptic_f(asin(sqrt(2)*sqrt(c)*
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))), (2*c*d-e*(b-
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2)*(c*(b*c*d^2+
-- b^2*d*e-8*a*c*d*e+a*b*e^2)-(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*(b-
-- sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*
-- sqrt(b^2-4*a*c))*sqrt(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(-e*(b+
-- 2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e*(c*d^2-
-- b*d*e+a*e^2)^2*sqrt(c)*sqrt(a+b*x+c*x^2))+1/3*(c^2*d^2+b^2*e^2-
-- c*e*(b*d+3*a*e))*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c))), (2*c*d-e*(b+sqrt(b^2-4*a*c)))/
-- (2*c*d-e*(b-sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(e^2*(c*d^2-b*d*e+a*e^2)^2*
-- sqrt(c)*sqrt(a+b*x+c*x^2))
--E 44

--S 45 of 764

```

```

--d0:=D(m0,x)
--E 45

)clear all

--S 46 of 764
t0:=(b+2*c*x)*(d+e*x)^(7/2)/(a+b*x+c*x^2)^(3/2)
--E 46

--S 47 of 764
--r0:=-2*(d+e*x)^(7/2)/sqrt(a+b*x+c*x^2)+14/5*e^2*(d+e*x)^(3/2)*_
-- sqrt(a+b*x+c*x^2)/c+56/15*e^2*(2*c*d-b*e)*sqrt(d+e*x)*sqrt(a+_
-- b*x+c*x^2)/c^2-7/15*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*(-2*c*(15*c^2*d^3+4*b*e^2*(b*d+a*e)-_
-- c*d*e*(11*b*d+17*a*e))+e*(23*c^2*d^2+8*b^2*e^2-c*e*(23*b*d+9*a*e))*_
-- (b-sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (c^(7/2)*sqrt(2)*sqrt(a+b*x+c*x^2))-7/15*(23*c^2*d^2+8*b^2*e^2-_
-- c*e*(23*b*d+9*a*e))*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(7/2)*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 47

--S 48 of 764
--d0:=D(m0,x)
--E 48

)clear all

--S 49 of 764
t0:=(b+2*c*x)*(d+e*x)^(5/2)/(a+b*x+c*x^2)^(3/2)
--E 49

--S 50 of 764
--r0:=-2*(d+e*x)^(5/2)/sqrt(a+b*x+c*x^2)+10/3*e^2*sqrt(d+e*x)*_
-- sqrt(a+b*x+c*x^2)/c-5/3*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2)*(-c*(3*c*d^2-e*(b*d+a*e))+_
-- e*(2*c*d-b*e)*(b-sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (c^(5/2)*sqrt(a+b*x+c*x^2))-5/3*(2*c*d-b*e)*elliptic_e(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c))))*sqrt(2)*(2*c*d-e*_
-- (b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+_

```

```

-- e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(5/2)*_
-- sqrt(a+b*x+c*x^2))
--E 50

--S 51 of 764
--d0:=D(m0,x)
--E 51

)clear all

--S 52 of 764
t0:=(b+2*c*x)*(d+e*x)^(3/2)/(a+b*x+c*x^2)^(3/2)
--E 52

--S 53 of 764
--r0:=-2*(d+e*x)^(3/2)/sqrt(a+b*x+c*x^2)+3*elliptic_f(asin(sqrt(2)*sqrt(c)*_
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2)*sqrt(a+b*x+c*x^2))-3*_
-- sqrt(b^2-4*a*c))^(3/2)*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*sqrt(2)*sqrt(a+b*x+c*x^2))-3*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))*sqrt(2)*sqrt(a+b*x+c*x^2))-3*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2)*sqrt(a+b*_
-- sqrt(b^2-4*a*c)))/(c^(3/2)*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 53

--S 54 of 764
--d0:=D(m0,x)
--E 54

)clear all

--S 55 of 764
t0:=(b+2*c*x)*sqrt(d+e*x)/(a+b*x+c*x^2)^(3/2)
--E 55

--S 56 of 764
--r0:=-2*sqrt(d+e*x)/sqrt(a+b*x+c*x^2)+elliptic_f(asin(sqrt(2)*sqrt(c)*_
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2)*sqrt(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+_
-- e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/(sqrt(c)*sqrt(a+b*x+c*x^2))
--E 56

--S 57 of 764

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--d0:=D(m0,x)
--E 57

)clear all

--S 58 of 764
t0:=(b+2*c*x)/((a+b*x+c*x^2)^(3/2)*sqrt(d+e*x))
--E 58

--S 59 of 764
--r0:=-2*((b^2-4*a*c)*(c*d-b*e)-c*(b^2-4*a*c)*e*x)*sqrt(d+e*x)/((b^2-4*a*c)*_
-- (c*d^2-b*d*e+a*e^2)*sqrt(a+b*x+c*x^2))-elliptic_f(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c))))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))^(3/2)*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+_
-- e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/((c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*sqrt(a+b*x+_
-- c*x^2))+elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c))))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))/((c*d^2-b*d*e+a*e^2)*sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 59

--S 60 of 764
--d0:=D(m0,x)
--E 60

)clear all

--S 61 of 764
t0:=(b+2*c*x)/((d+e*x)^(3/2)*(a+b*x+c*x^2)^(3/2))
--E 61

--S 62 of 764
--r0:=-2*((b^2-4*a*c)*(c*d-b*e)-c*(b^2-4*a*c)*e*x)/((b^2-4*a*c)*(c*d^2-_
-- b*d*e+a*e^2)*sqrt(d+e*x)*sqrt(a+b*x+c*x^2))+4*e^2*(2*c*d-b*e)*_
-- sqrt(a+b*x+c*x^2)/((c*d^2-b*d*e+a*e^2)^2*sqrt(d+e*x))-_
-- elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))*sqrt(2)*(3*c^2*d^2+b*e^2*(b-sqrt(b^2-4*a*c))-_
-- c*e*(3*b*d+a*e-2*d*sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- ((c*d^2-b*d*e+a*e^2)^2*sqrt(c)*sqrt(a+b*x+c*x^2))+2*c*d-b*e)*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c))))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*e+e*sqrt(b^2-4*a*c))*_

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-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c))))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/((c*d^2-b*d*e+a*e^2)^2*sqrt(c)*_
-- sqrt(a+b*x+c*x^2))
--E 62

--S 63 of 764
--d0:=D(m0,x)
--E 63

)clear all

--S 64 of 764
t0:=(b+2*c*x)*(d+e*x)^(7/2)/(a+b*x+c*x^2)^(5/2)
--E 64

--S 65 of 764
--r0:=-2/3*(d+e*x)^(7/2)/(a+b*x+c*x^2)^(3/2)-14/3*e*(d+e*x)^(3/2)*(b*d-_
-- 2*a*e+(2*c*d-b*e)*x)/((b^2-4*a*c)*sqrt(a+b*x+c*x^2))+14/3*e^2*(2*c*d-_
-- b*e)*sqrt(d+e*x)*sqrt(a+b*x+c*x^2)/(c*(b^2-4*a*c))+7/3*e*_
-- elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))*sqrt(2)*(c*(b*c*d^2+b^2*d*e-8*a*c*d*e+a*b*e^2)-_
-- (c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*(b-sqrt(b^2-4*a*c)))*sqrt(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/((c^(5/2)*(b^2-4*a*c)*sqrt(a+b*x+c*x^2))-_
-- 7/3*(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*elliptic_e(asin(sqrt(2)*_
-- sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c))))), (2*c*d-e*_
-- (b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(2)*(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c)))/(2*c*d-b*_
-- e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/((c^(5/2)*_
-- (b^2-4*a*c)*sqrt(a+b*x+c*x^2))
--E 65

--S 66 of 764
--d0:=D(m0,x)
--E 66

)clear all

--S 67 of 764
t0:=(b+2*c*x)*(d+e*x)^(5/2)/(a+b*x+c*x^2)^(5/2)
--E 67

--S 68 of 764
--r0:=-2/3*(d+e*x)^(5/2)/(a+b*x+c*x^2)^(3/2)-10/3*e*(b*d-2*a*e+(2*c*d-_
-- b*e)*x)*sqrt(d+e*x)/((b^2-4*a*c)*sqrt(a+b*x+c*x^2))+5/3*e*_
-- elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c))))), (2*c*d-e*(b-sqrt(b^2-4*a*c)))/(2*c*d-e*(b+_

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-- sqrt(b^2-4*a*c)))*(b*e*(b-sqrt(b^2-4*a*c))+c*(-4*a*e+2*d*_
-- sqrt(b^2-4*a*c))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-_
-- sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+_
-- sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*(b^2-_
-- 4*a*c)*sqrt(2)*sqrt(a+b*x+c*x^2))-5/3*(2*c*d-b*e)*elliptic_e(_
-- asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c))))*(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(c^(3/2)*_
-- (b^2-4*a*c)*sqrt(2)*sqrt(a+b*x+c*x^2))
--E 68

--S 69 of 764
--d0:=D(m0,x)
--E 69

)clear all

--S 70 of 764
t0:=(b+2*c*x)*(d+e*x)^(3/2)/(a+b*x+c*x^2)^(5/2)
--E 70

--S 71 of 764
--r0:=-2/3*(d+e*x)^(3/2)/(a+b*x+c*x^2)^(3/2)-2*e*(b+2*c*x)*sqrt(d+e*x)/_
-- ((b^2-4*a*c)*sqrt(a+b*x+c*x^2))+e*elliptic_f(asin(sqrt(2)*sqrt(c)*_
-- sqrt(d+e*x)/sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*sqrt(2)*sqrt(2*c*d-_
-- e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-_
-- b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-_
-- e*(b+sqrt(b^2-4*a*c)))/(sqrt(c)*sqrt(b^2-4*a*c)*sqrt(a+b*x+c*x^2))-_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+_
-- sqrt(b^2-4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-_
-- sqrt(b^2-4*a*c)))*sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(b^2-4*a*c)*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 71

--S 72 of 764
--d0:=D(m0,x)
--E 72

)clear all

--S 73 of 764
t0:=(b+2*c*x)*sqrt(d+e*x)/(a+b*x+c*x^2)^(5/2)
--E 73

--S 74 of 764

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--r0:=-2/3*sqrt(d+e*x)/(a+b*x+c*x^2)^(3/2)-2/3*e*(b*c*d-b^2*e+2*a*c*e+c*_
-- (2*c*d-b*e)*x)*sqrt(d+e*x)/((b^2-4*a*c)*(c*d^2-b*d*e+a*e^2)*_
-- sqrt(a+b*x+c*x^2))+1/3*e*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*(b*e*(b-sqrt(b^2-4*a*c))+c*(-4*a*e+_
-- 2*d*sqrt(b^2-4*a*c)))*sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- ((b^2-4*a*c)*(c*d^2-e*(b*d-a*e))*sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2))-_
-- 1/3*(2*c*d-b*e)*elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b-sqrt(b^2-4*a*c))))*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/(2*c*d-e*(b+sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/((b^2-4*a*c)*(c*d^2-e*(b*d-a*e)))*_
-- sqrt(2)*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 74

--S 75 of 764
--d0:=D(m0,x)
--E 75

)clear all

--S 76 of 764
t0:=(b+2*c*x)/((a+b*x+c*x^2)^(5/2)*sqrt(d+e*x))
--E 76

--S 77 of 764
--r0:=-2/3*((b^2-4*a*c)*(c*d-b*e)-c*(b^2-4*a*c)*e*x)*sqrt(d+e*x)/((b^2-_
-- 4*a*c)*(c*d^2-b*d*e+a*e^2)*(a+b*x+c*x^2)^(3/2))-2/3*e*(3*b^2*c*d*e-_
-- 8*a*c^2*d*e-2*b^3*e^2-b*c*(c*d^2-7*a*e^2)-2*c*(c^2*d^2+b^2*e^2-_
-- c*e*(b*d+3*a*e))*x)*sqrt(d+e*x)/((b^2-4*a*c)*(c*d^2-b*d*e+a*e^2)^2*_
-- sqrt(a+b*x+c*x^2))-1/3*e*elliptic_f(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/_
-- sqrt(2*c*d-e*(b-sqrt(b^2-4*a*c)))),(2*c*d-e*(b-sqrt(b^2-4*a*c)))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2)*(c*(b*c*d^2+b^2*d*e-8*a*c*d*e+_
-- a*b*e^2)-(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*(b-sqrt(b^2-4*a*c)))*_
-- sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/(2*c*d-b*e+e*sqrt(b^2-4*a*c)))*_
-- sqrt(2*c*d-b*e+e*sqrt(b^2-4*a*c))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))/((b^2-4*a*c)*(c*d^2-b*d*e+a*e^2)^2*_
-- sqrt(c)*sqrt(a+b*x+c*x^2))+1/3*(c^2*d^2+b^2*e^2-c*e*(b*d+3*a*e))*_
-- elliptic_e(asin(sqrt(2)*sqrt(c)*sqrt(d+e*x)/sqrt(2*c*d-e*(b+sqrt(b^2-_
-- 4*a*c)))),(2*c*d-e*(b+sqrt(b^2-4*a*c)))/(2*c*d-e*(b-sqrt(b^2-4*a*c))))*_
-- sqrt(2)*(2*c*d-e*(b-sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x-sqrt(b^2-4*a*c))/_
-- (2*c*d-b*e+e*sqrt(b^2-4*a*c)))*sqrt(-e*(b+2*c*x+sqrt(b^2-4*a*c))/_
-- (2*c*d-e*(b+sqrt(b^2-4*a*c))))*sqrt(2*c*d-e*(b+sqrt(b^2-4*a*c)))/_
-- ((b^2-4*a*c)*(c*d^2-b*d*e+a*e^2)^2*sqrt(c)*sqrt(a+b*x+c*x^2))
--E 77

--S 78 of 764

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--d0:=D(m0,x)
--E 78

)clear all

--S 79 of 764
t0:=(A+B*x)*(d+e*x)^m*(a^2+2*a*b*x+b^2*x^2)
--E 79

--S 80 of 764
r0:=- (b*d-a*e)^2*(B*d-A*e)*(d+e*x)^(1+m)/(e^4*(1+m))+(b*d-a*e)*(3*b*B*d-
2*A*b*e-a*B*e)*(d+e*x)^(2+m)/(e^4*(2+m))-b*(3*b*B*d-A*b*e-2*a*B*e)*
(d+e*x)^(3+m)/(e^4*(3+m))+b^2*B*(d+e*x)^(4+m)/(e^4*(4+m))
--E 80

--S 81 of 764
d0:=normalize(t0-D(r0,x))
--E 81

)clear all

--S 82 of 764
t0:=(A+B*x)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)
--E 82

--S 83 of 764
r0:=-1/6*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^6/e^4+1/7*(b*d-a*e)*(3*b*B*d-2*A*b*e-
a*B*e)*(d+e*x)^7/e^4-1/8*b*(3*b*B*d-A*b*e-2*a*B*e)*(d+e*x)^8/e^4+
1/9*b^2*B*(d+e*x)^9/e^4
--E 83

--S 84 of 764
d0:=normalize(t0-D(r0,x))
--E 84

)clear all

--S 85 of 764
t0:=(A+B*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)
--E 85

--S 86 of 764
r0:=-1/5*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^5/e^4+1/6*(b*d-a*e)*(3*b*B*d-2*A*b*e-
a*B*e)*(d+e*x)^6/e^4-1/7*b*(3*b*B*d-A*b*e-2*a*B*e)*(d+e*x)^7/e^4+
1/8*b^2*B*(d+e*x)^8/e^4
--E 86

--S 87 of 764
d0:=normalize(t0-D(r0,x))
--E 87

```

```

)clear all

--S 88 of 764
t0:=(A+B*x)*(d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)
--E 88

--S 89 of 764
r0:=-1/4*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^4/e^4+1/5*(b*d-a*e)*(3*b*B*d-2*A*b*e-_
a*B*e)*(d+e*x)^5/e^4-1/6*b*(3*b*B*d-A*b*e-2*a*B*e)*(d+e*x)^6/e^4+_
1/7*b^2*B*(d+e*x)^7/e^4
--E 89

--S 90 of 764
d0:=normalize(t0-D(r0,x))
--E 90

)clear all

--S 91 of 764
t0:=(A+B*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)
--E 91

--S 92 of 764
r0:=1/3*(A*b-a*B)*(b*d-a*e)^2*(a+b*x)^3/b^4+1/4*(b*d-a*e)*(b*B*d+2*A*b*e-_
3*a*B*e)*(a+b*x)^4/b^4+1/5*e*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)^5/b^4+_
1/6*B*e^2*(a+b*x)^6/b^4
--E 92

--S 93 of 764
d0:=normalize(t0-D(r0,x))
--E 93

)clear all

--S 94 of 764
t0:=(A+B*x)*(d+e*x)*(a^2+2*a*b*x+b^2*x^2)
--E 94

--S 95 of 764
r0:=1/3*(A*b-a*B)*(b*d-a*e)*(a+b*x)^3/b^3+1/4*(b*B*d+A*b*e-2*a*B*e)*_
(a+b*x)^4/b^3+1/5*B*e*(a+b*x)^5/b^3
--E 95

--S 96 of 764
d0:=normalize(t0-D(r0,x))
--E 96

)clear all

```

```

--S 97 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)
--E 97

--S 98 of 764
r0:=1/3*(A*b-a*B)*(a+b*x)^3/b^2+1/4*B*(a+b*x)^4/b^2
--E 98

--S 99 of 764
d0:=normalize(t0-D(r0,x))
--E 99

)clear all

--S 100 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)
--E 100

--S 101 of 764
r0:=b*(b*d-a*e)*(B*d-A*e)*x/e^3-1/2*(B*d-A*e)*(a+b*x)^2/e^2+_
1/3*B*(a+b*x)^3/(b*e)-(b*d-a*e)^2*(B*d-A*e)*log(d+e*x)/e^4
--E 101

--S 102 of 764
d0:=normalize(t0-D(r0,x))
--E 102

)clear all

--S 103 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^2
--E 103

--S 104 of 764
r0:=-b*(2*b*B*d-A*b*e-2*a*B*e)*x/e^3+1/2*b^2*B*x^2/e^2+(b*d-a*e)^2*_
(B*d-A*e)/(e^4*(d+e*x))+(b*d-a*e)*(3*b*B*d-2*A*b*e-a*B*e)*log(d+e*x)/e^4
--E 104

--S 105 of 764
d0:=normalize(t0-D(r0,x))
--E 105

)clear all

--S 106 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^3
--E 106

--S 107 of 764
r0:=b^2*B*x/e^3+1/2*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^2)-(b*d-a*e)*_

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(3*b*B*d-2*A*b*e-a*B*e)/(e^4*(d+e*x))-b*(3*b*B*d-A*b*e-2*a*B*e)*_
log(d+e*x)/e^4
--E 107

--S 108 of 764
d0:=normalize(t0-D(r0,x))
--E 108

)clear all

--S 109 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^4
--E 109

--S 110 of 764
r0:=-1/3*(B*d-A*e)*(a+b*x)^3/(e*(b*d-a*e)*(d+e*x)^3)-1/2*B*(b*d-a*e)^2/_
(e^4*(d+e*x)^2)+2*b*B*(b*d-a*e)/(e^4*(d+e*x))+b^2*B*log(d+e*x)/e^4
--E 110

--S 111 of 764
d0:=normalize(t0-D(r0,x))
--E 111

)clear all

--S 112 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^5
--E 112

--S 113 of 764
r0:=-1/4*(B*d-A*e)*(a+b*x)^3/(e*(b*d-a*e)*(d+e*x)^4)+1/12*(3*b*B*d+A*b*e-_
4*a*B*e)*(a+b*x)^3/(e*(b*d-a*e)^2*(d+e*x)^3)
--E 113

--S 114 of 764
d0:=normalize(t0-D(r0,x))
--E 114

)clear all

--S 115 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^6
--E 115

--S 116 of 764
r0:=1/5*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^5)-1/4*(b*d-a*e)*(3*b*B*d-2*A*b*e-_
a*B*e)/(e^4*(d+e*x)^4)+1/3*b*(3*b*B*d-A*b*e-2*a*B*e)/(e^4*(d+e*x)^3)-_
1/2*b^2*B/(e^4*(d+e*x)^2)
--E 116

```

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--S 117 of 764
d0:=normalize(t0-D(r0,x))
--E 117

)clear all

--S 118 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^7
--E 118

--S 119 of 764
r0:=1/6*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^6)-1/5*(b*d-a*e)*(3*b*B*d-2*A*b*e-
a*B*e)/(e^4*(d+e*x)^5)+1/4*b*(3*b*B*d-A*b*e-2*a*B*e)/(e^4*(d+e*x)^4)-
1/3*b^2*B/(e^4*(d+e*x)^3)
--E 119

--S 120 of 764
d0:=normalize(t0-D(r0,x))
--E 120

)clear all

--S 121 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^8
--E 121

--S 122 of 764
r0:=1/7*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^7)-1/6*(b*d-a*e)*(3*b*B*d-2*A*b*e-
a*B*e)/(e^4*(d+e*x)^6)+1/5*b*(3*b*B*d-A*b*e-2*a*B*e)/(e^4*(d+e*x)^5)-
1/4*b^2*B/(e^4*(d+e*x)^4)
--E 122

--S 123 of 764
d0:=normalize(t0-D(r0,x))
--E 123

)clear all

--S 124 of 764
t0:=(A+B*x)*(d+e*x)^m*(a^2+2*a*b*x+b^2*x^2)^2
--E 124

--S 125 of 764
r0:=- (b*d-a*e)^4*(B*d-A*e)*(d+e*x)^(1+m)/(e^6*(1+m))+ (b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)*(d+e*x)^(2+m)/(e^6*(2+m))-2*b*(b*d-a*e)^2*(5*b*B*d-
3*A*b*e-2*a*B*e)*(d+e*x)^(3+m)/(e^6*(3+m))+2*b^2*(b*d-a*e)*(5*b*B*d-
2*A*b*e-3*a*B*e)*(d+e*x)^(4+m)/(e^6*(4+m))-b^3*(5*b*B*d-A*b*e-4*a*B*e)*
(d+e*x)^(5+m)/(e^6*(5+m))+b^4*B*(d+e*x)^(6+m)/(e^6*(6+m))
--E 125

```

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--S 126 of 764
d0:=normalize(t0-D(r0,x))
--E 126

)clear all

--S 127 of 764
t0:=(A+B*x)*(d+e*x)^7*(a^2+2*a*b*x+b^2*x^2)^2
--E 127

--S 128 of 764
r0:=-1/8*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^8/e^6+1/9*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)*(d+e*x)^9/e^6-1/5*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)*(d+e*x)^10/e^6+2/11*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*
(d+e*x)^11/e^6-1/12*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^12/e^6+
1/13*b^4*B*(d+e*x)^13/e^6
--E 128

--S 129 of 764
d0:=normalize(t0-D(r0,x))
--E 129

)clear all

--S 130 of 764
t0:=(A+B*x)*(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^2
--E 130

--S 131 of 764
r0:=-1/7*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^7/e^6+1/8*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)*(d+e*x)^8/e^6-2/9*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)*(d+e*x)^9/e^6+1/5*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*
(d+e*x)^10/e^6-1/11*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^11/e^6+
1/12*b^4*B*(d+e*x)^12/e^6
--E 131

--S 132 of 764
d0:=normalize(t0-D(r0,x))
--E 132

)clear all

--S 133 of 764
t0:=(A+B*x)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)^2
--E 133

--S 134 of 764
r0:=-1/6*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^6/e^6+1/7*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)*(d+e*x)^7/e^6-1/4*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)*(d+e*x)^8/e^6+2/9*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*

```

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      (d+e*x)^9/e^6-1/10*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^10/e^6+_
      1/11*b^4*B*(d+e*x)^11/e^6
--E 134

--S 135 of 764
d0:=normalize(t0-D(r0,x))
--E 135

)clear all

--S 136 of 764
t0:=(A+B*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^2
--E 136

--S 137 of 764
r0:=1/5*(A*b-a*B)*(b*d-a*e)^4*(a+b*x)^5/b^6+1/6*(b*d-a*e)^3*(b*B*d+4*A*b*e-_
5*a*B*e)*(a+b*x)^6/b^6+2/7*e*(b*d-a*e)^2*(2*b*B*d+3*A*b*e-5*a*B*e)*_
(a+b*x)^7/b^6+1/4*e^2*(b*d-a*e)*(3*b*B*d+2*A*b*e-5*a*B*e)*(a+b*x)^8/_
b^6+1/9*e^3*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)^9/b^6+1/10*B*e^4*_
(a+b*x)^10/b^6
--E 137

--S 138 of 764
d0:=normalize(t0-D(r0,x))
--E 138

)clear all

--S 139 of 764
t0:=(A+B*x)*(d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^2
--E 139

--S 140 of 764
r0:=1/5*(A*b-a*B)*(b*d-a*e)^3*(a+b*x)^5/b^5+1/6*(b*d-a*e)^2*(b*B*d+3*A*b*e-_
4*a*B*e)*(a+b*x)^6/b^5+3/7*e*(b*d-a*e)*(b*B*d+A*b*e-2*a*B*e)*_
(a+b*x)^7/b^5+1/8*e^2*(3*b*B*d+A*b*e-4*a*B*e)*(a+b*x)^8/b^5+_
1/9*B*e^3*(a+b*x)^9/b^5
--E 140

--S 141 of 764
d0:=normalize(t0-D(r0,x))
--E 141

)clear all

--S 142 of 764
t0:=(A+B*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^2
--E 142

--S 143 of 764

```



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r0:=1/5*(A*b-a*B)*(b*d-a*e)^2*(a+b*x)^5/b^4+1/6*(b*d-a*e)*(b*B*d+2*A*b*e-
3*a*B*e)*(a+b*x)^6/b^4+1/7*e*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)^7/b^4+_
1/8*B*e^2*(a+b*x)^8/b^4
--E 143

--S 144 of 764
d0:=normalize(t0-D(r0,x))
--E 144

)clear all

--S 145 of 764
t0:=(A+B*x)*(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^2
--E 145

--S 146 of 764
r0:=1/5*(A*b-a*B)*(b*d-a*e)*(a+b*x)^5/b^3+1/6*(b*B*d+A*b*e-2*a*B*e)*_
(a+b*x)^6/b^3+1/7*B*e*(a+b*x)^7/b^3
--E 146

--S 147 of 764
d0:=normalize(t0-D(r0,x))
--E 147

)clear all

--S 148 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2
--E 148

--S 149 of 764
r0:=1/5*(A*b-a*B)*(a+b*x)^5/b^2+1/6*B*(a+b*x)^6/b^2
--E 149

--S 150 of 764
d0:=normalize(t0-D(r0,x))
--E 150

)clear all

--S 151 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)
--E 151

--S 152 of 764
r0:=b*(b*d-a*e)^3*(B*d-A*e)*x/e^5-1/2*(b*d-a*e)^2*(B*d-A*e)*(a+b*x)^2/e^4+_
1/3*(b*d-a*e)*(B*d-A*e)*(a+b*x)^3/e^3-1/4*(B*d-A*e)*(a+b*x)^4/e^2+_
1/5*B*(a+b*x)^5/(b*e)-(b*d-a*e)^4*(B*d-A*e)*log(d+e*x)/e^6
--E 152

```

```

--S 153 of 764
d0:=normalize(t0-D(r0,x))
--E 153

)clear all

--S 154 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^2
--E 154

--S 155 of 764
r0:=-2*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-2*a*B*e)*x/e^5+(b*d-a*e)^4*_
(B*d-A*e)/(e^6*(d+e*x))+b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*_
(d+e*x)^2/e^6-1/3*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^3/e^6+1/4*b^4*_
B*(d+e*x)^4/e^6+(b*d-a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)*log(d+e*x)/e^6
--E 155

--S 156 of 764
d0:=normalize(t0-D(r0,x))
--E 156

)clear all

--S 157 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^3
--E 157

--S 158 of 764
r0:=2*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*x/e^5+1/2*(b*d-a*e)^4*_
(B*d-A*e)/(e^6*(d+e*x)^2)-(b*d-a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)/(e^6*_
(d+e*x))-1/2*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^2/e^6+1/3*b^4*B*_
(d+e*x)^3/e^6-2*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-2*a*B*e)*log(d+e*x)/e^6
--E 158

--S 159 of 764
d0:=normalize(t0-D(r0,x))
--E 159

)clear all

--S 160 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^4
--E 160

--S 161 of 764
r0:=-b^3*(4*b*B*d-A*b*e-4*a*B*e)*x/e^5+1/2*b^4*B*x^2/e^4+1/3*(b*d-a*e)^4*_
(B*d-A*e)/(e^6*(d+e*x)^3)-1/2*(b*d-a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)/_
(e^6*(d+e*x)^2)+2*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-2*a*B*e)/(e^6*(d+_
e*x))+2*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*log(d+e*x)/e^6
--E 161

```

```

--S 162 of 764
d0:=normalize(t0-D(r0,x))
--E 162

)clear all

--S 163 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^5
--E 163

--S 164 of 764
r0:=b^4*B*x/e^5+1/4*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^4)-1/3*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)/(e^6*(d+e*x)^3)+b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-_
2*a*B*e)/(e^6*(d+e*x)^2)-2*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)/_
(e^6*(d+e*x))-b^3*(5*b*B*d-A*b*e-4*a*B*e)*log(d+e*x)/e^6
--E 164

--S 165 of 764
d0:=normalize(t0-D(r0,x))
--E 165

)clear all

--S 166 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^6
--E 166

--S 167 of 764
r0:=-1/5*(B*d-A*e)*(a+b*x)^5/(e*(b*d-a*e)*(d+e*x)^5)-1/4*B*(b*d-a*e)^4/_
(e^6*(d+e*x)^4)+4/3*b*B*(b*d-a*e)^3/(e^6*(d+e*x)^3)-3*b^2*B*(b*d-_
a*e)^2/(e^6*(d+e*x)^2)+4*b^3*B*(b*d-a*e)/(e^6*(d+e*x))+b^4*B*_
log(d+e*x)/e^6
--E 167

--S 168 of 764
d0:=normalize(t0-D(r0,x))
--E 168

)clear all

--S 169 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^7
--E 169

--S 170 of 764
r0:=-1/6*(B*d-A*e)*(a+b*x)^5/(e*(b*d-a*e)*(d+e*x)^6)+1/30*(5*b*B*d+A*b*e-_
6*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^2*(d+e*x)^5)
--E 170

```

```

--S 171 of 764
d0:=normalize(t0-D(r0,x))
--E 171

)clear all

--S 172 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^8
--E 172

--S 173 of 764
r0:=-1/7*(B*d-A*e)*(a+b*x)^5/(e*(b*d-a*e)*(d+e*x)^7)+1/42*(5*b*B*d+2*A*b*e-
7*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^2*(d+e*x)^6)+1/210*b*(5*b*B*d+2*A*b*e-
7*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^3*(d+e*x)^5)
--E 173

--S 174 of 764
d0:=normalize(t0-D(r0,x))
--E 174

)clear all

--S 175 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^9
--E 175

--S 176 of 764
r0:=-1/8*(B*d-A*e)*(a+b*x)^5/(e*(b*d-a*e)*(d+e*x)^8)+1/56*(5*b*B*d+3*A*b*e-
8*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^2*(d+e*x)^7)+1/168*b*(5*b*B*d+3*A*b*e-
8*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^3*(d+e*x)^6)+1/840*b^2*(5*b*B*d+
3*A*b*e-8*a*B*e)*(a+b*x)^5/(e*(b*d-a*e)^4*(d+e*x)^5)
--E 176

--S 177 of 764
d0:=normalize(t0-D(r0,x))
--E 177

)clear all

--S 178 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^10
--E 178

--S 179 of 764
r0:=1/9*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^9)-1/8*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)/(e^6*(d+e*x)^8)+2/7*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)/(e^6*(d+e*x)^7)-1/3*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)/
(e^6*(d+e*x)^6)+1/5*b^3*(5*b*B*d-A*b*e-4*a*B*e)/(e^6*(d+e*x)^5)-
1/4*b^4*B/(e^6*(d+e*x)^4)
--E 179

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--S 180 of 764
d0:=normalize(t0-D(r0,x))
--E 180

)clear all

--S 181 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^11
--E 181

--S 182 of 764
r0:=1/10*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^10)-1/9*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)/(e^6*(d+e*x)^9)+1/4*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)/(e^6*(d+e*x)^8)-2/7*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)/
(e^6*(d+e*x)^7)+1/6*b^3*(5*b*B*d-A*b*e-4*a*B*e)/(e^6*(d+e*x)^6)-
1/5*b^4*B/(e^6*(d+e*x)^5)
--E 182

--S 183 of 764
d0:=normalize(t0-D(r0,x))
--E 183

)clear all

--S 184 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^12
--E 184

--S 185 of 764
r0:=1/11*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^11)-1/10*(b*d-a*e)^3*(5*b*B*d-
4*A*b*e-a*B*e)/(e^6*(d+e*x)^10)+2/9*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-
2*a*B*e)/(e^6*(d+e*x)^9)-1/4*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)/
(e^6*(d+e*x)^8)+1/7*b^3*(5*b*B*d-A*b*e-4*a*B*e)/(e^6*(d+e*x)^7)-
1/6*b^4*B/(e^6*(d+e*x)^6)
--E 185

--S 186 of 764
d0:=normalize(t0-D(r0,x))
--E 186

)clear all

--S 187 of 764
t0:=(A+B*x)*(d+e*x)^4/(a^2+2*a*b*x+b^2*x^2)
--E 187

--S 188 of 764
r0:=2*e*(b*d-a*e)^2*(2*b*B*d+3*A*b*e-5*a*B*e)*x/b^5-(A*b-a*B)*(b*d-a*e)^4/_
(b^6*(a+b*x))+e^2*(b*d-a*e)*(3*b*B*d+2*A*b*e-5*a*B*e)*(a+b*x)^2/b^6+

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1/3*e^3*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)^3/b^6+1/4*B*e^4*(a+b*x)^4/b^6+_
(b*d-a*e)^3*(b*B*d+4*A*b*e-5*a*B*e)*log(a+b*x)/b^6
--E 188

--S 189 of 764
d0:=normalize(t0-D(r0,x))
--E 189

)clear all

--S 190 of 764
t0:=(A+B*x)*(d+e*x)^3/(a^2+2*a*b*x+b^2*x^2)
--E 190

--S 191 of 764
r0:=3*e*(b*d-a*e)*(b*B*d+A*b*e-2*a*B*e)*x/b^4-(A*b-a*B)*(b*d-a*e)^3/(b^5*_
(a+b*x))+1/2*e^2*(3*b*B*d+A*b*e-4*a*B*e)*(a+b*x)^2/b^5+1/3*B*e^3*_
(a+b*x)^3/b^5+(b*d-a*e)^2*(b*B*d+3*A*b*e-4*a*B*e)*log(a+b*x)/b^5
--E 191

--S 192 of 764
d0:=normalize(t0-D(r0,x))
--E 192

)clear all

--S 193 of 764
t0:=(A+B*x)*(d+e*x)^2/(a^2+2*a*b*x+b^2*x^2)
--E 193

--S 194 of 764
r0:=e*(2*b*B*d+A*b*e-2*a*B*e)*x/b^3+1/2*B*e^2*x^2/b^2-(A*b-a*B)*_
(b*d-a*e)^2/(b^4*(a+b*x))+(b*d-a*e)*(b*B*d+2*A*b*e-3*a*B*e)*log(a+b*x)/b^4
--E 194

--S 195 of 764
d0:=normalize(t0-D(r0,x))
--E 195

)clear all

--S 196 of 764
t0:=(A+B*x)*(d+e*x)/(a^2+2*a*b*x+b^2*x^2)
--E 196

--S 197 of 764
r0:=B*e*x/b^2-(A*b-a*B)*(b*d-a*e)/(b^3*(a+b*x))+(b*B*d+A*b*e-2*a*B*e)*_
log(a+b*x)/b^3
--E 197

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```

--S 198 of 764
d0:=normalize(t0-D(r0,x))
--E 198

)clear all

--S 199 of 764
t0:=(A+B*x)/(a^2+2*a*b*x+b^2*x^2)
--E 199

--S 200 of 764
r0:=(-A*b+a*B)/(b^2*(a+b*x))+B*log(a+b*x)/b^2
--E 200

--S 201 of 764
d0:=normalize(t0-D(r0,x))
--E 201

)clear all

--S 202 of 764
t0:=(A+B*x)/((d+e*x)*(a^2+2*a*b*x+b^2*x^2))
--E 202

--S 203 of 764
r0:=(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x))+(B*d-A*e)*log(a+b*x)/(b*d-a*e)^2-
(B*d-A*e)*log(d+e*x)/(b*d-a*e)^2
--E 203

--S 204 of 764
d0:=normalize(t0-D(r0,x))
--E 204

)clear all

--S 205 of 764
t0:=(A+B*x)/((d+e*x)^2*(a^2+2*a*b*x+b^2*x^2))
--E 205

--S 206 of 764
r0:=(-A*b+a*B)/((b*d-a*e)^2*(a+b*x))+(B*d-A*e)/((b*d-a*e)^2*(d+e*x))+
(b*B*d-2*A*b*e+a*B*e)*log(a+b*x)/(b*d-a*e)^3-(b*B*d-2*A*b*e+a*B*e)*
log(d+e*x)/(b*d-a*e)^3
--E 206

--S 207 of 764
d0:=normalize(t0-D(r0,x))
--E 207

)clear all

```

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--S 208 of 764
t0:=(A+B*x)/((d+e*x)^3*(a^2+2*a*b*x+b^2*x^2))
--E 208

--S 209 of 764
r0:=-b*(A*b-a*B)/((b*d-a*e)^3*(a+b*x))+1/2*(B*d-A*e)/((b*d-a*e)^2*(d+e*x)^2)+
(b*B*d-2*A*b*e+a*B*e)/((b*d-a*e)^3*(d+e*x))+b*(b*B*d-3*A*b*e+2*a*B*e)*
log(a+b*x)/(b*d-a*e)^4-b*(b*B*d-3*A*b*e+2*a*B*e)*log(d+e*x)/(b*d-a*e)^4
--E 209

--S 210 of 764
d0:=normalize(t0-D(r0,x))
--E 210

)clear all

--S 211 of 764
t0:=(A+B*x)*(d+e*x)^4/(a^2+2*a*b*x+b^2*x^2)^2
--E 211

--S 212 of 764
r0:=e^3*(4*b*B*d+A*b*e-4*a*B*e)*x/b^5+1/2*B*e^4*x^2/b^4-1/3*(A*b-a*B)*
(b*d-a*e)^4/(b^6*(a+b*x)^3)-1/2*(b*d-a*e)^3*(b*B*d+4*A*b*e-5*a*B*e)/
(b^6*(a+b*x)^2)-2*e*(b*d-a*e)^2*(2*b*B*d+3*A*b*e-5*a*B*e)/(b^6*(a+b*x))+
2*e^2*(b*d-a*e)*(3*b*B*d+2*A*b*e-5*a*B*e)*log(a+b*x)/b^6
--E 212

--S 213 of 764
d0:=normalize(t0-D(r0,x))
--E 213

)clear all

--S 214 of 764
t0:=(A+B*x)*(d+e*x)^3/(a^2+2*a*b*x+b^2*x^2)^2
--E 214

--S 215 of 764
r0:=B*e^3*x/b^4-1/3*(A*b-a*B)*(b*d-a*e)^3/(b^5*(a+b*x)^3)-1/2*(b*d-a*e)^2*
(b*B*d+3*A*b*e-4*a*B*e)/(b^5*(a+b*x)^2)-3*e*(b*d-a*e)*(b*B*d+A*b*e-
2*a*B*e)/(b^5*(a+b*x))+e^2*(3*b*B*d+A*b*e-4*a*B*e)*log(a+b*x)/b^5
--E 215

--S 216 of 764
d0:=normalize(t0-D(r0,x))
--E 216

)clear all

```



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--S 217 of 764
t0:=(A+B*x)*(d+e*x)^2/(a^2+2*a*b*x+b^2*x^2)^2
--E 217

--S 218 of 764
r0:=-1/2*B*(b*d-a*e)^2/(b^4*(a+b*x)^2)-2*B*e*(b*d-a*e)/(b^4*(a+b*x))-
1/3*(A*b-a*B)*(d+e*x)^3/(b*(b*d-a*e)*(a+b*x)^3)+B*e^2*log(a+b*x)/b^4
--E 218

--S 219 of 764
d0:=normalize(t0-D(r0,x))
--E 219

)clear all

--S 220 of 764
t0:=(A+B*x)*(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^2
--E 220

--S 221 of 764
r0:=-1/3*(A*b-a*B)*(b*d-a*e)/(b^3*(a+b*x)^3)+1/2*(-b*B*d-A*b*e+2*a*B*e)/
(b^3*(a+b*x)^2)-B*e/(b^3*(a+b*x))
--E 221

--S 222 of 764
d0:=normalize(t0-D(r0,x))
--E 222

)clear all

--S 223 of 764
t0:=(A+B*x)/(a^2+2*a*b*x+b^2*x^2)^2
--E 223

--S 224 of 764
r0:=1/3*(-A*b+a*B)/(b^2*(a+b*x)^3)-1/2*B/(b^2*(a+b*x)^2)
--E 224

--S 225 of 764
d0:=normalize(t0-D(r0,x))
--E 225

)clear all

--S 226 of 764
t0:=(A+B*x)/((d+e*x)*(a^2+2*a*b*x+b^2*x^2)^2)
--E 226

--S 227 of 764
r0:=1/3*(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)^3)+1/2*(-B*d+A*e)/((b*d-a*e)^2*_

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      (a+b*x)^2)+e*(B*d-A*e)/((b*d-a*e)^3*(a+b*x))+e^2*(B*d-A*e)*log(a+b*x)/_
      (b*d-a*e)^4-e^2*(B*d-A*e)*log(d+e*x)/(b*d-a*e)^4
--E 227

--S 228 of 764
d0:=normalize(t0-D(r0,x))
--E 228

)clear all

--S 229 of 764
t0:=(A+B*x)/((d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^2)
--E 229

--S 230 of 764
r0:=1/3*(-A*b+a*B)/((b*d-a*e)^2*(a+b*x)^3)+1/2*(-b*B*d+2*A*b*e-a*B*e)/_
      ((b*d-a*e)^3*(a+b*x)^2)+e*(2*b*B*d-3*A*b*e+a*B*e)/((b*d-a*e)^4*(a+b*x))+_
      e^2*(B*d-A*e)/((b*d-a*e)^4*(d+e*x))+e^2*(3*b*B*d-4*A*b*e+a*B*e)*_
      log(a+b*x)/(b*d-a*e)^5-e^2*(3*b*B*d-4*A*b*e+a*B*e)*log(d+e*x)/(b*d-a*e)^5
--E 230

--S 231 of 764
d0:=normalize(t0-D(r0,x))
--E 231

)clear all

--S 232 of 764
t0:=(A+B*x)*(d+e*x)^m*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 232

--S 233 of 764
r0:=(A*b*e*(3+m)-B*(2*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+_
      b^2*x^2)/(b*e^2*(2+m)*(3+m))- (b*d-a*e)*(A*b*e*(3+m)-B*(2*b*d+_
      a*e*(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(1+m)*_
      (2+m)*(3+m)*(a+b*x))+B*(a+b*x)*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+_
      b^2*x^2)/(b*e*(3+m))
--E 233

--S 234 of 764
d0:=normalize(t0-D(r0,x))
--E 234

)clear all

--S 235 of 764
t0:=(A+B*x)*(d+e*x)^4*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 235

--S 236 of 764

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r0:=-1/42*(2*b*B*d-7*A*b*e+5*a*B*e)*(d+e*x)^5*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^2)+1/210*(b*d-a*e)*(2*b*B*d-7*A*b*e+5*a*B*e)*(d+e*x)^5*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+1/7*B*(a+b*x)*(d+e*x)^5*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e)
--E 236

--S 237 of 764
d0:=normalize(t0-D(r0,x))
--E 237

)clear all

--S 238 of 764
t0:=(A+B*x)*(d+e*x)^3*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 238

--S 239 of 764
r0:=-1/15*(b*B*d-3*A*b*e+2*a*B*e)*(d+e*x)^4*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^2)+1/60*(b*d-a*e)*(b*B*d-3*A*b*e+2*a*B*e)*(d+e*x)^4*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+1/6*B*(a+b*x)*(d+e*x)^4*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e)
--E 239

--S 240 of 764
d0:=normalize(t0-D(r0,x))
--E 240

)clear all

--S 241 of 764
t0:=(A+B*x)*(d+e*x)^2*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 241

--S 242 of 764
r0:=-1/20*(2*b*B*d-5*A*b*e+3*a*B*e)*(d+e*x)^3*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^2)+1/60*(b*d-a*e)*(2*b*B*d-5*A*b*e+3*a*B*e)*(d+e*x)^3*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+1/5*B*(a+b*x)*(d+e*x)^3*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e)
--E 242

--S 243 of 764
d0:=normalize(t0-D(r0,x))
--E 243

)clear all

--S 244 of 764
t0:=(A+B*x)*(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 244

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```

--S 245 of 764
r0:=1/6*(2*A*b*e-B*(b*d+a*e))*(a^2+2*a*b*x+b^2*x^2)^(3/2)/b^3+1/4*(b*d-
a*e)*(2*A*b*e-B*(b*d+a*e))*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b^3*e)+
1/4*B*(a+b*x)*(d+e*x)^2*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 245

--S 246 of 764
d0:=normalize(t0-D(r0,x))
--E 246

)clear all

--S 247 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 247

--S 248 of 764
r0:=1/3*B*(a^2+2*a*b*x+b^2*x^2)^(3/2)/b^2+1/2*(A*b-a*B)*(a+b*x)*sqrt(a^2+
2*a*b*x+b^2*x^2)/b^2
--E 248

--S 249 of 764
d0:=normalize(t0-D(r0,x))
--E 249

)clear all

--S 250 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)
--E 250

--S 251 of 764
r0:=(B*d-A*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^2+1/2*B*(a+b*x)*sqrt(a^2+
2*a*b*x+b^2*x^2)/(b*e)+(b*d-a*e)*(B*d-A*e)*log(d+e*x)*sqrt(a^2+
2*a*b*x+b^2*x^2)/(e^3*(a+b*x))
--E 251

--S 252 of 764
d0:=normalize(t0-D(r0,x))
--E 252

)clear all

--S 253 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^2
--E 253

--S 254 of 764
r0:=(2*b*B*d-A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^2*(b*d-a*e))-
(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*(d+e*x))-

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(2*b*B*d-A*b*e-a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x))
--E 254

--S 255 of 764
d0:=normalize(t0-D(r0,x))
--E 255

)clear all

--S 256 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^3
--E 256

--S 257 of 764
r0:=-1/2*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^2)+B*(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*_
(d+e*x))+b*B*log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x))
--E 257

--S 258 of 764
d0:=normalize(t0-D(r0,x))
--E 258

)clear all

--S 259 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^4
--E 259

--S 260 of 764
r0:=1/3*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/((b*d-a*e)^2*(d+e*x)^3)+_
1/2*(A*b-a*B)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/((b*d-a*e)^2*(d+e*x)^2)
--E 260

--S 261 of 764
d0:=normalize(t0-D(r0,x))
--E 261

)clear all

--S 262 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^5
--E 262

--S 263 of 764
r0:=-1/4*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^4)-1/4*(b*B*d+A*b*e-2*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^2*(b*d-a*e)*(d+e*x)^3)-1/12*(b*B*d+A*b*e-2*a*B*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*(d+e*x)^3)
--E 263

```

```

--S 264 of 764
d0:=normalize(t0-D(r0,x))
--E 264

)clear all

--S 265 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^6
--E 265

--S 266 of 764
r0:=-1/5*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^5)-1/15*(2*b*B*d+3*A*b*e-5*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^2*(b*d-a*e)*(d+e*x)^4)-1/60*(2*b*B*d+3*A*b*e-5*a*B*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*(d+e*x)^4)
--E 266

--S 267 of 764
d0:=normalize(t0-D(r0,x))
--E 267

)clear all

--S 268 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^7
--E 268

--S 269 of 764
r0:=-1/6*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^6)-1/12*(b*B*d+2*A*b*e-3*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^2*(b*d-a*e)*(d+e*x)^5)-1/60*(b*B*d+2*A*b*e-3*a*B*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*(d+e*x)^5)
--E 269

--S 270 of 764
d0:=normalize(t0-D(r0,x))
--E 270

)clear all

--S 271 of 764
t0:=(A+B*x)*(d+e*x)^m*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 271

--S 272 of 764
r0:=(A*b*e*(5+m)-B*(4*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^2*(4+m)*(5+m))+B*(a+b*x)*(d+e*x)^(1+m)*(a^2+_
2*a*b*x+b^2*x^2)^(3/2)/(b*e*(5+m))+6*(b*d-a*e)^2*(A*b*e*(5+m)-_
B*(4*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4*_

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(2+m)*(3+m)*(4+m)*(5+m))-6*(b*d-a*e)^3*(A*b*e*(5+m)-B*(4*b*d+a*e*_
(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5*(1+m)*(2+m)*_
(3+m)*(4+m)*(5+m)*(a+b*x))-3*(b*d-a*e)*(A*b*e*(5+m)-B*(4*b*d+a*e*_
(1+m)))*(a+b*x)*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*_
(3+m)*(4+m)*(5+m))
--E 272

--S 273 of 764
d0:=normalize(t0-D(r0,x))
--E 273

)clear all

--S 274 of 764
t0:=(A+B*x)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 274

--S 275 of 764
r0:=-1/45*(2*b*B*d-5*A*b*e+3*a*B*e)*(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(b*e^2)+1/10*B*(a+b*x)*(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e)-_
1/420*(b*d-a*e)^2*(2*b*B*d-5*A*b*e+3*a*B*e)*(d+e*x)^6*sqrt(a^2+2*a*b*_
x+b^2*x^2)/(b*e^4)+1/2520*(b*d-a*e)^3*(2*b*B*d-5*A*b*e+3*a*B*e)*_
(d+e*x)^6*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5*(a+b*x))+1/120*(b*d-a*e)*_
(2*b*B*d-5*A*b*e+3*a*B*e)*(a+b*x)*(d+e*x)^6*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^3)
--E 275

--S 276 of 764
d0:=normalize(t0-D(r0,x))
--E 276

)clear all

--S 277 of 764
t0:=(A+B*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 277

--S 278 of 764
r0:=-1/72*(4*b*B*d-9*A*b*e+5*a*B*e)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(b*e^2)+1/9*B*(a+b*x)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e)-_
1/504*(b*d-a*e)^2*(4*b*B*d-9*A*b*e+5*a*B*e)*(d+e*x)^5*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e^4)+1/2520*(b*d-a*e)^3*(4*b*B*d-9*A*b*e+5*a*B*e)*_
(d+e*x)^5*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5*(a+b*x))+1/168*(b*d-a*e)*_
(4*b*B*d-9*A*b*e+5*a*B*e)*(a+b*x)*(d+e*x)^5*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^3)
--E 278

--S 279 of 764
d0:=normalize(t0-D(r0,x))
--E 279

```

```

)clear all

--S 280 of 764
t0:=(A+B*x)*(d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 280

--S 281 of 764
r0:=1/14*(2*A*b*e-B*(b*d+a*e))*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(b*e^2)+1/8*B*(a+b*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e)+_
1/70*(b*d-a*e)^2*(2*A*b*e-B*(b*d+a*e))*(d+e*x)^4*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^4)-1/280*(b*d-a*e)^3*(2*A*b*e-B*(b*d+a*e))*(d+e*x)^4*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5*(a+b*x))-1/28*(b*d-a*e)*(2*A*b*e-_
B*(b*d+a*e))*(a+b*x)*(d+e*x)^4*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 281

--S 282 of 764
d0:=normalize(t0-D(r0,x))
--E 282

)clear all

--S 283 of 764
t0:=(A+B*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 283

--S 284 of 764
r0:=-1/84*(b*d-a*e)^2*(4*b*B*d-7*A*b*e+3*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b^4*e)-1/42*(4*b*B*d-7*A*b*e+3*a*B*e)*(a+b*x)*(d+_
e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b^2*e)+1/7*B*(a+b*x)*(d+e*x)^3*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e)-1/105*(b*d-a*e)*(4*b*B*d-7*A*b*e+_
3*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/b^4
--E 284

--S 285 of 764
d0:=normalize(t0-D(r0,x))
--E 285

)clear all

--S 286 of 764
t0:=(A+B*x)*(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 286

--S 287 of 764
r0:=-1/12*(b*d-a*e)*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b^3*e)+1/6*B*(a+b*x)*(d+e*x)^2*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e)-1/15*(2*b*B*d-3*A*b*e+a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/b^3
--E 287

```



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--S 288 of 764
d0:=normalize(t0-D(r0,x))
--E 288

)clear all

--S 289 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 289

--S 290 of 764
r0:=1/4*(A*b-a*B)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/b^2+_
1/5*B*(a^2+2*a*b*x+b^2*x^2)^(5/2)/b^2
--E 290

--S 291 of 764
d0:=normalize(t0-D(r0,x))
--E 291

)clear all

--S 292 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)
--E 292

--S 293 of 764
r0:=-1/3*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^2+1/4*B*(a+b*x)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e)-(b*d-a*e)^2*(B*d-A*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/e^4+1/2*(b*d-a*e)*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/e^3+(b*d-a*e)^3*(B*d-A*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^5*(a+b*x))
--E 293

--S 294 of 764
d0:=normalize(t0-D(r0,x))
--E 294

)clear all

--S 295 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^2
--E 295

--S 296 of 764
r0:=1/3*(4*b*B*d-3*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^2*(b*d-a*e))-_
(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*(d+e*x))+_
(b*d-a*e)*(4*b*B*d-3*A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^4-_
1/2*(4*b*B*d-3*A*b*e-a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^3-_
(b*d-a*e)^2*(4*b*B*d-3*A*b*e-a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+_

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      b^2*x^2)/(e^5*(a+b*x))
--E 296

--S 297 of 764
d0:=normalize(t0-D(r0,x))
--E 297

)clear all

--S 298 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^3
--E 298

--S 299 of 764
r0:=-1/2*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^2)-(2*b*B*d-A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^2*_
(b*d-a*e)*(d+e*x))-3*b*(2*b*B*d-A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*_
x^2)/e^4+3/2*b*(2*b*B*d-A*b*e-a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*_
x^2)/(e^3*(b*d-a*e))+3*b*(b*d-a*e)*(2*b*B*d-A*b*e-a*B*e)*log(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x))
--E 299

--S 300 of 764
d0:=normalize(t0-D(r0,x))
--E 300

)clear all

--S 301 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^4
--E 301

--S 302 of 764
r0:=-1/3*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^3)-1/6*(4*b*B*d-A*b*e-3*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(e^2*(b*d-a*e)*(d+e*x)^2)+b^2*(4*b*B*d-A*b*e-3*a*B*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^4*(b*d-a*e))-1/2*b*(4*b*B*d-A*b*e-3*a*B*e)*(a+b*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*(d+e*x))-b^2*(4*b*B*d-A*b*e-_
3*a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x))
--E 302

--S 303 of 764
d0:=normalize(t0-D(r0,x))
--E 303

)clear all

--S 304 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^5
--E 304

```

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--S 305 of 764
r0:=-1/4*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^4)-1/3*B*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^2*(d+e*x)^3)-_
1/2*b*B*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(d+e*x)^2)+b^2*B*_
(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x)*(d+e*x))+b^3*B*_
log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x))
--E 305

--S 306 of 764
d0:=normalize(t0-D(r0,x))
--E 306

)clear all

--S 307 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^6
--E 307

--S 308 of 764
r0:=1/4*(A*b-a*B)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/((b*d-a*e)^2*_
(d+e*x)^4)+1/5*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/((b*d-a*e)^2*_
(d+e*x)^5)
--E 308

--S 309 of 764
d0:=normalize(t0-D(r0,x))
--E 309

)clear all

--S 310 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^7
--E 310

--S 311 of 764
r0:=-1/6*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^6)+1/12*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e*(b*d-a*e)^2*(d+e*x)^5)+1/60*(2*b*B*d+A*b*e-_
3*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/((b*d-a*e)^3*(d+e*x)^5)
--E 311

--S 312 of 764
d0:=normalize(t0-D(r0,x))
--E 312

)clear all

--S 313 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^8

```

```

--E 313

--S 314 of 764
r0:=-1/7*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^7)+1/42*(4*b*B*d+3*A*b*e-7*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e*(b*d-a*e)^2*(d+e*x)^6)+1/84*b*(4*b*B*d+3*A*b*e-_
7*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)^3*_
(d+e*x)^5)+1/420*b*(4*b*B*d+3*A*b*e-7*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/((b*d-a*e)^4*(d+e*x)^5)
--E 314

--S 315 of 764
d0:=normalize(t0-D(r0,x))
--E 315

)clear all

--S 316 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^9
--E 316

--S 317 of 764
r0:=-1/8*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^8)-1/14*(b*B*d+A*b*e-2*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(e^2*(b*d-a*e)*(d+e*x)^7)-1/28*b*(b*B*d+A*b*e-2*a*B*e)*(a+b*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*(d+e*x)^6)-1/56*b^2*_
(b*B*d+A*b*e-2*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^4*(b*d-a*e)*_
(d+e*x)^5)-1/280*b^2*(b*B*d+A*b*e-2*a*B*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^5*(a+b*x)*(d+e*x)^5)
--E 317

--S 318 of 764
d0:=normalize(t0-D(r0,x))
--E 318

)clear all

--S 319 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^10
--E 319

--S 320 of 764
r0:=-1/9*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^9)-1/72*(4*b*B*d+5*A*b*e-9*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^2*(b*d-a*e)*(d+e*x)^8)-1/168*b*(4*b*B*d+5*A*b*e-_
9*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*(d+e*x)^7)-_
1/420*b^2*(4*b*B*d+5*A*b*e-9*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^4*(b*d-a*e)*(d+e*x)^6)-1/2520*b^2*(4*b*B*d+5*A*b*e-9*a*B*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x)*(d+e*x)^6)
--E 320

```

```
--S 321 of 764
d0:=normalize(t0-D(r0,x))
--E 321
```

```
)clear all
```

```
--S 322 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^11
--E 322
```

```
--S 323 of 764
r0:=-1/10*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^10)-1/45*(2*b*B*d+3*A*b*e-5*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^2*(b*d-a*e)*(d+e*x)^9)-1/120*b*(2*b*B*d+3*A*b*e-_
5*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*(d+e*x)^8)-_
1/360*b^2*(2*b*B*d+3*A*b*e-5*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^4*(b*d-a*e)*(d+e*x)^7)-1/2520*b^2*(2*b*B*d+3*A*b*e-5*a*B*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x)*(d+e*x)^7)
--E 323
```

```
--S 324 of 764
d0:=normalize(t0-D(r0,x))
--E 324
```

```
)clear all
```

```
--S 325 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^12
--E 325
```

```
--S 326 of 764
r0:=-1/11*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^11)-1/110*(4*b*B*d+7*A*b*e-11*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^2*(b*d-a*e)*(d+e*x)^10)-1/330*b*(4*b*B*d+7*A*b*e-_
11*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*(d+e*x)^9)-_
1/1155*b^2*(4*b*B*d+7*A*b*e-11*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^4*(b*d-a*e)*(d+e*x)^8)-1/9240*b^2*(4*b*B*d+7*A*b*e-11*a*B*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x)*(d+e*x)^8)
--E 326
```

```
--S 327 of 764
d0:=normalize(t0-D(r0,x))
--E 327
```

```
)clear all
```

```
--S 328 of 764
t0:=(A+B*x)*(d+e*x)^m*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 328
```

```

--S 329 of 764
r0:=20*(b*d-a*e)^2*(A*b*e*(7+m)-B*(6*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^4*(4+m)*(5+m)*(6+m)*(7+m))-_
5*(b*d-a*e)*(A*b*e*(7+m)-B*(6*b*d+a*e*(1+m)))*(a+b*x)*(d+e*x)^(1+m)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3*(5+m)*(6+m)*(7+m))+ (A*b*e*(7+m)-_
B*(6*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/_
(b*e^2*(6+m)*(7+m))+B*(a+b*x)*(d+e*x)^(1+m)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e*(7+m))+120*(b*d-a*e)^4*(A*b*e*(7+m)-B*(6*b*d+_
a*e*(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6*_
(2+m)*(3+m)*(4+m)*(5+m)*(6+m)*(7+m))-120*(b*d-a*e)^5*(A*b*e*(7+m)-_
B*(6*b*d+a*e*(1+m)))*(d+e*x)^(1+m)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^7*(1+m)*(2+m)*(3+m)*(4+m)*(5+m)*(6+m)*(7+m)*(a+b*x))-60*(b*d-_
a*e)^3*(A*b*e*(7+m)-B*(6*b*d+a*e*(1+m)))*(a+b*x)*(d+e*x)^(1+m)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5*(3+m)*(4+m)*(5+m)*(6+m)*(7+m))
--E 329

--S 330 of 764
d0:=normalize(t0-D(r0,x))
--E 330

)clear all

--S 331 of 764
t0:=(A+B*x)*(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 331

--S 332 of 764
r0:=-1/858*(b*d-a*e)^2*(6*b*B*d-13*A*b*e+7*a*B*e)*(d+e*x)^7*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^4)+5/1716*(b*d-a*e)*(6*b*B*d-13*A*b*e+7*a*B*e)*_
(a+b*x)*(d+e*x)^7*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3)-1/156*(6*b*B*d-_
13*A*b*e+7*a*B*e)*(d+e*x)^7*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e^2)+_
1/13*B*(a+b*x)*(d+e*x)^7*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-_
1/10296*(b*d-a*e)^4*(6*b*B*d-13*A*b*e+7*a*B*e)*(d+e*x)^7*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(b*e^6)+1/72072*(b*d-a*e)^5*(6*b*B*d-13*A*b*e+_
7*a*B*e)*(d+e*x)^7*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^7*(a+b*x))+_
1/2574*(b*d-a*e)^3*(6*b*B*d-13*A*b*e+7*a*B*e)*(a+b*x)*(d+e*x)^7*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5)
--E 332

--S 333 of 764
d0:=normalize(t0-D(r0,x))
--E 333

)clear all

--S 334 of 764
t0:=(A+B*x)*(d+e*x)^5*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 334

```

```

--S 335 of 764
r0:=1/99*(b*d-a*e)^2*(2*A*b*e-B*(b*d+a*e))*(d+e*x)^6*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^4)-1/44*(b*d-a*e)*(2*A*b*e-B*(b*d+a*e))*(a+b*x)*_
(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3)+1/22*(2*A*b*e-B*(b*d+_
a*e))*(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e^2)+1/12*B*(a+b*x)*_
(d+e*x)^6*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)+1/924*(b*d-a*e)^4*(2*A*b*e-_
B*(b*d+a*e))*(d+e*x)^6*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)-_
1/5544*(b*d-a*e)^5*(2*A*b*e-B*(b*d+a*e))*(d+e*x)^6*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^7*(a+b*x))-1/264*(b*d-a*e)^3*(2*A*b*e-B*(b*d+a*e))*_
(a+b*x)*(d+e*x)^6*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5)
--E 335

--S 336 of 764
d0:=normalize(t0-D(r0,x))
--E 336

)clear all

--S 337 of 764
t0:=(A+B*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 337

--S 338 of 764
r0:=-1/1980*(b*d-a*e)^4*(6*b*B*d-11*A*b*e+5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b^6*e)-1/660*(b*d-a*e)^2*(6*b*B*d-11*A*b*e+5*a*B*e)*_
(a+b*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b^4*e)-2/495*(b*d-a*e)*_
(6*b*B*d-11*A*b*e+5*a*B*e)*(a+b*x)*(d+e*x)^3*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b^3*e)-1/110*(6*b*B*d-11*A*b*e+5*a*B*e)*(a+b*x)*_
(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b^2*e)+1/11*B*(a+b*x)*(d+_
e*x)^5*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-1/2310*(b*d-a*e)^3*(6*b*B*d-_
11*A*b*e+5*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(7/2)/b^6
--E 338

--S 339 of 764
d0:=normalize(t0-D(r0,x))
--E 339

)clear all

--S 340 of 764
t0:=(A+B*x)*(d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 340

--S 341 of 764
r0:=-1/360*(b*d-a*e)^3*(3*b*B*d-5*A*b*e+2*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b^5*e)-1/120*(b*d-a*e)*(3*b*B*d-5*A*b*e+2*a*B*e)*_
(a+b*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b^3*e)-1/45*(3*b*B*d-_
5*A*b*e+2*a*B*e)*(a+b*x)*(d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b^2*e)+_
1/10*B*(a+b*x)*(d+e*x)^4*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-_
1/420*(b*d-a*e)^2*(3*b*B*d-5*A*b*e+2*a*B*e)*(a^2+2*a*b*x+_

```

```

      b^2*x^2)^(7/2)/b^5
--E 341

--S 342 of 764
d0:=normalize(t0-D(r0,x))
--E 342

)clear all

--S 343 of 764
t0:=(A+B*x)*(d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 343

--S 344 of 764
r0:=-1/72*(b*d-a*e)^2*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(b^4*e)-1/24*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)*(d+_
      e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b^2*e)+1/9*B*(a+b*x)*(d+e*x)^3*_
      (a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-1/84*(b*d-a*e)*(2*b*B*d-3*A*b*e+_
      a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(7/2)/b^4
--E 344

--S 345 of 764
d0:=normalize(t0-D(r0,x))
--E 345

)clear all

--S 346 of 764
t0:=(A+B*x)*(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 346

--S 347 of 764
r0:=-1/24*(b*d-a*e)*(3*b*B*d-4*A*b*e+a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(b^3*e)+1/8*B*(a+b*x)*(d+e*x)^2*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(b*e)-1/28*(3*b*B*d-4*A*b*e+a*B*e)*(a^2+2*a*b*x+_
      b^2*x^2)^(7/2)/b^3
--E 347

--S 348 of 764
d0:=normalize(t0-D(r0,x))
--E 348

)clear all

--S 349 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 349

--S 350 of 764
r0:=1/6*(A*b-a*B)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/b^2+_

```



```

1/7*B*(a^2+2*a*b*x+b^2*x^2)^(7/2)/b^2
--E 350

--S 351 of 764
d0:=normalize(t0-D(r0,x))
--E 351

)clear all

--S 352 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)
--E 352

--S 353 of 764
r0:=-1/3*(b*d-a*e)^2*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^4+_
1/4*(b*d-a*e)*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^3-_
1/5*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/e^2+1/6*B*(a+b*x)*_
(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-(b*d-a*e)^4*(B*d-A*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/e^6+1/2*(b*d-a*e)^3*(B*d-A*e)*(a+b*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/e^5+(b*d-a*e)^5*(B*d-A*e)*log(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))
--E 353

--S 354 of 764
d0:=normalize(t0-D(r0,x))
--E 354

)clear all

--S 355 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^2
--E 355

--S 356 of 764
r0:=1/3*(b*d-a*e)*(6*b*B*d-5*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^4-_
1/4*(6*b*B*d-5*A*b*e-a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^3+_
1/5*(6*b*B*d-5*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e^2*(b*d-a*e))-_
(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*(d+e*x))+_
(b*d-a*e)^3*(6*b*B*d-5*A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^6-_
1/2*(b*d-a*e)^2*(6*b*B*d-5*A*b*e-a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/e^5-(b*d-a*e)^4*(6*b*B*d-5*A*b*e-a*B*e)*log(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))
--E 356

--S 357 of 764
d0:=normalize(t0-D(r0,x))
--E 357

)clear all

```

```

--S 358 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^3
--E 358

--S 359 of 764
r0:=-5/3*b*(3*b*B*d-2*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/e^4+_
5/4*b*(3*b*B*d-2*A*b*e-a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(e^3*(b*d-a*e))-1/2*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/_
(e*(b*d-a*e)*(d+e*x)^2)-(3*b*B*d-2*A*b*e-a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(e^2*(b*d-a*e)*(d+e*x))-5*b*(b*d-a*e)^2*(3*b*B*d-_
2*A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^6+5/2*b*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^5+5*b*_
(b*d-a*e)^3*(3*b*B*d-2*A*b*e-a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^7*(a+b*x))
--E 359

--S 360 of 764
d0:=normalize(t0-D(r0,x))
--E 360

)clear all

--S 361 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^4
--E 361

--S 362 of 764
r0:=10/3*b^2*(2*b*B*d-A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-_
a*e))-5/2*b*(2*b*B*d-A*b*e-a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^3*(b*d-a*e)*(d+e*x))-1/3*(B*d-A*e)*(a+b*x)*(a^2+_
2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*(d+e*x)^3)-1/2*(2*b*B*d-A*b*e-_
a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e^2*(b*d-a*e)*(d+e*x)^2)+_
10*b^2*(b*d-a*e)*(2*b*B*d-A*b*e-a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^6-_
5*b^2*(2*b*B*d-A*b*e-a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^5-_
10*b^2*(b*d-a*e)^2*(2*b*B*d-A*b*e-a*B*e)*log(d+e*x)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^7*(a+b*x))
--E 362

--S 363 of 764
d0:=normalize(t0-D(r0,x))
--E 363

)clear all

--S 364 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^5
--E 364

--S 365 of 764
r0:=-5/12*b*(3*b*B*d-A*b*e-2*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_

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b^2*x^2)^(3/2)/(e^3*(b*d-a*e)*(d+e*x)^2)-5/3*b^2*(3*b*B*d-A*b*e-
2*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-a*e)*(d+e*x))-
1/4*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*
(d+e*x)^4)-1/6*(3*b*B*d-A*b*e-2*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/
(e^2*(b*d-a*e)*(d+e*x)^3)-5*b^3*(3*b*B*d-A*b*e-2*a*B*e)*sqrt(a^2+
2*a*b*x+b^2*x^2)/e^6+5/2*b^3*(3*b*B*d-A*b*e-2*a*B*e)*(a+b*x)*
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(b*d-a*e))+5*b^3*(b*d-a*e)*(3*b*B*d-
A*b*e-2*a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))
--E 365

--S 366 of 764
d0:=normalize(t0-D(r0,x))
--E 366

)clear all

--S 367 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^6
--E 367

--S 368 of 764
r0:=-1/12*b*(6*b*B*d-A*b*e-5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/
(e^3*(b*d-a*e)*(d+e*x)^3)-1/6*b^2*(6*b*B*d-A*b*e-5*a*B*e)*(a^2+
2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-a*e)*(d+e*x)^2)-1/5*(B*d-A*e)*
(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*(d+e*x)^5)-
1/20*(6*b*B*d-A*b*e-5*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e^2*
(b*d-a*e)*(d+e*x)^4)+b^4*(6*b*B*d-A*b*e-5*a*B*e)*sqrt(a^2+2*a*b*x+
b^2*x^2)/(e^6*(b*d-a*e))-1/2*b^3*(6*b*B*d-A*b*e-5*a*B*e)*(a+b*x)*
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(b*d-a*e)*(d+e*x))-b^4*(6*b*B*d-A*b*e-
5*a*B*e)*log(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))
--E 368

--S 369 of 764
d0:=normalize(t0-D(r0,x))
--E 369

)clear all

--S 370 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^7
--E 370

--S 371 of 764
r0:=-1/4*b*B*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^3*(d+e*x)^4)-
1/3*b^2*B*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^4*(d+e*x)^3)-1/6*(B*d-A*e)*
(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*(d+e*x)^6)-
1/5*B*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e^2*(d+e*x)^5)-1/2*b^3*B*(a+b*x)*
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(d+e*x)^2)+b^4*B*(b*d-a*e)*sqrt(a^2+
2*a*b*x+b^2*x^2)/(e^7*(a+b*x))*(d+e*x))+b^5*B*log(d+e*x)*sqrt(a^2+
2*a*b*x+b^2*x^2)/(e^7*(a+b*x))

```

```

--E 371

--S 372 of 764
d0:=normalize(t0-D(r0,x))
--E 372

)clear all

--S 373 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^8
--E 373

--S 374 of 764
r0:=1/6*(A*b-a*B)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/((b*d-a*e)^2*_
(d+e*x)^6)+1/7*(B*d-A*e)*(a^2+2*a*b*x+b^2*x^2)^(7/2)/((b*d-a*e)^2*_
(d+e*x)^7)
--E 374

--S 375 of 764
d0:=normalize(t0-D(r0,x))
--E 375

)clear all

--S 376 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^9
--E 376

--S 377 of 764
r0:=-1/8*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
(d+e*x)^8)+1/24*(3*b*B*d+A*b*e-4*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(e*(b*d-a*e)^2*(d+e*x)^7)+1/168*(3*b*B*d+A*b*e-_
4*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(7/2)/((b*d-a*e)^3*(d+e*x)^7)
--E 377

--S 378 of 764
d0:=normalize(t0-D(r0,x))
--E 378

)clear all

--S 379 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^10
--E 379

--S 380 of 764
r0:=-1/9*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
(d+e*x)^9)+1/24*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(e*(b*d-a*e)^2*(d+e*x)^8)+1/72*b*(2*b*B*d+A*b*e-_
3*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)^3*_

```

```

      (d+e*x)^7)+1/504*b*(2*b*B*d+A*b*e-3*a*B*e)*(a^2+2*a*b*x+_
      b^2*x^2)^(7/2)/((b*d-a*e)^4*(d+e*x)^7)
--E 380

--S 381 of 764
d0:=normalize(t0-D(r0,x))
--E 381

)clear all

--S 382 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^11
--E 382

--S 383 of 764
r0:=-1/10*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
      (d+e*x)^10)+1/45*(3*b*B*d+2*A*b*e-5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(e*(b*d-a*e)^2*(d+e*x)^9)+1/120*b*(3*b*B*d+2*A*b*e-_
      5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)^3*(d+_
      e*x)^8)+1/360*b^2*(3*b*B*d+2*A*b*e-5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(e*(b*d-a*e)^4*(d+e*x)^7)+1/2520*b^2*(3*b*B*d+2*A*b*e-_
      5*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(7/2)/((b*d-a*e)^5*(d+e*x)^7)
--E 383

--S 384 of 764
d0:=normalize(t0-D(r0,x))
--E 384

)clear all

--S 385 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^12
--E 385

--S 386 of 764
r0:=-1/198*b*(6*b*B*d+5*A*b*e-11*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
      b^2*x^2)^(3/2)/(e^3*(b*d-a*e)*(d+e*x)^9)-1/396*b^2*(6*b*B*d+5*A*b*e-_
      11*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-a*e)*(d+e*x)^8)-_
      1/11*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
      (d+e*x)^11)-1/110*(6*b*B*d+5*A*b*e-11*a*B*e)*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2)/(e^2*(b*d-a*e)*(d+e*x)^10)-1/924*b^3*(6*b*B*d+5*A*b*e-_
      11*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(b*d-a*e)*_
      (d+e*x)^7)-1/2310*b^4*(6*b*B*d+5*A*b*e-11*a*B*e)*sqrt(a^2+2*a*b*x+_
      b^2*x^2)/(e^6*(b*d-a*e)*(d+e*x)^6)-1/13860*b^4*(6*b*B*d+5*A*b*e-_
      11*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x)*(d+e*x)^6)
--E 386

--S 387 of 764
d0:=normalize(t0-D(r0,x))
--E 387

```

```

)clear all

--S 388 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^13
--E 388

--S 389 of 764
r0:=-1/44*b*(b*B*d+A*b*e-2*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(e^3*(b*d-a*e)*(d+e*x)^10)-1/99*b^2*(b*B*d+A*b*e-2*a*B*e)*(a^2+_
2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-a*e)*(d+e*x)^9)-1/12*(B*d-A*e)*_
(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*(d+e*x)^12)-_
1/22*(b*B*d+A*b*e-2*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e^2*(b*d-_
a*e)*(d+e*x)^11)-1/264*b^3*(b*B*d+A*b*e-2*a*B*e)*(a+b*x)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^5*(b*d-a*e)*(d+e*x)^8)-1/792*b^4*(b*B*d+A*b*e-_
2*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^6*(b*d-a*e)*(d+e*x)^7)-_
1/5544*b^4*(b*B*d+A*b*e-2*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*_
(a+b*x)*(d+e*x)^7)
--E 389

--S 390 of 764
d0:=normalize(t0-D(r0,x))
--E 390

)clear all

--S 391 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^14
--E 391

--S 392 of 764
r0:=-5/1716*b*(6*b*B*d+7*A*b*e-13*a*B*e)*(a+b*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^3*(b*d-a*e)*(d+e*x)^11)-1/858*b^2*(6*b*B*d+7*A*b*e-_
13*a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^4*(b*d-a*e)*(d+e*x)^10)-_
1/13*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
(d+e*x)^13)-1/156*(6*b*B*d+7*A*b*e-13*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(e^2*(b*d-a*e)*(d+e*x)^12)-1/2574*b^3*(6*b*B*d+_
7*A*b*e-13*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(b*d-_
a*e)*(d+e*x)^9)-1/9009*b^4*(6*b*B*d+7*A*b*e-13*a*B*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^6*(b*d-a*e)*(d+e*x)^8)-1/72072*b^4*(6*b*B*d+_
7*A*b*e-13*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x)*(d+e*x)^8)
--E 392

--S 393 of 764
d0:=normalize(t0-D(r0,x))
--E 393

)clear all

--S 394 of 764

```

```

t0:=(A+B*x)*(d+e*x)^3/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 394

--S 395 of 764
r0:=1/2*(A*b-a*B)*(b*d-a*e)*(a+b*x)*(d+e*x)^2/(b^3*sqrt(a^2+2*a*b*x+_
b^2*x^2))+1/3*(A*b-a*B)*(a+b*x)*(d+e*x)^3/(b^2*sqrt(a^2+2*a*b*x+_
b^2*x^2))+1/4*B*(a+b*x)*(d+e*x)^4/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))+
(A*b-a*B)*(b*d-a*e)^3*(a+b*x)*log(a+b*x)/(b^5*sqrt(a^2+2*a*b*x+_
b^2*x^2))+(A*b-a*B)*e*(b*d-a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2)/b^5
--E 395

--S 396 of 764
d0:=normalize(t0-D(r0,x))
--E 396

)clear all

--S 397 of 764
t0:=(A+B*x)*(d+e*x)^2/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 397

--S 398 of 764
r0:=1/2*(A*b-a*B)*(a+b*x)*(d+e*x)^2/(b^2*sqrt(a^2+2*a*b*x+b^2*x^2))+
1/3*B*(a+b*x)*(d+e*x)^3/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))+(A*b-a*B)*
(b*d-a*e)^2*(a+b*x)*log(a+b*x)/(b^4*sqrt(a^2+2*a*b*x+b^2*x^2))+
(A*b-a*B)*e*(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/b^4
--E 398

--S 399 of 764
d0:=normalize(t0-D(r0,x))
--E 399

)clear all

--S 400 of 764
t0:=(A+B*x)*(d+e*x)/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 400

--S 401 of 764
r0:=1/2*B*(a+b*x)*(d+e*x)^2/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))+(A*b-a*B)*
(b*d-a*e)*(a+b*x)*log(a+b*x)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))+(A*b-
a*B)*e*sqrt(a^2+2*a*b*x+b^2*x^2)/b^3
--E 401

--S 402 of 764
d0:=normalize(t0-D(r0,x))
--E 402

)clear all

```

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--S 403 of 764
t0:=(A+B*x)/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 403

--S 404 of 764
r0:=(A*b-a*B)*(a+b*x)*log(a+b*x)/(b^2*sqrt(a^2+2*a*b*x+b^2*x^2))+_
B*sqrt(a^2+2*a*b*x+b^2*x^2)/b^2
--E 404

--S 405 of 764
d0:=normalize(t0-D(r0,x))
--E 405

)clear all

--S 406 of 764
t0:=(A+B*x)/((d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 406

--S 407 of 764
r0:=(A*b-a*B)*(a+b*x)*log(a+b*x)/(b*(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2))+_
(B*d-A*e)*(a+b*x)*log(d+e*x)/(e*(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 407

--S 408 of 764
d0:=normalize(t0-D(r0,x))
--E 408

)clear all

--S 409 of 764
t0:=(A+B*x)/((d+e*x)^2*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 409

--S 410 of 764
r0:=- (B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))+_
(A*b-a*B)*(a+b*x)*log(a+b*x)/((b*d-a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2))-_
(A*b-a*B)*(a+b*x)*log(d+e*x)/((b*d-a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 410

--S 411 of 764
d0:=normalize(t0-D(r0,x))
--E 411

)clear all

--S 412 of 764
t0:=(A+B*x)/((d+e*x)^3*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 412

```



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--S 413 of 764
r0:=-1/2*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^2*sqrt(a^2+2*a*b*x+b^2*x^2))+
  b*(A*b-a*B)*(a+b*x)*log(a+b*x)/((b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))-
  b*(A*b-a*B)*(a+b*x)*log(d+e*x)/((b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))-
  (A*b-a*B)*e*sqrt(a^2+2*a*b*x+b^2*x^2)/((b*d-a*e)^3*(d+e*x))
--E 413

--S 414 of 764
d0:=normalize(t0-D(r0,x))
--E 414

)clear all

--S 415 of 764
t0:=(A+B*x)/(d+e*x)^4*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 415

--S 416 of 764
r0:=-1/3*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^3*sqrt(a^2+2*a*b*x+b^2*x^2))+
  1/2*(A*b-a*B)*(a+b*x)/((b*d-a*e)^2*(d+e*x)^2*sqrt(a^2+2*a*b*x+b^2*x^2))+
  b^2*(A*b-a*B)*(a+b*x)*log(a+b*x)/((b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))-
  b^2*(A*b-a*B)*(a+b*x)*log(d+e*x)/((b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))-
  b*(A*b-a*B)*e*sqrt(a^2+2*a*b*x+b^2*x^2)/((b*d-a*e)^4*(d+e*x))
--E 416

--S 417 of 764
d0:=normalize(t0-D(r0,x))
--E 417

)clear all

--S 418 of 764
t0:=(A+B*x)*(d+e*x)^4/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 418

--S 419 of 764
r0:=-1/6*(2*b*B*d+3*A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^4/(b^2*e*(a^2+2*a*b*x+_
  b^2*x^2)^(3/2))+1/3*B*(a+b*x)*(d+e*x)^5/(b*e*(a^2+2*a*b*x+_
  b^2*x^2)^(3/2))+e*(2*b*B*d+3*A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^2/(b^4*_
  sqrt(a^2+2*a*b*x+b^2*x^2))-2/3*(2*b*B*d+3*A*b*e-5*a*B*e)*(d+e*x)^3/_
  (b^3*sqrt(a^2+2*a*b*x+b^2*x^2))+2*e*(b*d-a*e)^2*(2*b*B*d+3*A*b*e-_
  5*a*B*e)*(a+b*x)*log(a+b*x)/(b^6*sqrt(a^2+2*a*b*x+b^2*x^2))+
  2*e^2*(b*d-a*e)*(2*b*B*d+3*A*b*e-5*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/b^6
--E 419

--S 420 of 764
d0:=normalize(t0-D(r0,x))
--E 420

)clear all

```

```

--S 421 of 764
t0:=(A+B*x)*(d+e*x)^3/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 421

--S 422 of 764
r0:=-1/2*(b*B*d+A*b*e-2*a*B*e)*(a+b*x)*(d+e*x)^3/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+1/2*B*(a+b*x)*(d+e*x)^4/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-3/2*(b*B*d+A*b*e-2*a*B*e)*(d+e*x)^2/(b^3*sqrt(a^2+_
2*a*b*x+b^2*x^2))+3*e*(b*d-a*e)*(b*B*d+A*b*e-2*a*B*e)*(a+b*x)*_
log(a+b*x)/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2))+3*e^2*(b*B*d+A*b*e-_
2*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/b^5
--E 422

--S 423 of 764
d0:=normalize(t0-D(r0,x))
--E 423

)clear all

--S 424 of 764
t0:=(A+B*x)*(d+e*x)^2/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 424

--S 425 of 764
r0:=-1/2*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*(d+e*x)^2/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+B*(a+b*x)*(d+e*x)^3/(b*e*(a^2+2*a*b*x+b^2*x^2)^(3/2))-_
(2*b*B*d+A*b*e-3*a*B*e)*(d+e*x)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))+_
e*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*log(a+b*x)/(b^4*sqrt(a^2+2*a*b*x+_
b^2*x^2))
--E 425

--S 426 of 764
d0:=normalize(t0-D(r0,x))
--E 426

)clear all

--S 427 of 764
t0:=(A+B*x)*(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 427

--S 428 of 764
r0:=-1/2*(A*b-a*B)*(a+b*x)*(d+e*x)^2/(b*(b*d-a*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-B*(b*d-a*e)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))+_
B*e*(a+b*x)*log(a+b*x)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2)), -1/2*B*(a+_
b*x)*(d+e*x)^2/(b*e*(a^2+2*a*b*x+b^2*x^2)^(3/2))+1/2*(B*d-A*e)*(a+_
b*x)*(d+e*x)^2/(e*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2))-B*(d+e*x)/_
(b^2*sqrt(a^2+2*a*b*x+b^2*x^2))+B*e*(a+b*x)*log(a+b*x)/(b^3*_
sqrt(a^2+2*a*b*x+b^2*x^2))

```

```

--E 428

--S 429 of 764
d0:=normalize(t0-D(r0,x))
--E 429

)clear all

--S 430 of 764
t0:=(A+B*x)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 430

--S 431 of 764
r0:=-1/2*(a+b*x)*(A+B*x)^2/((A*b-a*B)*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 431

--S 432 of 764
d0:=normalize(t0-D(r0,x))
--E 432

)clear all

--S 433 of 764
t0:=(A+B*x)/((d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 433

--S 434 of 764
r0:=-1/2*(A*b-a*B)*(a+b*x)/(b*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2))+_
(-B*d+A*e)/((b*d-a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2))-e*(B*d-A*e)*_
(a+b*x)*log(a+b*x)/((b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))+_
e*(B*d-A*e)*(a+b*x)*log(d+e*x)/((b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 434

--S 435 of 764
d0:=normalize(t0-D(r0,x))
--E 435

)clear all

--S 436 of 764
t0:=(A+B*x)/((d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 436

--S 437 of 764
r0:=1/2*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)/(e*(b*d-a*e)^2*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+(-2*b*B*d+3*A*b*e-a*B*e)/((b*d-a*e)^3*sqrt(a^2+_
2*a*b*x+b^2*x^2))-e*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)*log(a+b*x)/_
((b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))+e*(2*b*B*d-3*A*b*e+a*B*e)*_
(a+b*x)*log(d+e*x)/((b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))

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--E 437

--S 438 of 764
d0:=normalize(t0-D(r0,x))
--E 438

)clear all

--S 439 of 764
t0:=(A+B*x)/((d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 439

--S 440 of 764
r0:=-1/2*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^2*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+1/2*(b*B*d-2*A*b*e+a*B*e)*(a+b*x)/(e*(b*d-a*e)^2*_
(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2))-3/2*(b*B*d-2*A*b*e+a*B*e)/_
((b*d-a*e)^3*(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))-3*b*e*(b*B*d-_
2*A*b*e+a*B*e)*(a+b*x)*log(a+b*x)/((b*d-a*e)^5*sqrt(a^2+2*a*b*x+_
b^2*x^2))+3*b*e*(b*B*d-2*A*b*e+a*B*e)*(a+b*x)*log(d+e*x)/((b*d-a*e)^5*_
sqrt(a^2+2*a*b*x+b^2*x^2))+3*e^2*(b*B*d-2*A*b*e+a*B*e)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/((b*d-a*e)^5*(d+e*x))
--E 440

--S 441 of 764
d0:=normalize(t0-D(r0,x))
--E 441

)clear all

--S 442 of 764
t0:=(A+B*x)*(d+e*x)^5/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 442

--S 443 of 764
r0:=-1/4*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*(d+e*x)^5/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+1/2*B*(a+b*x)*(d+e*x)^6/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-5/6*e*(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*(d+e*x)^3/_
(b^4*(a^2+2*a*b*x+b^2*x^2)^(3/2))-5/12*(2*b*B*d+A*b*e-3*a*B*e)*_
(d+e*x)^4/(b^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))-5/2*e^2*(2*b*B*d+A*b*e-_
3*a*B*e)*(d+e*x)^2/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2))+5*e^3*(b*d-a*e)*_
(2*b*B*d+A*b*e-3*a*B*e)*(a+b*x)*log(a+b*x)/(b^7*sqrt(a^2+2*a*b*x+_
b^2*x^2))+5*e^4*(2*b*B*d+A*b*e-3*a*B*e)*sqrt(a^2+2*a*b*x+b^2*x^2)/b^7
--E 443

--S 444 of 764
d0:=normalize(t0-D(r0,x))
--E 444

)clear all

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--S 445 of 764
t0:=(A+B*x)*(d+e*x)^4/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 445

--S 446 of 764
r0:=-1/4*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^4/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+B*(a+b*x)*(d+e*x)^5/(b*e*(a^2+2*a*b*x+b^2*x^2)^(5/2))-
1/2*e*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^2/(b^4*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-1/3*(4*b*B*d+A*b*e-5*a*B*e)*(d+e*x)^3/(b^3*(a^2+_
2*a*b*x+b^2*x^2)^(3/2))-e^2*(4*b*B*d+A*b*e-5*a*B*e)*(d+e*x)/(b^5*_
sqrt(a^2+2*a*b*x+b^2*x^2))+e^3*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)*_
log(a+b*x)/(b^6*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 446

--S 447 of 764
d0:=normalize(t0-D(r0,x))
--E 447

)clear all

--S 448 of 764
t0:=(A+B*x)*(d+e*x)^3/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 448

--S 449 of 764
r0:=-1/4*(A*b-a*B)*(a+b*x)*(d+e*x)^4/(b*(b*d-a*e)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-1/2*B*e*(a+b*x)*(d+e*x)^2/(b^3*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-1/3*B*(d+e*x)^3/(b^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))-
B*e^2*(d+e*x)/(b^4*sqrt(a^2+2*a*b*x+b^2*x^2))+B*e^3*(a+b*x)*_
log(a+b*x)/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2)), -1/4*B*(a+b*x)*_
(d+e*x)^4/(b*e*(a^2+2*a*b*x+b^2*x^2)^(5/2))+1/4*(B*d-A*e)*(a+b*x)*_
(d+e*x)^4/(e*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2))-1/2*B*e*(a+b*x)*_
(d+e*x)^2/(b^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))-1/3*B*(d+e*x)^3/(b^2*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))-B*e^2*(d+e*x)/(b^4*sqrt(a^2+2*a*b*x+_
b^2*x^2))+B*e^3*(a+b*x)*log(a+b*x)/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 449

--S 450 of 764
d0:=normalize(t0-D(r0,x))
--E 450

)clear all

--S 451 of 764
t0:=(A+B*x)*(d+e*x)^2/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 451

--S 452 of 764
r0:=-1/4*(A*b-a*B)*(a+b*x)*(d+e*x)^4/((b*d-a*e)^2*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-1/3*(B*d-A*e)*(d+e*x)^3/((b*d-a*e)^2*(a^2+2*a*b*x+_

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      b^2*x^2)^(3/2))
--E 452

--S 453 of 764
d0:=normalize(t0-D(r0,x))
--E 453

)clear all

--S 454 of 764
t0:=(A+B*x)*(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 454

--S 455 of 764
r0:=1/4*(b*d-a*e)*(2*b*B*d-A*b*e-a*B*e)*(a+b*x)/(b^3*e*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2))-1/2*B*(a+b*x)*(d+e*x)^2/(b*e*(a^2+2*a*b*x+_
      b^2*x^2)^(5/2))+1/3*(2*b*B*d-A*b*e-a*B*e)/(b^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 455

--S 456 of 764
d0:=normalize(t0-D(r0,x))
--E 456

)clear all

--S 457 of 764
t0:=(A+B*x)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 457

--S 458 of 764
r0:=-1/4*(A*b-a*B)*(a+b*x)/(b^2*(a^2+2*a*b*x+b^2*x^2)^(5/2))-
      1/3*B/(b^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 458

--S 459 of 764
d0:=normalize(t0-D(r0,x))
--E 459

)clear all

--S 460 of 764
t0:=(A+B*x)/((d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2))
--E 460

--S 461 of 764
r0:=-1/4*(A*b-a*B)*(a+b*x)/(b*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2))+
      1/3*(-B*d+A*e)/((b*d-a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))+
      1/2*e*(B*d-A*e)*(a+b*x)/((b*d-a*e)^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))-
      e^2*(B*d-A*e)/((b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))-e^3*(B*d-A*e)*
      (a+b*x)*log(a+b*x)/((b*d-a*e)^5*sqrt(a^2+2*a*b*x+b^2*x^2))+e^3*_

```

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      (B*d-A*e)*(a+b*x)*log(d+e*x)/((b*d-a*e)^5*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 461

--S 462 of 764
d0:=normalize(t0-D(r0,x))
--E 462

)clear all

--S 463 of 764
t0:=(A+B*x)/((d+e*x)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2))
--E 463

--S 464 of 764
r0:=1/4*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)/(e*(b*d-a*e)^2*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)*(a^2+_
2*a*b*x+b^2*x^2)^(5/2))+1/3*(-4*b*B*d+5*A*b*e-a*B*e)/((b*d-a*e)^3*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))+1/2*e*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)/_
((b*d-a*e)^4*(a^2+2*a*b*x+b^2*x^2)^(3/2))-e^2*(4*b*B*d-5*A*b*e+_
a*B*e)/((b*d-a*e)^5*sqrt(a^2+2*a*b*x+b^2*x^2))-e^3*(4*b*B*d-_
5*A*b*e+a*B*e)*(a+b*x)*log(a+b*x)/((b*d-a*e)^6*sqrt(a^2+2*a*b*x+_
b^2*x^2))+e^3*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)*log(d+e*x)/_
((b*d-a*e)^6*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 464

--S 465 of 764
d0:=normalize(t0-D(r0,x))
--E 465

)clear all

--S 466 of 764
t0:=(A+B*x)/((d+e*x)^3*(a^2+2*a*b*x+b^2*x^2)^(5/2))
--E 466

--S 467 of 764
r0:=-1/2*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^2*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+1/4*(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)/(e*(b*d-a*e)^2*_
(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2))-5/12*(2*b*B*d-3*A*b*e+a*B*e)/_
((b*d-a*e)^3*(d+e*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2))+5/6*e*(2*b*B*d-_
3*A*b*e+a*B*e)*(a+b*x)/((b*d-a*e)^4*(d+e*x)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-5/2*e^2*(2*b*B*d-3*A*b*e+a*B*e)/((b*d-a*e)^5*(d+_
e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))-5*b*e^3*(2*b*B*d-3*A*b*e+a*B*e)*_
(a+b*x)*log(a+b*x)/((b*d-a*e)^7*sqrt(a^2+2*a*b*x+b^2*x^2))+5*b*e^3*_
(2*b*B*d-3*A*b*e+a*B*e)*(a+b*x)*log(d+e*x)/((b*d-a*e)^7*sqrt(a^2+_
2*a*b*x+b^2*x^2))+5*e^4*(2*b*B*d-3*A*b*e+a*B*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/((b*d-a*e)^7*(d+e*x))
--E 467

--S 468 of 764

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```

d0:=normalize(t0-D(r0,x))
--E 468

)clear all

--S 469 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)
--E 469

--S 470 of 764
r0:=-2/9*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^(9/2)/e^4+2/11*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)*(d+e*x)^(11/2)/e^4-2/13*b*(3*b*B*d-A*b*e-_
2*a*B*e)*(d+e*x)^(13/2)/e^4+2/15*b^2*B*(d+e*x)^(15/2)/e^4
--E 470

--S 471 of 764
d0:=normalize(t0-D(r0,x))
--E 471

)clear all

--S 472 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)
--E 472

--S 473 of 764
r0:=-2/7*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^(7/2)/e^4+2/9*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)*(d+e*x)^(9/2)/e^4-2/11*b*(3*b*B*d-A*b*e-_
2*a*B*e)*(d+e*x)^(11/2)/e^4+2/13*b^2*B*(d+e*x)^(13/2)/e^4
--E 473

--S 474 of 764
d0:=normalize(t0-D(r0,x))
--E 474

)clear all

--S 475 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)
--E 475

--S 476 of 764
r0:=-2/5*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^(5/2)/e^4+2/7*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)*(d+e*x)^(7/2)/e^4-2/9*b*(3*b*B*d-A*b*e-_
2*a*B*e)*(d+e*x)^(9/2)/e^4+2/11*b^2*B*(d+e*x)^(11/2)/e^4
--E 476

--S 477 of 764
d0:=normalize(t0-D(r0,x))
--E 477

```



```

)clear all

--S 478 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)*sqrt(d+e*x)
--E 478

--S 479 of 764
r0:=-2/3*(b*d-a*e)^2*(B*d-A*e)*(d+e*x)^(3/2)/e^4+2/5*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)*(d+e*x)^(5/2)/e^4-2/7*b*(3*b*B*d-A*b*e-_
2*a*B*e)*(d+e*x)^(7/2)/e^4+2/9*b^2*B*(d+e*x)^(9/2)/e^4
--E 479

--S 480 of 764
d0:=normalize(t0-D(r0,x))
--E 480

)clear all

--S 481 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/sqrt(d+e*x)
--E 481

--S 482 of 764
r0:=2/3*(b*d-a*e)*(3*b*B*d-2*A*b*e-a*B*e)*(d+e*x)^(3/2)/e^4-2/5*b*_
(3*b*B*d-A*b*e-2*a*B*e)*(d+e*x)^(5/2)/e^4+2/7*b^2*B*(d+e*x)^(7/2)/e^4-_
2*(b*d-a*e)^2*(B*d-A*e)*sqrt(d+e*x)/e^4
--E 482

--S 483 of 764
d0:=normalize(t0-D(r0,x))
--E 483

)clear all

--S 484 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(3/2)
--E 484

--S 485 of 764
r0:=-2/3*b*(3*b*B*d-A*b*e-2*a*B*e)*(d+e*x)^(3/2)/e^4+2/5*b^2*B*_
(d+e*x)^(5/2)/e^4+2*(b*d-a*e)^2*(B*d-A*e)/(e^4*sqrt(d+e*x))+_
2*(b*d-a*e)*(3*b*B*d-2*A*b*e-a*B*e)*sqrt(d+e*x)/e^4
--E 485

--S 486 of 764
d0:=normalize(t0-D(r0,x))
--E 486

)clear all

```

```

--S 487 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(5/2)
--E 487

--S 488 of 764
r0:=2/3*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^(3/2))+2/3*b^2*B*_
(d+e*x)^(3/2)/e^4-2*(b*d-a*e)*(3*b*B*d-2*A*b*e-a*B*e)/(e^4*_
sqrt(d+e*x))-2*b*(3*b*B*d-A*b*e-2*a*B*e)*sqrt(d+e*x)/e^4
--E 488

--S 489 of 764
d0:=normalize(t0-D(r0,x))
--E 489

)clear all

--S 490 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(7/2)
--E 490

--S 491 of 764
r0:=2/5*(b*d-a*e)^2*(B*d-A*e)/(e^4*(d+e*x)^(5/2))-2/3*(b*d-a*e)*_
(3*b*B*d-2*A*b*e-a*B*e)/(e^4*(d+e*x)^(3/2))+2*b*(3*b*B*d-A*b*e-_
2*a*B*e)/(e^4*sqrt(d+e*x))+2*b^2*B*sqrt(d+e*x)/e^4
--E 491

--S 492 of 764
d0:=normalize(t0-D(r0,x))
--E 492

)clear all

--S 493 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^2
--E 493

--S 494 of 764
r0:=-2/9*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^(9/2)/e^6+2/11*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)*(d+e*x)^(11/2)/e^6-4/13*b*(b*d-a*e)^2*_
(5*b*B*d-3*A*b*e-2*a*B*e)*(d+e*x)^(13/2)/e^6+4/15*b^2*(b*d-a*e)*_
(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(15/2)/e^6-2/17*b^3*(5*b*B*d-_
A*b*e-4*a*B*e)*(d+e*x)^(17/2)/e^6+2/19*b^4*B*(d+e*x)^(19/2)/e^6
--E 494

--S 495 of 764
d0:=normalize(t0-D(r0,x))
--E 495

)clear all

```

```

--S 496 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^2
--E 496

--S 497 of 764
r0:=-2/7*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^(7/2)/e^6+2/9*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)*(d+e*x)^(9/2)/e^6-4/11*b*(b*d-a*e)^2*_
(5*b*B*d-3*A*b*e-2*a*B*e)*(d+e*x)^(11/2)/e^6+4/13*b^2*(b*d-a*e)*_
(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(13/2)/e^6-2/15*b^3*(5*b*B*d-A*b*e-_
4*a*B*e)*(d+e*x)^(15/2)/e^6+2/17*b^4*B*(d+e*x)^(17/2)/e^6
--E 497

--S 498 of 764
d0:=normalize(t0-D(r0,x))
--E 498

)clear all

--S 499 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^2
--E 499

--S 500 of 764
r0:=-2/5*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^(5/2)/e^6+2/7*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)*(d+e*x)^(7/2)/e^6-4/9*b*(b*d-a*e)^2*(5*b*B*d-_
3*A*b*e-2*a*B*e)*(d+e*x)^(9/2)/e^6+4/11*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-_
3*a*B*e)*(d+e*x)^(11/2)/e^6-2/13*b^3*(5*b*B*d-A*b*e-4*a*B*e)*_
(d+e*x)^(13/2)/e^6+2/15*b^4*B*(d+e*x)^(15/2)/e^6
--E 500

--S 501 of 764
d0:=normalize(t0-D(r0,x))
--E 501

)clear all

--S 502 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2*sqrt(d+e*x)
--E 502

--S 503 of 764
r0:=-2/3*(b*d-a*e)^4*(B*d-A*e)*(d+e*x)^(3/2)/e^6+2/5*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)*(d+e*x)^(5/2)/e^6-4/7*b*(b*d-a*e)^2*_
(5*b*B*d-3*A*b*e-2*a*B*e)*(d+e*x)^(7/2)/e^6+4/9*b^2*(b*d-a*e)*_
(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(9/2)/e^6-2/11*b^3*_
(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^(11/2)/e^6+2/13*b^4*B*(d+e*x)^(13/2)/e^6
--E 503

--S 504 of 764

```

```

d0:=normalize(t0-D(r0,x))
--E 504

)clear all

--S 505 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/sqrt(d+e*x)
--E 505

--S 506 of 764
r0:=2/3*(b*d-a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)*(d+e*x)^(3/2)/e^6-4/5*b*_
(b*d-a*e)^2*(5*b*B*d-3*A*b*e-2*a*B*e)*(d+e*x)^(5/2)/e^6+4/7*b^2*_
(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(7/2)/e^6-2/9*b^3*_
(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^(9/2)/e^6+2/11*b^4*B*(d+e*x)^(11/2)/e^6-_
2*(b*d-a*e)^4*(B*d-A*e)*sqrt(d+e*x)/e^6
--E 506

--S 507 of 764
d0:=normalize(t0-D(r0,x))
--E 507

)clear all

--S 508 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^(3/2)
--E 508

--S 509 of 764
r0:=-4/3*b*(b*d-a*e)^2*(5*b*B*d-3*A*b*e-2*a*B*e)*(d+e*x)^(3/2)/e^6+_
4/5*b^2*(b*d-a*e)*(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(5/2)/e^6-_
2/7*b^3*(5*b*B*d-A*b*e-4*a*B*e)*(d+e*x)^(7/2)/e^6+2/9*b^4*B*_
(d+e*x)^(9/2)/e^6+2*(b*d-a*e)^4*(B*d-A*e)/(e^6*sqrt(d+e*x))+_
2*(b*d-a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)*sqrt(d+e*x)/e^6
--E 509

--S 510 of 764
d0:=normalize(t0-D(r0,x))
--E 510

)clear all

--S 511 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^(5/2)
--E 511

--S 512 of 764
r0:=2/3*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^(3/2))+4/3*b^2*(b*d-a*e)*_
(5*b*B*d-2*A*b*e-3*a*B*e)*(d+e*x)^(3/2)/e^6-2/5*b^3*(5*b*B*d-A*b*e-_
4*a*B*e)*(d+e*x)^(5/2)/e^6+2/7*b^4*B*(d+e*x)^(7/2)/e^6-2*(b*d-_
a*e)^3*(5*b*B*d-4*A*b*e-a*B*e)/(e^6*sqrt(d+e*x))-4*b*(b*d-a*e)^2*_

```

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(5*b*B*d-3*A*b*e-2*a*B*e)*sqrt(d+e*x)/e^6
--E 512

--S 513 of 764
d0:=normalize(t0-D(r0,x))
--E 513

)clear all

--S 514 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^2/(d+e*x)^(7/2)
--E 514

--S 515 of 764
r0:=2/5*(b*d-a*e)^4*(B*d-A*e)/(e^6*(d+e*x)^(5/2))-2/3*(b*d-a*e)^3*_
(5*b*B*d-4*A*b*e-a*B*e)/(e^6*(d+e*x)^(3/2))-2/3*b^3*(5*b*B*d-A*b*e-_
4*a*B*e)*(d+e*x)^(3/2)/e^6+2/5*b^4*B*(d+e*x)^(5/2)/e^6+4*b*(b*d-a*e)^2*_
(5*b*B*d-3*A*b*e-2*a*B*e)/(e^6*sqrt(d+e*x))+4*b^2*(b*d-a*e)*_
(5*b*B*d-2*A*b*e-3*a*B*e)*sqrt(d+e*x)/e^6
--E 515

--S 516 of 764
d0:=normalize(t0-D(r0,x))
--E 516

)clear all

--S 517 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^3
--E 517

--S 518 of 764
r0:=-2/9*(b*d-a*e)^6*(B*d-A*e)*(d+e*x)^(9/2)/e^8+2/11*(b*d-a*e)^5*_
(7*b*B*d-6*A*b*e-a*B*e)*(d+e*x)^(11/2)/e^8-6/13*b*(b*d-a*e)^4*_
(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(13/2)/e^8+2/3*b^2*(b*d-a*e)^3*_
(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(15/2)/e^8-10/17*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(17/2)/e^8+6/19*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(19/2)/e^8-2/21*b^5*(7*b*B*d-A*b*e-_
6*a*B*e)*(d+e*x)^(21/2)/e^8+2/23*b^6*B*(d+e*x)^(23/2)/e^8
--E 518

--S 519 of 764
d0:=normalize(t0-D(r0,x))
--E 519

)clear all

--S 520 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^3
--E 520

```

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--S 521 of 764
r0:=-2/7*(b*d-a*e)^6*(B*d-A*e)*(d+e*x)^(7/2)/e^8+2/9*(b*d-a*e)^5*_
(7*b*B*d-6*A*b*e-a*B*e)*(d+e*x)^(9/2)/e^8-6/11*b*(b*d-a*e)^4*_
(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(11/2)/e^8+10/13*b^2*(b*d-a*e)^3*_
(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(13/2)/e^8-2/3*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(15/2)/e^8+6/17*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(17/2)/e^8-2/19*b^5*_
(7*b*B*d-A*b*e-6*a*B*e)*(d+e*x)^(19/2)/e^8+2/21*b^6*B*(d+e*x)^(21/2)/e^8
--E 521

--S 522 of 764
d0:=normalize(t0-D(r0,x))
--E 522

)clear all

--S 523 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^3
--E 523

--S 524 of 764
r0:=-2/5*(b*d-a*e)^6*(B*d-A*e)*(d+e*x)^(5/2)/e^8+2/7*(b*d-a*e)^5*_
(7*b*B*d-6*A*b*e-a*B*e)*(d+e*x)^(7/2)/e^8-2/3*b*(b*d-a*e)^4*_
(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(9/2)/e^8+10/11*b^2*(b*d-a*e)^3*_
(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(11/2)/e^8-10/13*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(13/2)/e^8+2/5*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(15/2)/e^8-2/17*b^5*_
(7*b*B*d-A*b*e-6*a*B*e)*(d+e*x)^(17/2)/e^8+2/19*b^6*B*(d+e*x)^(19/2)/e^8
--E 524

--S 525 of 764
d0:=normalize(t0-D(r0,x))
--E 525

)clear all

--S 526 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^3*sqrt(d+e*x)
--E 526

--S 527 of 764
r0:=-2/3*(b*d-a*e)^6*(B*d-A*e)*(d+e*x)^(3/2)/e^8+2/5*(b*d-a*e)^5*_
(7*b*B*d-6*A*b*e-a*B*e)*(d+e*x)^(5/2)/e^8-6/7*b*(b*d-a*e)^4*_
(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(7/2)/e^8+10/9*b^2*(b*d-a*e)^3*_
(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(9/2)/e^8-10/11*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(11/2)/e^8+6/13*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(13/2)/e^8-2/15*b^5*_
(7*b*B*d-A*b*e-6*a*B*e)*(d+e*x)^(15/2)/e^8+2/17*b^6*B*(d+e*x)^(17/2)/e^8
--E 527

```

```

--S 528 of 764
d0:=normalize(t0-D(r0,x))
--E 528

)clear all

--S 529 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^3/sqrt(d+e*x)
--E 529

--S 530 of 764
r0:=2/3*(b*d-a*e)^5*(7*b*B*d-6*A*b*e-a*B*e)*(d+e*x)^(3/2)/e^8-6/5*b*_
(b*d-a*e)^4*(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(5/2)/e^8+10/7*b^2*_
(b*d-a*e)^3*(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(7/2)/e^8-10/9*b^3*_
(b*d-a*e)^2*(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(9/2)/e^8+6/11*b^4*_
(b*d-a*e)*(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(11/2)/e^8-2/13*b^5*_
(7*b*B*d-A*b*e-6*a*B*e)*(d+e*x)^(13/2)/e^8+2/15*b^6*B*_
(d+e*x)^(15/2)/e^8-2*(b*d-a*e)^6*(B*d-A*e)*sqrt(d+e*x)/e^8
--E 530

--S 531 of 764
d0:=normalize(t0-D(r0,x))
--E 531

)clear all

--S 532 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^3/(d+e*x)^(3/2)
--E 532

--S 533 of 764
r0:=-2*b*(b*d-a*e)^4*(7*b*B*d-5*A*b*e-2*a*B*e)*(d+e*x)^(3/2)/e^8+2*b^2*_
(b*d-a*e)^3*(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(5/2)/e^8-10/7*b^3*_
(b*d-a*e)^2*(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(7/2)/e^8+2/3*b^4*_
(b*d-a*e)*(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(9/2)/e^8-2/11*b^5*_
(7*b*B*d-A*b*e-6*a*B*e)*(d+e*x)^(11/2)/e^8+2/13*b^6*B*_
(d+e*x)^(13/2)/e^8+2*(b*d-a*e)^6*(B*d-A*e)/(e^8*sqrt(d+e*x))+_
2*(b*d-a*e)^5*(7*b*B*d-6*A*b*e-a*B*e)*sqrt(d+e*x)/e^8
--E 533

--S 534 of 764
d0:=normalize(t0-D(r0,x))
--E 534

)clear all

--S 535 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^3/(d+e*x)^(5/2)
--E 535

```

```

--S 536 of 764
r0:=2/3*(b*d-a*e)^6*(B*d-A*e)/(e^8*(d+e*x)^(3/2))+10/3*b^2*(b*d-a*e)^3*_
(7*b*B*d-4*A*b*e-3*a*B*e)*(d+e*x)^(3/2)/e^8-2*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(5/2)/e^8+6/7*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(7/2)/e^8-2/9*b^5*(7*b*B*d-A*b*e-_
6*a*B*e)*(d+e*x)^(9/2)/e^8+2/11*b^6*B*(d+e*x)^(11/2)/e^8-2*_
(b*d-a*e)^5*(7*b*B*d-6*A*b*e-a*B*e)/(e^8*sqrt(d+e*x))-6*b*(b*d-a*e)^4*_
(7*b*B*d-5*A*b*e-2*a*B*e)*sqrt(d+e*x)/e^8
--E 536

--S 537 of 764
d0:=normalize(t0-D(r0,x))
--E 537

)clear all

--S 538 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^3/(d+e*x)^(7/2)
--E 538

--S 539 of 764
r0:=2/5*(b*d-a*e)^6*(B*d-A*e)/(e^8*(d+e*x)^(5/2))-2/3*(b*d-a*e)^5*_
(7*b*B*d-6*A*b*e-a*B*e)/(e^8*(d+e*x)^(3/2))-10/3*b^3*(b*d-a*e)^2*_
(7*b*B*d-3*A*b*e-4*a*B*e)*(d+e*x)^(3/2)/e^8+6/5*b^4*(b*d-a*e)*_
(7*b*B*d-2*A*b*e-5*a*B*e)*(d+e*x)^(5/2)/e^8-2/7*b^5*(7*b*B*d-_
A*b*e-6*a*B*e)*(d+e*x)^(7/2)/e^8+2/9*b^6*B*(d+e*x)^(9/2)/e^8+6*b*_
(b*d-a*e)^4*(7*b*B*d-5*A*b*e-2*a*B*e)/(e^8*sqrt(d+e*x))+10*b^2*_
(b*d-a*e)^3*(7*b*B*d-4*A*b*e-3*a*B*e)*sqrt(d+e*x)/e^8
--E 539

--S 540 of 764
d0:=normalize(t0-D(r0,x))
--E 540

)clear all

--S 541 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)/(a^2+2*a*b*x+b^2*x^2)
--E 541

--S 542 of 764
r0:=1/3*(b*d-a*e)*(2*b*B*d+7*A*b*e-9*a*B*e)*(d+e*x)^(3/2)/b^4+_
1/5*(2*b*B*d+7*A*b*e-9*a*B*e)*(d+e*x)^(5/2)/b^3+1/7*(2*b*B*d+7*A*b*e-_
9*a*B*e)*(d+e*x)^(7/2)/(b^2*(b*d-a*e))-(A*b-a*B)*(d+e*x)^(9/2)/(b*_
(b*d-a*e)*(a+b*x))-(b*d-a*e)^(5/2)*(2*b*B*d+7*A*b*e-9*a*B*e)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/b^(11/2)+(b*d-a*e)^2*_
(2*b*B*d+7*A*b*e-9*a*B*e)*sqrt(d+e*x)/b^5
--E 542

```



```

--S 543 of 764
d0:=normalize(t0-D(r0,x))
--E 543

)clear all

--S 544 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/(a^2+2*a*b*x+b^2*x^2)
--E 544

--S 545 of 764
r0:=1/3*(2*b*B*d+5*A*b*e-7*a*B*e)*(d+e*x)^(3/2)/b^3+1/5*(2*b*B*d+5*A*b*e-
7*a*B*e)*(d+e*x)^(5/2)/(b^2*(b*d-a*e))-(A*b-a*B)*(d+e*x)^(7/2)/(b*_
(b*d-a*e)*(a+b*x))-(b*d-a*e)^(3/2)*(2*b*B*d+5*A*b*e-7*a*B*e)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/b^(9/2)+(b*d-a*e)*(2*b*B*d+_
5*A*b*e-7*a*B*e)*sqrt(d+e*x)/b^4
--E 545

--S 546 of 764
d0:=normalize(t0-D(r0,x))
--E 546

)clear all

--S 547 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/(a^2+2*a*b*x+b^2*x^2)
--E 547

--S 548 of 764
r0:=1/3*(2*b*B*d+3*A*b*e-5*a*B*e)*(d+e*x)^(3/2)/(b^2*(b*d-a*e))-
(A*b-a*B)*(d+e*x)^(5/2)/(b*(b*d-a*e)*(a+b*x))-(2*b*B*d+3*A*b*e-
5*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b*d-a*e)/b^(7/2)+
(2*b*B*d+3*A*b*e-5*a*B*e)*sqrt(d+e*x)/b^3
--E 548

--S 549 of 764
d0:=normalize(t0-D(r0,x))
--E 549

)clear all

--S 550 of 764
t0:=(A+B*x)*sqrt(d+e*x)/(a^2+2*a*b*x+b^2*x^2)
--E 550

--S 551 of 764
r0:=- (A*b-a*B)*(d+e*x)^(3/2)/(b*(b*d-a*e)*(a+b*x))- (2*b*B*d+A*b*e-3*a*B*e)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(5/2)*sqrt(b*d-a*e))+
(2*b*B*d+A*b*e-3*a*B*e)*sqrt(d+e*x)/(b^2*(b*d-a*e))
--E 551

```

```

--S 552 of 764
d0:=normalize(t0-D(r0,x))
--E 552

)clear all

--S 553 of 764
t0:=(A+B*x)/((a^2+2*a*b*x+b^2*x^2)*sqrt(d+e*x))
--E 553

--S 554 of 764
r0:=- (2*b*B*d-A*b*e-a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
      (b^(3/2)*(b*d-a*e)^(3/2))-(A*b-a*B)*sqrt(d+e*x)/(b*(b*d-a*e)*(a+b*x))
--E 554

--S 555 of 764
d0:=normalize(t0-D(r0,x))
--E 555

)clear all

--S 556 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2))
--E 556

--S 557 of 764
r0:=- (2*b*B*d-3*A*b*e+a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
      ((b*d-a*e)^(5/2)*sqrt(b))+ (2*b*B*d-3*A*b*e+a*B*e)/(b*(b*d-a*e)^2*_
      sqrt(d+e*x))+ (-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)*sqrt(d+e*x))
--E 557

--S 558 of 764
d0:=normalize(t0-D(r0,x))
--E 558

)clear all

--S 559 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2))
--E 559

--S 560 of 764
r0:=1/3*(2*b*B*d-5*A*b*e+3*a*B*e)/(b*(b*d-a*e)^2*(d+e*x)^(3/2))+(-A*b+a*B)/_
      (b*(b*d-a*e)*(a+b*x)*(d+e*x)^(3/2))- (2*b*B*d-5*A*b*e+3*a*B*e)*_
      atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b)/(b*d-a*e)^(7/2)+_
      (2*b*B*d-5*A*b*e+3*a*B*e)/((b*d-a*e)^3*sqrt(d+e*x))
--E 560

--S 561 of 764

```

```

d0:=normalize(t0-D(r0,x))
--E 561

)clear all

--S 562 of 764
t0:=(A+B*x)/((d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2))
--E 562

--S 563 of 764
r0:=1/5*(2*b*B*d-7*A*b*e+5*a*B*e)/(b*(b*d-a*e)^2*(d+e*x)^(5/2))+
(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)*(d+e*x)^(5/2))+1/3*(2*b*B*d-7*A*b*e+_
5*a*B*e)/((b*d-a*e)^3*(d+e*x)^(3/2))-b^(3/2)*(2*b*B*d-7*A*b*e+_
5*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b*d-a*e)^(9/2)+_
b*(2*b*B*d-7*A*b*e+5*a*B*e)/((b*d-a*e)^4*sqrt(d+e*x))
--E 563

--S 564 of 764
d0:=normalize(t0-D(r0,x))
--E 564

)clear all

--S 565 of 764
t0:=(A+B*x)*(d+e*x)^(9/2)/(a^2+2*a*b*x+b^2*x^2)^2
--E 565

--S 566 of 764
r0:=7/8*e^2*(6*b*B*d+5*A*b*e-11*a*B*e)*(d+e*x)^(3/2)/b^5+21/40*e^2*_
(6*b*B*d+5*A*b*e-11*a*B*e)*(d+e*x)^(5/2)/(b^4*(b*d-a*e))-3/8*e*_
(6*b*B*d+5*A*b*e-11*a*B*e)*(d+e*x)^(7/2)/(b^3*(b*d-a*e)*(a+b*x))-_
1/12*(6*b*B*d+5*A*b*e-11*a*B*e)*(d+e*x)^(9/2)/(b^2*(b*d-a*e)*_
(a+b*x)^2)-1/3*(A*b-a*B)*(d+e*x)^(11/2)/(b*(b*d-a*e)*(a+b*x)^3)-_
21/8*e^2*(b*d-a*e)^(3/2)*(6*b*B*d+5*A*b*e-11*a*B*e)*atanh(sqrt(b)*_
sqrt(d+e*x)/sqrt(b*d-a*e))/b^(13/2)+21/8*e^2*(b*d-a*e)*(6*b*B*d+_
5*A*b*e-11*a*B*e)*sqrt(d+e*x)/b^6
--E 566

--S 567 of 764
d0:=normalize(t0-D(r0,x))
--E 567

)clear all

--S 568 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)/(a^2+2*a*b*x+b^2*x^2)^2
--E 568

--S 569 of 764
r0:=35/24*e^2*(2*b*B*d+A*b*e-3*a*B*e)*(d+e*x)^(3/2)/(b^4*(b*d-a*e))-_

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7/8*e*(2*b*B*d+A*b*e-3*a*B*e)*(d+e*x)^(5/2)/(b^3*(b*d-a*e)*(a+b*x))-
1/4*(2*b*B*d+A*b*e-3*a*B*e)*(d+e*x)^(7/2)/(b^2*(b*d-a*e)*(a+b*x)^2)-
1/3*(A*b-a*B)*(d+e*x)^(9/2)/(b*(b*d-a*e)*(a+b*x)^3)-35/8*e^2*(2*b*B*d+
A*b*e-3*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b*d-
a*e)/b^(11/2)+35/8*e^2*(2*b*B*d+A*b*e-3*a*B*e)*sqrt(d+e*x)/b^5
--E 569

--S 570 of 764
d0:=normalize(t0-D(r0,x))
--E 570

)clear all

--S 571 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/(a^2+2*a*b*x+b^2*x^2)^2
--E 571

--S 572 of 764
r0:=-5/24*e*(6*b*B*d+A*b*e-7*a*B*e)*(d+e*x)^(3/2)/(b^3*(b*d-a*e)*(a+b*x))-
1/12*(6*b*B*d+A*b*e-7*a*B*e)*(d+e*x)^(5/2)/(b^2*(b*d-a*e)*(a+b*x)^2)-
1/3*(A*b-a*B)*(d+e*x)^(7/2)/(b*(b*d-a*e)*(a+b*x)^3)-5/8*e^2*_
(6*b*B*d+A*b*e-7*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
(b^(9/2)*sqrt(b*d-a*e))+5/8*e^2*(6*b*B*d+A*b*e-7*a*B*e)*sqrt(d+e*x)/_
(b^4*(b*d-a*e))
--E 572

--S 573 of 764
d0:=normalize(t0-D(r0,x))
--E 573

)clear all

--S 574 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/(a^2+2*a*b*x+b^2*x^2)^2
--E 574

--S 575 of 764
r0:=-1/12*(6*b*B*d-A*b*e-5*a*B*e)*(d+e*x)^(3/2)/(b^2*(b*d-a*e)*(a+b*x)^2)-
1/3*(A*b-a*B)*(d+e*x)^(5/2)/(b*(b*d-a*e)*(a+b*x)^3)-1/8*e^2*(6*b*B*d-
A*b*e-5*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(7/2)*_
(b*d-a*e)^(3/2))-1/8*e*(6*b*B*d-A*b*e-5*a*B*e)*sqrt(d+e*x)/(b^3*_
(b*d-a*e)*(a+b*x))
--E 575

--S 576 of 764
d0:=normalize(t0-D(r0,x))
--E 576

)clear all

```

```

--S 577 of 764
t0:=(A+B*x)*sqrt(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^2
--E 577

--S 578 of 764
r0:=-1/3*(A*b-a*B)*(d+e*x)^(3/2)/(b*(b*d-a*e)*(a+b*x)^3)+1/8*e^2*(2*b*B*d-
A*b*e-a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(5/2)*
(b*d-a*e)^(5/2))-1/4*(2*b*B*d-A*b*e-a*B*e)*sqrt(d+e*x)/(b^2*
(b*d-a*e)*(a+b*x)^2)-1/8*e*(2*b*B*d-A*b*e-a*B*e)*sqrt(d+e*x)/
(b^2*(b*d-a*e)^2*(a+b*x))
--E 578

--S 579 of 764
d0:=normalize(t0-D(r0,x))
--E 579

)clear all

--S 580 of 764
t0:=(A+B*x)/((a^2+2*a*b*x+b^2*x^2)^2*sqrt(d+e*x))
--E 580

--S 581 of 764
r0:=-1/8*e^2*(6*b*B*d-5*A*b*e-a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/
sqrt(b*d-a*e))/(b^(3/2)*(b*d-a*e)^(7/2))-1/3*(A*b-a*B)*sqrt(d+e*x)/
(b*(b*d-a*e)*(a+b*x)^3)-1/12*(6*b*B*d-5*A*b*e-a*B*e)*sqrt(d+e*x)/
(b*(b*d-a*e)^2*(a+b*x)^2)+1/8*e*(6*b*B*d-5*A*b*e-a*B*e)*sqrt(d+e*x)/
(b*(b*d-a*e)^3*(a+b*x))
--E 581

--S 582 of 764
d0:=normalize(t0-D(r0,x))
--E 582

)clear all

--S 583 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^2)
--E 583

--S 584 of 764
r0:=-5/8*e^2*(6*b*B*d-7*A*b*e+a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/
sqrt(b*d-a*e))/((b*d-a*e)^(9/2)*sqrt(b))+5/8*e^2*(6*b*B*d-7*A*b*e+
a*B*e)/(b*(b*d-a*e)^4*sqrt(d+e*x))+1/3*(-A*b+a*B)/(b*(b*d-a*e)*
(a+b*x)^3*sqrt(d+e*x))+1/12*(-6*b*B*d+7*A*b*e-a*B*e)/(b*(b*d-a*e)^2*
(a+b*x)^2*sqrt(d+e*x))+5/24*e*(6*b*B*d-7*A*b*e+a*B*e)/(b*(b*d-a*e)^3*
(a+b*x)*sqrt(d+e*x))
--E 584

--S 585 of 764

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d0:=normalize(t0-D(r0,x))
--E 585

)clear all

--S 586 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^2)
--E 586

--S 587 of 764
r0:=35/24*e^2*(2*b*B*d-3*A*b*e+a*B*e)/(b*(b*d-a*e)^4*(d+e*x)^(3/2))+
1/3*(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)^3*(d+e*x)^(3/2))+1/4*(-2*b*B*d+
3*A*b*e-a*B*e)/(b*(b*d-a*e)^2*(a+b*x)^2*(d+e*x)^(3/2))+7/8*e*(2*b*B*d-
3*A*b*e+a*B*e)/(b*(b*d-a*e)^3*(a+b*x)*(d+e*x)^(3/2))-35/8*e^2*(2*b*B*d-
3*A*b*e+a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b)/(b*d-
a*e)^(11/2)+35/8*e^2*(2*b*B*d-3*A*b*e+a*B*e)/((b*d-a*e)^5*sqrt(d+e*x))
--E 587

--S 588 of 764
d0:=normalize(t0-D(r0,x))
--E 588

)clear all

--S 589 of 764
t0:=(A+B*x)/((d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^2)
--E 589

--S 590 of 764
r0:=21/40*e^2*(6*b*B*d-11*A*b*e+5*a*B*e)/(b*(b*d-a*e)^4*(d+e*x)^(5/2))+
1/3*(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)^3*(d+e*x)^(5/2))+1/12*(-6*b*B*d+
11*A*b*e-5*a*B*e)/(b*(b*d-a*e)^2*(a+b*x)^2*(d+e*x)^(5/2))+3/8*e*(6*b*B*d-
11*A*b*e+5*a*B*e)/(b*(b*d-a*e)^3*(a+b*x)*(d+e*x)^(5/2))+7/8*e^2*(6*b*B*d-
11*A*b*e+5*a*B*e)/((b*d-a*e)^5*(d+e*x)^(3/2))-21/8*b^(3/2)*e^2*(6*b*B*d-
11*A*b*e+5*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/
(b*d-a*e)^(13/2)+21/8*b*e^2*(6*b*B*d-11*A*b*e+5*a*B*e)/((b*d-a*e)^6*
sqrt(d+e*x))
--E 590

--S 591 of 764
d0:=normalize(t0-D(r0,x))
--E 591

)clear all

--S 592 of 764
t0:=(A+B*x)*(d+e*x)^(11/2)/(a^2+2*a*b*x+b^2*x^2)^3
--E 592

--S 593 of 764

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r0:=77/128*e^4*(10*b*B*d+3*A*b*e-13*a*B*e)*(d+e*x)^(3/2)/(b^6*(b*d-a*e))-
231/640*e^3*(10*b*B*d+3*A*b*e-13*a*B*e)*(d+e*x)^(5/2)/(b^5*(b*d-a*e)*
(a+b*x))-33/320*e^2*(10*b*B*d+3*A*b*e-13*a*B*e)*(d+e*x)^(7/2)/(b^4*
(b*d-a*e)*(a+b*x)^2)-11/240*e*(10*b*B*d+3*A*b*e-13*a*B*e)*(d+e*x)^(9/2)/
(b^3*(b*d-a*e)*(a+b*x)^3)-1/40*(10*b*B*d+3*A*b*e-13*a*B*e)*
(d+e*x)^(11/2)/(b^2*(b*d-a*e)*(a+b*x)^4)-1/5*(A*b-a*B)*(d+e*x)^(13/2)/
(b*(b*d-a*e)*(a+b*x)^5)-231/128*e^4*(10*b*B*d+3*A*b*e-13*a*B*e)*
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b*d-a*e)/b^(15/2)+
231/128*e^4*(10*b*B*d+3*A*b*e-13*a*B*e)*sqrt(d+e*x)/b^7
--E 593

--S 594 of 764
d0:=normalize(t0-D(r0,x))
--E 594

)clear all

--S 595 of 764
t0:=(A+B*x)*(d+e*x)^(9/2)/(a^2+2*a*b*x+b^2*x^2)^3
--E 595

--S 596 of 764
r0:=-21/128*e^3*(10*b*B*d+A*b*e-11*a*B*e)*(d+e*x)^(3/2)/(b^5*(b*d-a*e)*
(a+b*x))-21/320*e^2*(10*b*B*d+A*b*e-11*a*B*e)*(d+e*x)^(5/2)/(b^4*
(b*d-a*e)*(a+b*x)^2)-3/80*e*(10*b*B*d+A*b*e-11*a*B*e)*(d+e*x)^(7/2)/
(b^3*(b*d-a*e)*(a+b*x)^3)-1/40*(10*b*B*d+A*b*e-11*a*B*e)*
(d+e*x)^(9/2)/(b^2*(b*d-a*e)*(a+b*x)^4)-1/5*(A*b-a*B)*(d+e*x)^(11/2)/
(b*(b*d-a*e)*(a+b*x)^5)-63/128*e^4*(10*b*B*d+A*b*e-11*a*B*e)*
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(13/2)*sqrt(b*d-a*e))+
63/128*e^4*(10*b*B*d+A*b*e-11*a*B*e)*sqrt(d+e*x)/(b^6*(b*d-a*e))
--E 596

--S 597 of 764
d0:=normalize(t0-D(r0,x))
--E 597

)clear all

--S 598 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)/(a^2+2*a*b*x+b^2*x^2)^3
--E 598

--S 599 of 764
r0:=-7/192*e^2*(10*b*B*d-A*b*e-9*a*B*e)*(d+e*x)^(3/2)/(b^4*(b*d-a*e)*
(a+b*x)^2)-7/240*e*(10*b*B*d-A*b*e-9*a*B*e)*(d+e*x)^(5/2)/(b^3*
(b*d-a*e)*(a+b*x)^3)-1/40*(10*b*B*d-A*b*e-9*a*B*e)*(d+e*x)^(7/2)/
(b^2*(b*d-a*e)*(a+b*x)^4)-1/5*(A*b-a*B)*(d+e*x)^(9/2)/(b*(b*d-a*e)*
(a+b*x)^5)-7/128*e^4*(10*b*B*d-A*b*e-9*a*B*e)*atanh(sqrt(b)*
sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(11/2)*(b*d-a*e)^(3/2))-
7/128*e^3*(10*b*B*d-A*b*e-9*a*B*e)*sqrt(d+e*x)/(b^5*(b*d-a*e)*(a+b*x))

```

```

--E 599

--S 600 of 764
d0:=normalize(t0-D(r0,x))
--E 600

)clear all

--S 601 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/(a^2+2*a*b*x+b^2*x^2)^3
--E 601

--S 602 of 764
r0:=-1/48*e*(10*b*B*d-3*A*b*e-7*a*B*e)*(d+e*x)^(3/2)/(b^3*(b*d-a*e)*_
(a+b*x)^3)-1/40*(10*b*B*d-3*A*b*e-7*a*B*e)*(d+e*x)^(5/2)/(b^2*(b*d-_
a*e)*(a+b*x)^4)-1/5*(A*b-a*B)*(d+e*x)^(7/2)/(b*(b*d-a*e)*(a+b*x)^5)+_
1/128*e^4*(10*b*B*d-3*A*b*e-7*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/_
sqrt(b*d-a*e))/(b^(9/2)*(b*d-a*e)^(5/2))-1/64*e^2*(10*b*B*d-_
3*A*b*e-7*a*B*e)*sqrt(d+e*x)/(b^4*(b*d-a*e)*(a+b*x)^2)-_
1/128*e^3*(10*b*B*d-3*A*b*e-7*a*B*e)*sqrt(d+e*x)/(b^4*(b*d-a*e)^2*(a+b*x))
--E 602

--S 603 of 764
d0:=normalize(t0-D(r0,x))
--E 603

)clear all

--S 604 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/(a^2+2*a*b*x+b^2*x^2)^3
--E 604

--S 605 of 764
r0:=-1/8*(2*b*B*d-A*b*e-a*B*e)*(d+e*x)^(3/2)/(b^2*(b*d-a*e)*(a+b*x)^4)-_
1/5*(A*b-a*B)*(d+e*x)^(5/2)/(b*(b*d-a*e)*(a+b*x)^5)-3/128*e^4*(2*b*B*d-_
A*b*e-a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(7/2)*(b*d-_
a*e)^(7/2))-1/16*e*(2*b*B*d-A*b*e-a*B*e)*sqrt(d+e*x)/(b^3*(b*d-a*e)*_
(a+b*x)^3)-1/64*e^2*(2*b*B*d-A*b*e-a*B*e)*sqrt(d+e*x)/(b^3*(b*d-a*e)^2*_
(a+b*x)^2)+3/128*e^3*(2*b*B*d-A*b*e-a*B*e)*sqrt(d+e*x)/(b^3*_
(b*d-a*e)^3*(a+b*x))
--E 605

--S 606 of 764
d0:=normalize(t0-D(r0,x))
--E 606

)clear all

--S 607 of 764
t0:=(A+B*x)*sqrt(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^3

```



```

--E 607

--S 608 of 764
r0:=-1/5*(A*b-a*B)*(d+e*x)^(3/2)/(b*(b*d-a*e)*(a+b*x)^5+1/128*e^4*_
(10*b*B*d-7*A*b*e-3*a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
(b^(5/2)*(b*d-a*e)^(9/2))-1/40*(10*b*B*d-7*A*b*e-3*a*B*e)*sqrt(d+e*x)/_
(b^2*(b*d-a*e)*(a+b*x)^4)-1/240*e*(10*b*B*d-7*A*b*e-3*a*B*e)*_
sqrt(d+e*x)/(b^2*(b*d-a*e)^2*(a+b*x)^3)+1/192*e^2*(10*b*B*d-7*A*b*e-_
3*a*B*e)*sqrt(d+e*x)/(b^2*(b*d-a*e)^3*(a+b*x)^2)-1/128*e^3*(10*b*B*d-_
7*A*b*e-3*a*B*e)*sqrt(d+e*x)/(b^2*(b*d-a*e)^4*(a+b*x))
--E 608

--S 609 of 764
d0:=normalize(t0-D(r0,x))
--E 609

)clear all

--S 610 of 764
t0:=(A+B*x)/((a^2+2*a*b*x+b^2*x^2)^3*sqrt(d+e*x))
--E 610

--S 611 of 764
r0:=-7/128*e^4*(10*b*B*d-9*A*b*e-a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/_
sqrt(b*d-a*e))/(b^(3/2)*(b*d-a*e)^(11/2))-1/5*(A*b-a*B)*sqrt(d+e*x)/_
(b*(b*d-a*e)*(a+b*x)^5)-1/40*(10*b*B*d-9*A*b*e-a*B*e)*sqrt(d+e*x)/_
(b*(b*d-a*e)^2*(a+b*x)^4)+7/240*e*(10*b*B*d-9*A*b*e-a*B*e)*_
sqrt(d+e*x)/(b*(b*d-a*e)^3*(a+b*x)^3)-7/192*e^2*(10*b*B*d-9*A*b*e-_
a*B*e)*sqrt(d+e*x)/(b*(b*d-a*e)^4*(a+b*x)^2)+7/128*e^3*(10*b*B*d-_
9*A*b*e-a*B*e)*sqrt(d+e*x)/(b*(b*d-a*e)^5*(a+b*x))
--E 611

--S 612 of 764
d0:=normalize(t0-D(r0,x))
--E 612

)clear all

--S 613 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^3)
--E 613

--S 614 of 764
r0:=-63/128*e^4*(10*b*B*d-11*A*b*e+a*B*e)*atanh(sqrt(b)*sqrt(d+e*x)/_
sqrt(b*d-a*e))/(b*d-a*e)^(13/2)*sqrt(b))+63/128*e^4*(10*b*B*d-_
11*A*b*e+a*B*e)/(b*(b*d-a*e)^6*sqrt(d+e*x))+1/5*(-A*b+a*B)/(b*(b*d-_
a*e)*(a+b*x)^5*sqrt(d+e*x))+1/40*(-10*b*B*d+11*A*b*e-a*B*e)/(b*(b*d-_
a*e)^2*(a+b*x)^4*sqrt(d+e*x))+3/80*e*(10*b*B*d-11*A*b*e+a*B*e)/(b*_
(b*d-a*e)^3*(a+b*x)^3*sqrt(d+e*x))-21/320*e^2*(10*b*B*d-11*A*b*e+_
a*B*e)/(b*(b*d-a*e)^4*(a+b*x)^2*sqrt(d+e*x))+21/128*e^3*(10*b*B*d-_

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11*A*b*e+a*B*e)/(b*(b*d-a*e)^5*(a+b*x)*sqrt(d+e*x))
--E 614

--S 615 of 764
d0:=normalize(t0-D(r0,x))
--E 615

)clear all

--S 616 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^3)
--E 616

--S 617 of 764
r0:=77/128*e^4*(10*b*B*d-13*A*b*e+3*a*B*e)/(b*(b*d-a*e)^6*(d+e*x)^(3/2))+_
1/5*(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)^5*(d+e*x)^(3/2))+1/40*(-10*b*B*d+_
13*A*b*e-3*a*B*e)/(b*(b*d-a*e)^2*(a+b*x)^4*(d+e*x)^(3/2))+11/240*e*_
(10*b*B*d-13*A*b*e+3*a*B*e)/(b*(b*d-a*e)^3*(a+b*x)^3*(d+e*x)^(3/2))-_
33/320*e^2*(10*b*B*d-13*A*b*e+3*a*B*e)/(b*(b*d-a*e)^4*(a+b*x)^2*_
(d+e*x)^(3/2))+231/640*e^3*(10*b*B*d-13*A*b*e+3*a*B*e)/(b*(b*d-a*e)^5*_
(a+b*x)*(d+e*x)^(3/2))-231/128*e^4*(10*b*B*d-13*A*b*e+3*a*B*e)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b)/(b*d-a*e)^(15/2)+_
231/128*e^4*(10*b*B*d-13*A*b*e+3*a*B*e)/((b*d-a*e)^7*sqrt(d+e*x))
--E 617

--S 618 of 764
d0:=normalize(t0-D(r0,x))
--E 618

)clear all

--S 619 of 764
t0:=(A+B*x)/((d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^3)
--E 619

--S 620 of 764
r0:=3003/640*e^4*(2*b*B*d-3*A*b*e+a*B*e)/(b*(b*d-a*e)^6*(d+e*x)^(5/2))+_
1/5*(-A*b+a*B)/(b*(b*d-a*e)*(a+b*x)^5*(d+e*x)^(5/2))+1/8*(-2*b*B*d+_
3*A*b*e-a*B*e)/(b*(b*d-a*e)^2*(a+b*x)^4*(d+e*x)^(5/2))+13/48*e*(2*b*B*d-_
3*A*b*e+a*B*e)/(b*(b*d-a*e)^3*(a+b*x)^3*(d+e*x)^(5/2))-143/192*e^2*_
(2*b*B*d-3*A*b*e+a*B*e)/(b*(b*d-a*e)^4*(a+b*x)^2*(d+e*x)^(5/2))+_
429/128*e^3*(2*b*B*d-3*A*b*e+a*B*e)/(b*(b*d-a*e)^5*(a+b*x)*_
(d+e*x)^(5/2))+1001/128*e^4*(2*b*B*d-3*A*b*e+a*B*e)/((b*d-a*e)^7*_
(d+e*x)^(3/2))-3003/128*b^(3/2)*e^4*(2*b*B*d-3*A*b*e+a*B*e)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b*d-a*e)^(17/2)+_
3003/128*b*e^4*(2*b*B*d-3*A*b*e+a*B*e)/((b*d-a*e)^8*sqrt(d+e*x))
--E 620

--S 621 of 764
d0:=normalize(t0-D(r0,x))

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--E 621

)clear all

--S 622 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 622

--S 623 of 764
r0:=-2/143*(4*b*B*d-13*A*b*e+9*a*B*e)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^2)+4/1287*(b*d-a*e)*(4*b*B*d-13*A*b*e+9*a*B*e)*_
(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+_
2/13*B*(a+b*x)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 623

--S 624 of 764
d0:=normalize(t0-D(r0,x))
--E 624

)clear all

--S 625 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 625

--S 626 of 764
r0:=-2/99*(4*b*B*d-11*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^2)+4/693*(b*d-a*e)*(4*b*B*d-11*A*b*e+7*a*B*e)*_
(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+2/11*B*_
(a+b*x)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 626

--S 627 of 764
d0:=normalize(t0-D(r0,x))
--E 627

)clear all

--S 628 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 628

--S 629 of 764
r0:=-2/63*(4*b*B*d-9*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^2)+4/315*(b*d-a*e)*(4*b*B*d-9*A*b*e+5*a*B*e)*_
(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+2/9*B*_
(a+b*x)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 629

--S 630 of 764

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d0:=normalize(t0-D(r0,x))
--E 630

)clear all

--S 631 of 764
t0:=(A+B*x)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)
--E 631

--S 632 of 764
r0:=-2/35*(4*b*B*d-7*A*b*e+3*a*B*e)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^2)+4/105*(b*d-a*e)*(4*b*B*d-7*A*b*e+3*a*B*e)*_
(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+2/7*B*_
(a+b*x)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 632

--S 633 of 764
d0:=normalize(t0-D(r0,x))
--E 633

)clear all

--S 634 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/sqrt(d+e*x)
--E 634

--S 635 of 764
r0:=-2/15*(4*b*B*d-5*A*b*e+a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^2)+4/15*(b*d-a*e)*(4*b*B*d-5*A*b*e+a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3*(a+b*x))+2/5*B*(a+b*x)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e)
--E 635

--S 636 of 764
d0:=normalize(t0-D(r0,x))
--E 636

)clear all

--S 637 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(3/2)
--E 637

--S 638 of 764
r0:=-2*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
sqrt(d+e*x))+2/3*(4*b*B*d-3*A*b*e-a*B*e)*sqrt(d+e*x)*sqrt(a^2+_
2*a*b*x+b^2*x^2)/(e^2*(b*d-a*e))-4/3*(4*b*B*d-3*A*b*e-a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x))
--E 638

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--S 639 of 764
d0:=normalize(t0-D(r0,x))
--E 639

)clear all

--S 640 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(5/2)
--E 640

--S 641 of 764
r0:=-2/3*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^(3/2))+2/3*(4*b*B*d-A*b*e-3*a*B*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^2*(b*d-a*e)*sqrt(d+e*x))+4/3*(4*b*B*d-A*b*e-3*a*B*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*sqrt(d+e*x))
--E 641

--S 642 of 764
d0:=normalize(t0-D(r0,x))
--E 642

)clear all

--S 643 of 764
t0:=(A+B*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(d+e*x)^(7/2)
--E 643

--S 644 of 764
r0:=-2/5*(B*d-A*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e*(b*d-a*e)*_
(d+e*x)^(5/2))-2/5*(4*b*B*d+A*b*e-5*a*B*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(e^2*(b*d-a*e)*(d+e*x)^(3/2))-4/15*(4*b*B*d+A*b*e-5*a*B*e)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(a+b*x)*(d+e*x)^(3/2))
--E 644

--S 645 of 764
d0:=normalize(t0-D(r0,x))
--E 645

)clear all

--S 646 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 646

--S 647 of 764
r0:=-2/255*(8*b*B*d-17*A*b*e+9*a*B*e)*(d+e*x)^(9/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^2)+2/17*B*(a+b*x)*(d+e*x)^(9/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e)-16/12155*(b*d-a*e)^2*(8*b*B*d-17*A*b*e+_
9*a*B*e)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4)+32/109395*_
(b*d-a*e)^3*(8*b*B*d-17*A*b*e+9*a*B*e)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+_

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      b^2*x^2)/(b*e^5*(a+b*x))+4/1105*(b*d-a*e)*(8*b*B*d-17*A*b*e+_
      9*a*B*e)*(a+b*x)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 647

--S 648 of 764
d0:=normalize(t0-D(r0,x))
--E 648

)clear all

--S 649 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 649

--S 650 of 764
r0:=-2/195*(8*b*B*d-15*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*(a^2+2*a*b*x+_
      b^2*x^2)^(3/2)/(b*e^2)+2/15*B*(a+b*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+_
      b^2*x^2)^(3/2)/(b*e)-16/6435*(b*d-a*e)^2*(8*b*B*d-15*A*b*e+7*a*B*e)*_
      (d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4)+32/45045*(b*d-a*e)^3*_
      (8*b*B*d-15*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
      (b*e^5*(a+b*x))+4/715*(b*d-a*e)*(8*b*B*d-15*A*b*e+7*a*B*e)*(a+b*x)*_
      (d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 650

--S 651 of 764
d0:=normalize(t0-D(r0,x))
--E 651

)clear all

--S 652 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 652

--S 653 of 764
r0:=-2/143*(8*b*B*d-13*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*(a^2+2*a*b*x+_
      b^2*x^2)^(3/2)/(b*e^2)+2/13*B*(a+b*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+_
      b^2*x^2)^(3/2)/(b*e)-16/3003*(b*d-a*e)^2*(8*b*B*d-13*A*b*e+5*a*B*e)*_
      (d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4)+32/15015*(b*d-a*e)^3*_
      (8*b*B*d-13*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
      (b*e^5*(a+b*x))+4/429*(b*d-a*e)*(8*b*B*d-13*A*b*e+5*a*B*e)*(a+b*x)*_
      (d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 653

--S 654 of 764
d0:=normalize(t0-D(r0,x))
--E 654

)clear all

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--S 655 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)
--E 655

--S 656 of 764
r0:=-2/99*(8*b*B*d-11*A*b*e+3*a*B*e)*(d+e*x)^(3/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^2)+2/11*B*(a+b*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e)-16/1155*(b*d-a*e)^2*(8*b*B*d-11*A*b*e+3*a*B*e)*_
(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4)+32/3465*(b*d-a*e)^3*_
(8*b*B*d-11*A*b*e+3*a*B*e)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^5*(a+b*x))+4/231*(b*d-a*e)*(8*b*B*d-11*A*b*e+3*a*B*e)*(a+b*x)*_
(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 656

--S 657 of 764
d0:=normalize(t0-D(r0,x))
--E 657

)clear all

--S 658 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/sqrt(d+e*x)
--E 658

--S 659 of 764
r0:=-2/63*(8*b*B*d-9*A*b*e+a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*_
sqrt(d+e*x)/(b*e^2)+2/9*B*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*_
sqrt(d+e*x)/(b*e)-16/315*(b*d-a*e)^2*(8*b*B*d-9*A*b*e+a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^4)+32/315*(b*d-a*e)^3*_
(8*b*B*d-9*A*b*e+a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^5*(a+b*x))+4/105*(b*d-a*e)*(8*b*B*d-9*A*b*e+a*B*e)*(a+b*x)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^3)
--E 659

--S 660 of 764
d0:=normalize(t0-D(r0,x))
--E 660

)clear all

--S 661 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^(3/2)
--E 661

--S 662 of 764
r0:=-2*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
sqrt(d+e*x))+2/7*(8*b*B*d-7*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*_
sqrt(d+e*x)/(e^2*(b*d-a*e))+16/35*(b*d-a*e)*(8*b*B*d-7*A*b*e-a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^4-32/35*(b*d-a*e)^2*(8*b*B*d-_
7*A*b*e-a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x))-_

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12/35*(8*b*B*d-7*A*b*e-a*B*e)*(a+b*x)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/e^3
--E 662

--S 663 of 764
d0:=normalize(t0-D(r0,x))
--E 663

)clear all

--S 664 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^(5/2)
--E 664

--S 665 of 764
r0:=-2/3*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^(3/2))-2/3*(8*b*B*d-5*A*b*e-3*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^2*(b*d-a*e)*sqrt(d+e*x))-16/15*b*(8*b*B*d-5*A*b*e-_
3*a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^4+32/15*b*(b*d-a*e)*_
(8*b*B*d-5*A*b*e-3*a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^5*(a+b*x))+4/5*b*(8*b*B*d-5*A*b*e-3*a*B*e)*(a+b*x)*sqrt(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e))
--E 665

--S 666 of 764
d0:=normalize(t0-D(r0,x))
--E 666

)clear all

--S 667 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(d+e*x)^(7/2)
--E 667

--S 668 of 764
r0:=-2/5*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e*(b*d-a*e)*_
(d+e*x)^(5/2))-2/15*(8*b*B*d-3*A*b*e-5*a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(e^2*(b*d-a*e)*(d+e*x)^(3/2))-4/5*b*(8*b*B*d-_
3*A*b*e-5*a*B*e)*(a+b*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^3*(b*d-a*e)*_
sqrt(d+e*x))+16/15*b^2*(8*b*B*d-3*A*b*e-5*a*B*e)*sqrt(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^4*(b*d-a*e))-32/15*b^2*(8*b*B*d-3*A*b*e-_
5*a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^5*(a+b*x))
--E 668

--S 669 of 764
d0:=normalize(t0-D(r0,x))
--E 669

)clear all

```



```

--S 670 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 670

--S 671 of 764
r0:=-32/6783*(b*d-a*e)^2*(4*b*B*d-7*A*b*e+3*a*B*e)*(d+e*x)^(9/2)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^4)+20/2261*(b*d-a*e)*(4*b*B*d-7*A*b*e+_
3*a*B*e)*(a+b*x)*(d+e*x)^(9/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3)-_
2/133*(4*b*B*d-7*A*b*e+3*a*B*e)*(d+e*x)^(9/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e^2)+2/21*B*(a+b*x)*(d+e*x)^(9/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e)-256/323323*(b*d-a*e)^4*(4*b*B*d-7*A*b*e+_
3*a*B*e)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)+_
512/2909907*(b*d-a*e)^5*(4*b*B*d-7*A*b*e+3*a*B*e)*(d+e*x)^(9/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^7*(a+b*x))+64/29393*(b*d-a*e)^3*_
(4*b*B*d-7*A*b*e+3*a*B*e)*(a+b*x)*(d+e*x)^(9/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^5)
--E 671

--S 672 of 764
d0:=normalize(t0-D(r0,x))
--E 672

)clear all

--S 673 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 673

--S 674 of 764
r0:=-32/12597*(b*d-a*e)^2*(12*b*B*d-19*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^4)+4/969*(b*d-a*e)*(12*b*B*d-19*A*b*e+_
7*a*B*e)*(a+b*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3)-_
2/323*(12*b*B*d-19*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e^2)+2/19*B*(a+b*x)*(d+e*x)^(7/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e)-256/415701*(b*d-a*e)^4*(12*b*B*d-19*A*b*e+_
7*a*B*e)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)+_
512/2909907*(b*d-a*e)^5*(12*b*B*d-19*A*b*e+7*a*B*e)*(d+e*x)^(7/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^7*(a+b*x))+64/46189*(b*d-a*e)^3*_
(12*b*B*d-19*A*b*e+7*a*B*e)*(a+b*x)*(d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^5)
--E 674

--S 675 of 764
d0:=normalize(t0-D(r0,x))
--E 675

)clear all

--S 676 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2)

```

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--E 676

--S 677 of 764
r0:=-32/7293*(b*d-a*e)^2*(12*b*B*d-17*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^4)+4/663*(b*d-a*e)*(12*b*B*d-_
17*A*b*e+5*a*B*e)*(a+b*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/_
(b*e^3)-2/255*(12*b*B*d-17*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e^2)+2/17*B*(a+b*x)*(d+e*x)^(5/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2)/(b*e)-256/153153*(b*d-a*e)^4*(12*b*B*d-17*A*b*e+_
5*a*B*e)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)+_
512/765765*(b*d-a*e)^5*(12*b*B*d-17*A*b*e+5*a*B*e)*(d+e*x)^(5/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^7*(a+b*x))+64/21879*(b*d-a*e)^3*_
(12*b*B*d-17*A*b*e+5*a*B*e)*(a+b*x)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2)/(b*e^5)
--E 677

--S 678 of 764
d0:=normalize(t0-D(r0,x))
--E 678

)clear all

--S 679 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)*sqrt(d+e*x)
--E 679

--S 680 of 764
r0:=-32/1287*(b*d-a*e)^2*(4*b*B*d-5*A*b*e+a*B*e)*(d+e*x)^(3/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)/(b*e^4)+4/143*(b*d-a*e)*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)*_
(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(b*e^3)-2/65*(4*b*B*d-_
5*A*b*e+a*B*e)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e^2)+_
2/15*B*(a+b*x)*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(b*e)-_
256/15015*(b*d-a*e)^4*(4*b*B*d-5*A*b*e+a*B*e)*(d+e*x)^(3/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)+512/45045*(b*d-a*e)^5*(4*b*B*d-_
5*A*b*e+a*B*e)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^7*_
(a+b*x))+64/3003*(b*d-a*e)^3*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)*_
(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5)
--E 680

--S 681 of 764
d0:=normalize(t0-D(r0,x))
--E 681

)clear all

--S 682 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/sqrt(d+e*x)
--E 682

--S 683 of 764

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r0:=-160/9009*(b*d-a*e)^2*(12*b*B*d-13*A*b*e+a*B*e)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)*sqrt(d+e*x)/(b*e^4)+20/1287*(b*d-a*e)*(12*b*B*d-_
13*A*b*e+a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)/_
(b*e^3)-2/143*(12*b*B*d-13*A*b*e+a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)*_
sqrt(d+e*x)/(b*e^2)+2/13*B*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)*_
sqrt(d+e*x)/(b*e)-256/9009*(b*d-a*e)^4*(12*b*B*d-13*A*b*e+a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^6)+512/9009*(b*d-a*e)^5*_
(12*b*B*d-13*A*b*e+a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(b*e^7*(a+b*x))+64/3003*(b*d-a*e)^3*(12*b*B*d-13*A*b*e+a*B*e)*(a+b*x)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(b*e^5)
--E 683

--S 684 of 764
d0:=normalize(t0-D(r0,x))
--E 684

)clear all

--S 685 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^(3/2)
--E 685

--S 686 of 764
r0:=-2*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
sqrt(d+e*x))+160/693*(b*d-a*e)*(12*b*B*d-11*A*b*e-a*B*e)*(a^2+_
2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)/e^4-20/99*(12*b*B*d-11*A*b*e-_
a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)/e^3+2/11*_
(12*b*B*d-11*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)*sqrt(d+e*x)/_
(e^2*(b*d-a*e))+256/693*(b*d-a*e)^3*(12*b*B*d-11*A*b*e-a*B*e)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^6-512/693*(b*d-a*e)^4*_
(12*b*B*d-11*A*b*e-a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/_
(e^7*(a+b*x))-64/231*(b*d-a*e)^2*(12*b*B*d-11*A*b*e-a*B*e)*(a+b*x)*_
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^5
--E 686

--S 687 of 764
d0:=normalize(t0-D(r0,x))
--E 687

)clear all

--S 688 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^(5/2)
--E 688

--S 689 of 764
r0:=-2/3*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*_
(d+e*x)^(3/2))-2*(4*b*B*d-3*A*b*e-a*B*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/_
(e^2*(b*d-a*e)*sqrt(d+e*x))-160/63*b*(4*b*B*d-3*A*b*e-a*B*e)*(a^2+_
2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)/e^4+20/9*b*(4*b*B*d-3*A*b*e-a*B*e)*_

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(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x)/(e^3*(b*d-a*e))-
256/63*b*(b*d-a*e)^2*(4*b*B*d-3*A*b*e-a*B*e)*sqrt(d+e*x)*sqrt(a^2+
2*a*b*x+b^2*x^2)/e^6+512/63*b*(b*d-a*e)^3*(4*b*B*d-3*A*b*e-a*B*e)*
sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))+64/21*b*(b*d-
a*e)*(4*b*B*d-3*A*b*e-a*B*e)*(a+b*x)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+
b^2*x^2)/e^5
--E 689

--S 690 of 764
d0:=normalize(t0-D(r0,x))
--E 690

)clear all

--S 691 of 764
t0:=(A+B*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(d+e*x)^(7/2)
--E 691

--S 692 of 764
r0:=-2/5*(B*d-A*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(5/2)/(e*(b*d-a*e)*
(d+e*x)^(5/2))-2/15*(12*b*B*d-7*A*b*e-5*a*B*e)*(a^2+2*a*b*x+
b^2*x^2)^(5/2)/(e^2*(b*d-a*e)*(d+e*x)^(3/2))-4/3*b*(12*b*B*d-
7*A*b*e-5*a*B*e)*(a+b*x)*(a^2+2*a*b*x+b^2*x^2)^(3/2)/(e^3*(b*d-a*e)*
sqrt(d+e*x))+32/21*b^2*(12*b*B*d-7*A*b*e-5*a*B*e)*(a^2+2*a*b*x+
b^2*x^2)^(3/2)*sqrt(d+e*x)/(e^4*(b*d-a*e))+256/105*b^2*(b*d-a*e)*
(12*b*B*d-7*A*b*e-5*a*B*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^6-
512/105*b^2*(b*d-a*e)^2*(12*b*B*d-7*A*b*e-5*a*B*e)*sqrt(d+e*x)*
sqrt(a^2+2*a*b*x+b^2*x^2)/(e^7*(a+b*x))-64/35*b^2*(12*b*B*d-7*A*b*
e-5*a*B*e)*(a+b*x)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2)/e^5
--E 692

--S 693 of 764
d0:=normalize(t0-D(r0,x))
--E 693

)clear all

--S 694 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 694

--S 695 of 764
r0:=2/3*(A*b-a*B)*(b*d-a*e)*(a+b*x)*(d+e*x)^(3/2)/(b^3*sqrt(a^2+2*a*b*x+
b^2*x^2))+2/5*(A*b-a*B)*(a+b*x)*(d+e*x)^(5/2)/(b^2*sqrt(a^2+2*a*b*x+
b^2*x^2))+2/7*B*(a+b*x)*(d+e*x)^(7/2)/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))-
2*(A*b-a*B)*(b*d-a*e)^(5/2)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/
sqrt(b*d-a*e))/(b^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+2*(A*b-a*B)*
(b*d-a*e)^2*(a+b*x)*sqrt(d+e*x)/(b^4*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 695

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```

--S 696 of 764
d0:=normalize(t0-D(r0,x))
--E 696

)clear all

--S 697 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 697

--S 698 of 764
r0:=2/3*(A*b-a*B)*(a+b*x)*(d+e*x)^(3/2)/(b^2*sqrt(a^2+2*a*b*x+b^2*x^2))+
2/5*B*(a+b*x)*(d+e*x)^(5/2)/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))-
2*(A*b-a*B)*(b*d-a*e)^(3/2)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/_
sqrt(b*d-a*e))/(b^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+2*(A*b-a*B)*_
(b*d-a*e)*(a+b*x)*sqrt(d+e*x)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 698

--S 699 of 764
d0:=normalize(t0-D(r0,x))
--E 699

)clear all

--S 700 of 764
t0:=(A+B*x)*sqrt(d+e*x)/sqrt(a^2+2*a*b*x+b^2*x^2)
--E 700

--S 701 of 764
r0:=2/3*B*(a+b*x)*(d+e*x)^(3/2)/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))-
2*(A*b-a*B)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*_
sqrt(b*d-a*e)/(b^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+2*(A*b-a*B)*_
(a+b*x)*sqrt(d+e*x)/(b^2*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 701

--S 702 of 764
d0:=normalize(t0-D(r0,x))
--E 702

)clear all

--S 703 of 764
t0:=(A+B*x)/(sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 703

--S 704 of 764
r0:=-2*(A*b-a*B)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
(b^(3/2)*sqrt(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2))+2*B*(a+b*x)*_
sqrt(d+e*x)/(b*e*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 704

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```

--S 705 of 764
d0:=normalize(t0-D(r0,x))
--E 705

)clear all

--S 706 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 706

--S 707 of 764
r0:=-2*(A*b-a*B)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
((b*d-a*e)^(3/2)*sqrt(b)*sqrt(a^2+2*a*b*x+b^2*x^2))-2*(B*d-A*e)*_
(a+b*x)/(e*(b*d-a*e)*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 707

--S 708 of 764
d0:=normalize(t0-D(r0,x))
--E 708

)clear all

--S 709 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 709

--S 710 of 764
r0:=-2/3*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2))-2*(A*b-a*B)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-_
a*e))*sqrt(b)/((b*d-a*e)^(5/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+2*(A*b-_
a*B)*(a+b*x)/((b*d-a*e)^2*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 710

--S 711 of 764
d0:=normalize(t0-D(r0,x))
--E 711

)clear all

--S 712 of 764
t0:=(A+B*x)/((d+e*x)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 712

--S 713 of 764
r0:=-2/5*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^(5/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2))+2/3*(A*b-a*B)*(a+b*x)/((b*d-a*e)^2*(d+e*x)^(3/2)*sqrt(a^2+_
2*a*b*x+b^2*x^2))-2*b^(3/2)*(A*b-a*B)*(a+b*x)*atanh(sqrt(b)*sqrt(d+_
e*x)/sqrt(b*d-a*e))/((b*d-a*e)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+_
2*b*(A*b-a*B)*(a+b*x)/((b*d-a*e)^3*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))

```

```

--E 713

--S 714 of 764
d0:=normalize(t0-D(r0,x))
--E 714

)clear all

--S 715 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 715

--S 716 of 764
r0:=-1/10*(4*b*B*d+5*A*b*e-9*a*B*e)*(a+b*x)*(d+e*x)^(7/2)/(b^2*e*(a^2+_
2*a*b*x+b^2*x^2)^(3/2))+2/5*B*(a+b*x)*(d+e*x)^(9/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+7/12*e*(4*b*B*d+5*A*b*e-9*a*B*e)*(a+b*x)*_
(d+e*x)^(3/2)/(b^4*sqrt(a^2+2*a*b*x+b^2*x^2))-7/20*(4*b*B*d+5*A*b*e-_
9*a*B*e)*(d+e*x)^(5/2)/(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))-7/4*e*(b*d-_
a*e)^(3/2)*(4*b*B*d+5*A*b*e-9*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+_
e*x)/sqrt(b*d-a*e))/(b^(11/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+7/4*e*(b*d-_
a*e)*(4*b*B*d+5*A*b*e-9*a*B*e)*(a+b*x)*sqrt(d+e*x)/(b^5*sqrt(a^2+_
2*a*b*x+b^2*x^2))
--E 716

--S 717 of 764
d0:=normalize(t0-D(r0,x))
--E 717

)clear all

--S 718 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 718

--S 719 of 764
r0:=-1/6*(4*b*B*d+3*A*b*e-7*a*B*e)*(a+b*x)*(d+e*x)^(5/2)/(b^2*e*(a^2+_
2*a*b*x+b^2*x^2)^(3/2))+2/3*B*(a+b*x)*(d+e*x)^(7/2)/(b*e*(a^2+_
2*a*b*x+b^2*x^2)^(3/2))-5/12*(4*b*B*d+3*A*b*e-7*a*B*e)*(d+e*x)^(3/2)/_
(b^3*sqrt(a^2+2*a*b*x+b^2*x^2))-5/4*e*(4*b*B*d+3*A*b*e-7*a*B*e)*_
(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b*d-a*e)/_
(b^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+5/4*e*(4*b*B*d+3*A*b*e-7*a*B*e)*_
(a+b*x)*sqrt(d+e*x)/(b^4*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 719

--S 720 of 764
d0:=normalize(t0-D(r0,x))
--E 720

)clear all

```

```

--S 721 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 721

--S 722 of 764
r0:=-1/2*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^(3/2)/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+2*B*(a+b*x)*(d+e*x)^(5/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))-3/4*e*(4*b*B*d+A*b*e-5*a*B*e)*(a+b*x)*atanh(sqrt(b)*_
sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(7/2)*sqrt(b*d-a*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2))-3/4*(4*b*B*d+A*b*e-5*a*B*e)*sqrt(d+e*x)/(b^3*sqrt(a^2+_
2*a*b*x+b^2*x^2))
--E 722

--S 723 of 764
d0:=normalize(t0-D(r0,x))
--E 723

)clear all

--S 724 of 764
t0:=(A+B*x)*sqrt(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^(3/2)
--E 724

--S 725 of 764
r0:=-2*B*(a+b*x)*(d+e*x)^(3/2)/(b*e*(a^2+2*a*b*x+b^2*x^2)^(3/2))+_
1/2*(4*b*B*d-A*b*e-3*a*B*e)*(a+b*x)*(d+e*x)^(3/2)/(b*e*(b*d-a*e)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))-1/4*e*(4*b*B*d-A*b*e-3*a*B*e)*(a+b*x)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(5/2)*(b*d-a*e)^(3/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2))-1/4*(4*b*B*d-A*b*e-3*a*B*e)*sqrt(d+e*x)/_
(b^2*(b*d-a*e)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 725

--S 726 of 764
d0:=normalize(t0-D(r0,x))
--E 726

)clear all

--S 727 of 764
t0:=(A+B*x)/((a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x))
--E 727

--S 728 of 764
r0:=-2/3*B*(a+b*x)*sqrt(d+e*x)/(b*e*(a^2+2*a*b*x+b^2*x^2)^(3/2))+_
1/6*(4*b*B*d-3*A*b*e-a*B*e)*(a+b*x)*sqrt(d+e*x)/(b*e*(b*d-a*e)*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))+1/4*e*(4*b*B*d-3*A*b*e-a*B*e)*(a+b*x)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(3/2)*(b*d-a*e)^(5/2)*_
sqrt(a^2+2*a*b*x+b^2*x^2))-1/4*(4*b*B*d-3*A*b*e-a*B*e)*sqrt(d+e*x)/_
(b*(b*d-a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 728

```



```

)clear all

--S 729 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 729

--S 730 of 764
r0:=-2*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2)*_
sqrt(d+e*x))+1/2*(4*b*B*d-5*A*b*e+a*B*e)*(a+b*x)*sqrt(d+e*x)/(e*_
(b*d-a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))+3/4*e*(4*b*B*d-5*A*b*e+_
a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/((b*d-_
a*e)^(7/2)*sqrt(b)*sqrt(a^2+2*a*b*x+b^2*x^2))-3/4*(4*b*B*d-5*A*b*e+_
a*B*e)*sqrt(d+e*x)/((b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 730

--S 731 of 764
d0:=normalize(t0-D(r0,x))
--E 731

)clear all

--S 732 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 732

--S 733 of 764
r0:=-2/3*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^(3/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+1/6*(4*b*B*d-7*A*b*e+3*a*B*e)*(a+b*x)/(e*(b*d-_
a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x))+5/4*e*(4*b*B*d-_
7*A*b*e+3*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*_
sqrt(b)/((b*d-a*e)^(9/2)*sqrt(a^2+2*a*b*x+b^2*x^2))-5/12*(4*b*B*d-_
7*A*b*e+3*a*B*e)/((b*d-a*e)^3*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))-_
5/4*e*(4*b*B*d-7*A*b*e+3*a*B*e)*(a+b*x)/((b*d-a*e)^4*sqrt(d+e*x)*_
sqrt(a^2+2*a*b*x+b^2*x^2))
--E 733

--S 734 of 764
d0:=normalize(t0-D(r0,x))
--E 734

)clear all

--S 735 of 764
t0:=(A+B*x)/((d+e*x)^(7/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2))
--E 735

--S 736 of 764
r0:=-2/5*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^(5/2)*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+1/10*(4*b*B*d-9*A*b*e+5*a*B*e)*(a+b*x)/(e*(b*d-_

```

```

a*e)^(2*(d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(3/2))-7/20*(4*b*B*d-
9*A*b*e+5*a*B*e)/((b*d-a*e)^3*(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2))-7/12*e*(4*b*B*d-9*A*b*e+5*a*B*e)*(a+b*x)/((b*d-a*e)^4*_
(d+e*x)^(3/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+7/4*b^(3/2)*e*(4*b*B*d-
9*A*b*e+5*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/_
((b*d-a*e)^(11/2)*sqrt(a^2+2*a*b*x+b^2*x^2))-7/4*b*e*(4*b*B*d-
9*A*b*e+5*a*B*e)*(a+b*x)/((b*d-a*e)^5*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+_
b^2*x^2))
--E 736

```

```

--S 737 of 764
d0:=normalize(t0-D(r0,x))
--E 737

```

```

)clear all

```

```

--S 738 of 764
t0:=(A+B*x)*(d+e*x)^(11/2)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 738

```

```

--S 739 of 764
r0:=-1/20*(8*b*B*d+5*A*b*e-13*a*B*e)*(a+b*x)*(d+e*x)^(11/2)/(b^2*e*_
(a^2+2*a*b*x+b^2*x^2)^(5/2))+2/5*B*(a+b*x)*(d+e*x)^(13/2)/(b*e*_
(a^2+2*a*b*x+b^2*x^2)^(5/2))-33/160*e*(8*b*B*d+5*A*b*e-13*a*B*e)*_
(a+b*x)*(d+e*x)^(7/2)/(b^4*(a^2+2*a*b*x+b^2*x^2)^(3/2))-11/120*_
(8*b*B*d+5*A*b*e-13*a*B*e)*(d+e*x)^(9/2)/(b^3*(a^2+2*a*b*x+_
b^2*x^2)^(3/2))+77/64*e^3*(8*b*B*d+5*A*b*e-13*a*B*e)*(a+b*x)*(d+_
e*x)^(3/2)/(b^6*sqrt(a^2+2*a*b*x+b^2*x^2))-231/320*e^2*(8*b*B*d+_
5*A*b*e-13*a*B*e)*(d+e*x)^(5/2)/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2))-_
231/64*e^3*(b*d-a*e)^(3/2)*(8*b*B*d+5*A*b*e-13*a*B*e)*(a+b*x)*_
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(15/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2))+231/64*e^3*(b*d-a*e)*(8*b*B*d+5*A*b*e-13*a*B*e)*(a+b*x)*_
sqrt(d+e*x)/(b^7*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 739

```

```

--S 740 of 764
d0:=normalize(t0-D(r0,x))
--E 740

```

```

)clear all

```

```

--S 741 of 764
t0:=(A+B*x)*(d+e*x)^(9/2)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 741

```

```

--S 742 of 764
r0:=-1/12*(8*b*B*d+3*A*b*e-11*a*B*e)*(a+b*x)*(d+e*x)^(9/2)/(b^2*e*(a^2+_
2*a*b*x+b^2*x^2)^(5/2))+2/3*B*(a+b*x)*(d+e*x)^(11/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-7/32*e*(8*b*B*d+3*A*b*e-11*a*B*e)*(a+b*x)*(d+_
e*x)^(5/2)/(b^4*(a^2+2*a*b*x+b^2*x^2)^(3/2))-1/8*(8*b*B*d+3*A*b*e-_

```

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11*a*B*e)*(d+e*x)^(7/2)/(b^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))-
35/64*e^2*(8*b*B*d+3*A*b*e-11*a*B*e)*(d+e*x)^(3/2)/(b^5*sqrt(a^2+
2*a*b*x+b^2*x^2))-105/64*e^3*(8*b*B*d+3*A*b*e-11*a*B*e)*(a+b*x)*
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b*d-a*e)/(b^(13/2)*
sqrt(a^2+2*a*b*x+b^2*x^2))+105/64*e^3*(8*b*B*d+3*A*b*e-11*a*B*e)*
(a+b*x)*sqrt(d+e*x)/(b^6*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 742

--S 743 of 764
d0:=normalize(t0-D(r0,x))
--E 743

)clear all

--S 744 of 764
t0:=(A+B*x)*(d+e*x)^(7/2)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 744

--S 745 of 764
r0:=-1/4*(8*b*B*d+A*b*e-9*a*B*e)*(a+b*x)*(d+e*x)^(7/2)/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+2*B*(a+b*x)*(d+e*x)^(9/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-35/96*e*(8*b*B*d+A*b*e-9*a*B*e)*(a+b*x)*(d+_
e*x)^(3/2)/(b^4*(a^2+2*a*b*x+b^2*x^2)^(3/2))-7/24*(8*b*B*d+A*b*e-_
9*a*B*e)*(d+e*x)^(5/2)/(b^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))-35/64*e^3*_
(8*b*B*d+A*b*e-9*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-_
a*e))/(b^(11/2)*sqrt(b*d-a*e))*sqrt(a^2+2*a*b*x+b^2*x^2))-35/64*e^2*_
(8*b*B*d+A*b*e-9*a*B*e)*sqrt(d+e*x)/(b^5*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 745

--S 746 of 764
d0:=normalize(t0-D(r0,x))
--E 746

)clear all

--S 747 of 764
t0:=(A+B*x)*(d+e*x)^(5/2)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 747

--S 748 of 764
r0:=1/4*(8*b*B*d-A*b*e-7*a*B*e)*(a+b*x)*(d+e*x)^(5/2)/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-2*B*(a+b*x)*(d+e*x)^(7/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+5/24*(8*b*B*d-A*b*e-7*a*B*e)*(d+e*x)^(3/2)/(b^3*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))+5/32*e*(8*b*B*d-A*b*e-7*a*B*e)*(a+b*x)*_
(d+e*x)^(3/2)/(b^3*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2))-5/64*e^3*_
(8*b*B*d-A*b*e-7*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-_
a*e))/(b^(9/2)*(b*d-a*e)^(3/2))*sqrt(a^2+2*a*b*x+b^2*x^2))-5/64*e^2*_
(8*b*B*d-A*b*e-7*a*B*e)*sqrt(d+e*x)/(b^4*(b*d-a*e)*sqrt(a^2+2*a*b*x+_
b^2*x^2))
--E 748

```

```

--S 749 of 764
d0:=normalize(t0-D(r0,x))
--E 749

)clear all

--S 750 of 764
t0:=(A+B*x)*(d+e*x)^(3/2)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 750

--S 751 of 764
r0:=1/12*(8*b*B*d-3*A*b*e-5*a*B*e)*(a+b*x)*(d+e*x)^(3/2)/(b^2*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))-2/3*B*(a+b*x)*(d+e*x)^(5/2)/(b*e*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+1/24*(8*b*B*d-3*A*b*e-5*a*B*e)*sqrt(d+e*x)/(b^3*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))+1/96*e*(8*b*B*d-3*A*b*e-5*a*B*e)*(a+_
b*x)*sqrt(d+e*x)/(b^3*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2))+_
1/64*e^3*(8*b*B*d-3*A*b*e-5*a*B*e)*(a+b*x)*atanh(sqrt(b)*sqrt(d+_
e*x)/sqrt(b*d-a*e))/(b^(7/2)*(b*d-a*e)^(5/2)*sqrt(a^2+2*a*b*x+_
b^2*x^2))-1/64*e^2*(8*b*B*d-3*A*b*e-5*a*B*e)*sqrt(d+e*x)/(b^3*(b*d-_
a*e)^2*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 751

--S 752 of 764
d0:=normalize(t0-D(r0,x))
--E 752

)clear all

--S 753 of 764
t0:=(A+B*x)*sqrt(d+e*x)/(a^2+2*a*b*x+b^2*x^2)^(5/2)
--E 753

--S 754 of 764
r0:=-2/5*B*(a+b*x)*(d+e*x)^(3/2)/(b*e*(a^2+2*a*b*x+b^2*x^2)^(5/2))+_
1/20*(8*b*B*d-5*A*b*e-3*a*B*e)*(a+b*x)*(d+e*x)^(3/2)/(b*e*(b*d-a*e)*_
(a^2+2*a*b*x+b^2*x^2)^(5/2))-1/24*(8*b*B*d-5*A*b*e-3*a*B*e)*_
sqrt(d+e*x)/(b^2*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(3/2))-1/96*e*_
(8*b*B*d-5*A*b*e-3*a*B*e)*(a+b*x)*sqrt(d+e*x)/(b^2*(b*d-a*e)^2*_
(a^2+2*a*b*x+b^2*x^2)^(3/2))-1/64*e^3*(8*b*B*d-5*A*b*e-3*a*B*e)*_
(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(5/2)*(b*d-_
a*e)^(7/2)*sqrt(a^2+2*a*b*x+b^2*x^2))+1/64*e^2*(8*b*B*d-5*A*b*e-_
3*a*B*e)*sqrt(d+e*x)/(b^2*(b*d-a*e)^3*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 754

--S 755 of 764
d0:=normalize(t0-D(r0,x))
--E 755

)clear all

```

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--S 756 of 764
t0:=(A+B*x)/((a^2+2*a*b*x+b^2*x^2)^(5/2)*sqrt(d+e*x))
--E 756

--S 757 of 764
r0:=-2/7*B*(a+b*x)*sqrt(d+e*x)/(b*e*(a^2+2*a*b*x+b^2*x^2)^(5/2))+
1/28*(8*b*B*d-7*A*b*e-a*B*e)*(a+b*x)*sqrt(d+e*x)/(b*e*(b*d-a*e)*
(a^2+2*a*b*x+b^2*x^2)^(5/2))-1/24*(8*b*B*d-7*A*b*e-a*B*e)*
sqrt(d+e*x)/(b*(b*d-a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(3/2))+5/96*e*
(8*b*B*d-7*A*b*e-a*B*e)*(a+b*x)*sqrt(d+e*x)/(b*(b*d-a*e)^3*(a^2+
2*a*b*x+b^2*x^2)^(3/2))+5/64*e^3*(8*b*B*d-7*A*b*e-a*B*e)*(a+b*x)*
atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/(b^(3/2)*(b*d-a*e)^(9/2))*
sqrt(a^2+2*a*b*x+b^2*x^2))-5/64*e^2*(8*b*B*d-7*A*b*e-a*B*e)*
sqrt(d+e*x)/(b*(b*d-a*e)^4*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 757

--S 758 of 764
d0:=normalize(t0-D(r0,x))
--E 758

)clear all

--S 759 of 764
t0:=(A+B*x)/((d+e*x)^(3/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2))
--E 759

--S 760 of 764
r0:=-2*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(a^2+2*a*b*x+b^2*x^2)^(5/2))*
sqrt(d+e*x))+1/4*(8*b*B*d-9*A*b*e+a*B*e)*(a+b*x)*sqrt(d+e*x)/(e*
(b*d-a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2))-7/24*(8*b*B*d-9*A*b*e+
a*B*e)*sqrt(d+e*x)/((b*d-a*e)^3*(a^2+2*a*b*x+b^2*x^2)^(3/2))+
35/96*e*(8*b*B*d-9*A*b*e+a*B*e)*(a+b*x)*sqrt(d+e*x)/((b*d-a*e)^4*
(a^2+2*a*b*x+b^2*x^2)^(3/2))+35/64*e^3*(8*b*B*d-9*A*b*e+a*B*e)*
(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))/((b*d-a*e)^(11/2))*
sqrt(b)*sqrt(a^2+2*a*b*x+b^2*x^2))-35/64*e^2*(8*b*B*d-9*A*b*e+
a*B*e)*sqrt(d+e*x)/((b*d-a*e)^5*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 760

--S 761 of 764
d0:=normalize(t0-D(r0,x))
--E 761

)clear all

--S 762 of 764
t0:=(A+B*x)/((d+e*x)^(5/2)*(a^2+2*a*b*x+b^2*x^2)^(5/2))
--E 762

--S 763 of 764

```

```

r0:=-2/3*(B*d-A*e)*(a+b*x)/(e*(b*d-a*e)*(d+e*x)^(3/2)*(a^2+2*a*b*x+_
b^2*x^2)^(5/2))+1/12*(8*b*B*d-11*A*b*e+3*a*B*e)*(a+b*x)/(e*(b*d-_
a*e)^2*(a^2+2*a*b*x+b^2*x^2)^(5/2)*sqrt(d+e*x))+1/8*(-8*b*B*d+11*A*b*e-_
3*a*B*e)/((b*d-a*e)^3*(a^2+2*a*b*x+b^2*x^2)^(3/2)*sqrt(d+e*x))+_
7/32*e*(8*b*B*d-11*A*b*e+3*a*B*e)*(a+b*x)/((b*d-a*e)^4*(a^2+2*a*b*x+_
b^2*x^2)^(3/2)*sqrt(d+e*x))+105/64*e^3*(8*b*B*d-11*A*b*e+3*a*B*e)*_
(a+b*x)*atanh(sqrt(b)*sqrt(d+e*x)/sqrt(b*d-a*e))*sqrt(b)/((b*d-_
a*e)^(13/2)*sqrt(a^2+2*a*b*x+b^2*x^2))-35/64*e^2*(8*b*B*d-11*A*b*e+_
3*a*B*e)/((b*d-a*e)^5*sqrt(d+e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))-_
105/64*e^3*(8*b*B*d-11*A*b*e+3*a*B*e)*(a+b*x)/((b*d-a*e)^6*sqrt(d+_
e*x)*sqrt(a^2+2*a*b*x+b^2*x^2))
--E 763

--S 764 of 764
d0:=normalize(t0-D(r0,x))
--E 764

)spool
)lisp (bye)

```

References

- [1] nothing