

\$SPAD/src/input richerror000-078.input

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**Abstract**

## Contents

```

      *
)set break resume
)sys rm -f richerror000-078.output
)spool richerror000-078.output
)set message auto off
)clear all

--S 1 of 395
t0000:= erf(b*x)^2/x^7
--R
--R
--R      2
--R      erf(b x)
--R (1) -----
--R      7
--R      x
--R
--R                                          Type: Expression(Integer)
--E 1

--S 2 of 395
r0000:= -1/15*b^2/(exp(1)^(2*b^2*x^2))/pi/x^4+2/9*b^4/_
(exp(1)^(2*b^2*x^2))/pi/x^2-2/45*b*(3-2*b^2*x^2+_
4*b^4*x^4)*erf(b*x)/(exp(1)^(b^2*x^2))/pi^(1/2)/_
x^5-4/45*b^6*erf(b*x)^2-1/6*erf(b*x)^2/x^6+_
28/45*b^6*Ei(-2*b^2*x^2)/pi
--R
--R
--R (2)
--R
--R      6      6      2      6 6      2 2      2 2      2 2
--R      ((- 8b %pi x - 15%pi)erf(b x) + 56b x Ei(- 2b x ))%e %e
--R
--R      +
--R
--R      2 2
--R      4 4      2 2      b x
--R      (20b x - 6b x )%e
--R
--R      *
--R
--R      +---+
--R      \|%pi
--R
--R      +
--R
--R      5      5      3      3      2 2
--R      (- 16b %pi x + 8b %pi x - 12b %pi x)erf(b x)%e 2b x
--R
--R      /
--R
--R      2 2      2 2
--R      6 b x 2b x +---+
--R      90%pi x %e %e \|%pi
--R
--R                                          Type: Expression(Integer)
--E 2

```

```

--S 3 of 395
a0000:= integrate(t0000,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 3

--S 4 of 395
--m0000:= a0000-r0000
--E 4

--S 5 of 395
--d0000:= D(m0000,x)
--E 5

--S 6 of 395
t0001:= erf(b*x)^2/x^5
--R
--R
--R          2
--R      erf(b x)
--R (3) -----
--R          5
--R         x
--R
--R                                          Type: Expression(Integer)
--E 6

--S 7 of 395
r0001:= -1/3*b^2/(exp(1)^(2*b^2*x^2))/pi/x^2-
1/3*b*(1-2*b^2*x^2)*erf(b*x)/(exp(1)^(b^2*x^2))/pi^(1/2)/x^3+
1/3*b^4*erf(b*x)^2-1/4*erf(b*x)^2/x^4-4/3*b^4*Ei(-2*b^2*x^2)/pi
--R
--R
--R (4)
--R
--R          4      4      2      4      2      2      2      2      2
--R      ((4b %pi x  - 3%pi)erf(b x)  - 16b x Ei(- 2b x ))%e  %e
--R      +
--R          2      2
--R      - 4b x %e
--R      *
--R      +----+
--R      \|%pi
--R      +

```

```

--R
--R
--R      2 2
--R      3      3      2b x
--R      (8b %pi x - 4b %pi x)erf(b x)%e
--R /
--R      2 2      2 2
--R      4 b x 2b x +----+
--R      12%pi x %e %e \|%pi
--R
--R      Type: Expression(Integer)
--E 7

```

```

--S 8 of 395
a0001:= integrate(t0001,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 8

```

```

--S 9 of 395
--m0001:= a0001-r0001
--E 9

```

```

--S 10 of 395
--d0001:= D(m0001,x)
--E 10

```

```

--S 11 of 395
t0002:= erf(b*x)^2/x^3
--R
--R
--R      2
--R      erf(b x)
--R      (5) -----
--R      3
--R      x
--R
--R      Type: Expression(Integer)
--E 11

```

```

--S 12 of 395
r0002:= -2*b*erf(b*x)/(exp(1)^(b^2*x^2))/%pi^(1/2)/x-b^2*erf(b*x)^2-
1/2*erf(b*x)^2/x^2+2*b^2*Ei(-2*b^2*x^2)/%pi
--R
--R
--R      (6)
--R
--R      2 2      2 2      2 2      2 2      2 2      b x +----+
--R      ((- 2b %pi x - %pi)erf(b x) + 4b x Ei(- 2b x ))%e \|%pi

```

```

--R      +
--R      - 4b %pi x erf(b x)
--R      /
--R      2 2
--R      2 b x +----+
--R      2%pi x %e  \|%pi
--R
--R                                          Type: Expression(Integer)
--E 12

```

```

--S 13 of 395
a0002:= integrate(t0002,x)
--R
--R
--R      >> Error detected within library code:
--R      Sorry - cannot handle that integrand yet
--R
--R      Continuing to read the file...
--R
--E 13

```

```

--S 14 of 395
--m0002:= a0002-r0002
--E 14

```

```

--S 15 of 395
--d0002:= D(m0002,x)
--E 15

```

```

--S 16 of 395
t0003:= x*erf(b*x)^2
--R
--R
--R      2
--R      (7) x erf(b x)
--R
--R                                          Type: Expression(Integer)
--E 16

```

```

--S 17 of 395
r0003:= 1/2/(exp(1)^(2*b^2*x^2))/b^2/%pi+x*erf(b*x)/(exp(1)^(b^2*x^2))/_
      b/%pi^(1/2)-1/4*erf(b*x)^2/b^2+1/2*x^2*erf(b*x)^2
--R
--R
--R      (8)
--R      2 2      2 2      2 2
--R      2 2      2 b x      2b x      b x +----+
--R      ((2b %pi x - %pi)erf(b x) %e %e + 2%e )\|%pi
--R      +
--R      2 2
--R      2b x
--R      4b %pi x erf(b x)%e

```

```

--R /
--R      2 2      2 2
--R      b x      2b x +----+
--R      4b %pi %e      %e      \|%pi
--R
--R                                          Type: Expression(Integer)
--E 17

```

```

--S 18 of 395
a0003:= integrate(t0003,x)
--R
--R
--R      >> Error detected within library code:
--R      Sorry - cannot handle that integrand yet
--R
--R      Continuing to read the file...
--R
--E 18

```

```

--S 19 of 395
--m0003:= a0003-r0003
--E 19

```

```

--S 20 of 395
--d0003:= D(m0003,x)
--E 20

```

```

--S 21 of 395
t0004:= x^3*erf(b*x)^2
--R
--R
--R      3      2
--R      (9) x erf(b x)
--R
--R                                          Type: Expression(Integer)
--E 21

```

```

--S 22 of 395
r0004:= 1/2/(exp(1)^(2*b^2*x^2))/b^4/%pi+1/4*x^2/(exp(1)^(2*b^2*x^2))/b^2/%pi+_
1/4*x*(3+2*b^2*x^2)*erf(b*x)/(exp(1)^(b^2*x^2))/b^3/%pi^(1/2)-_
3/16*erf(b*x)^2/b^4+1/4*x^4*erf(b*x)^2
--R
--R
--R      (10)
--R
--R      2 2      2 2      2 2
--R      b x      2b x      b x +----+
--R      ((4b %pi x - 3%pi)erf(b x) %e      %e      + (4b x + 8)%e      )\|%pi
--R      +
--R      2 2
--R      3      3      2b x
--R      (8b %pi x + 12b %pi x)erf(b x)%e
--R /

```

```

--R          2 2    2 2
--R      4      b x  2b x  +----+
--R    16b %pi %e    %e    \|%pi
--R
--R                                          Type: Expression(Integer)
--E 22

```

```

--S 23 of 395
a0004:= integrate(t0004,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 23

```

```

--S 24 of 395
--m0004:= a0004-r0004
--E 24

```

```

--S 25 of 395
--d0004:= D(m0004,x)
--E 25

```

```

--S 26 of 395
t0005:= x^5*erf(b*x)^2
--R
--R
--R      5      2
--R    (11) x erf(b x)
--R
--R                                          Type: Expression(Integer)
--E 26

```

```

--S 27 of 395
r0005:= 11/12/(exp(1)^(2*b^2*x^2))/b^6/%pi+7/12*x^2/(exp(1)^(2*b^2*x^2))/_
b^4/%pi+1/6*x^4/(exp(1)^(2*b^2*x^2))/b^2/%pi+1/12*x*(15+10*b^2*x^2+_
4*b^4*x^4)*erf(b*x)/(exp(1)^(b^2*x^2))/b^5/%pi^(1/2)-_
5/16*erf(b*x)^2/b^6+1/6*x^6*erf(b*x)^2
--R
--R
--R    (12)
--R
--R          2 2    2 2
--R      6      6      2 b x  2b x
--R    (8b %pi x  - 15%pi)erf(b x) %e    %e
--R
--R      +
--R
--R          2 2
--R      4 4      2 2      b x
--R    (8b x  + 28b x  + 44)%e
--R
--R      *

```



```

--R      +----+
--R      \|%pi
--R      +
--R      2 2
--R      5 5 3 3 2b x
--R      (16b %pi x + 40b %pi x + 60b %pi x)erf(b x)%e
--R      /
--R      2 2 2 2
--R      6 b x 2b x +----+
--R      48b %pi %e %e \|%pi
--R
--R                                          Type: Expression(Integer)
--E 27

```

```

--S 28 of 395
a0005:= integrate(t0005,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 28

```

```

--S 29 of 395
--m0005:= a0005-r0005
--E 29

```

```

--S 30 of 395
--d0005:= D(m0005,x)
--E 30

```

```

--S 31 of 395
t0006:= x*erf(a+b*x)^2
--R
--R
--R      2
--R      (13) x erf(b x + a)
--R
--R                                          Type: Expression(Integer)
--E 31

```

```

--S 32 of 395
r0006:= 1/4/b^2*(2/(exp(1)^(2*(a+b*x)^2))/%pi-
4*(a-b*x)*erf(a+b*x)/exp((a+b*x)^2)/%pi^(1/2)-erf(a+b*x)^2-
4*a*(a+b*x)*erf(a+b*x)^2+2*(a+b*x)^2*erf(a+b*x)^2+
4*a*2^(1/2)/%pi^(1/2)*erf(2^(1/2)*(a+b*x)))
--R
--R
--R      (14)
--R
--R      2 2 2

```

```

--R          2      2      2              2  b x  + 2a b x + a
--R      (2b %pi x  + (- 2a  - 1)%pi)erf(b x + a) %e
--R      *
--R          2 2              2
--R      2b x  + 4a b x + 2a
--R      %e
--R      +
--R          2 2              2
--R      b x  + 2a b x + a
--R      2%e
--R      *
--R      +---+
--R      \|%pi
--R      +
--R          +-+              +-+      2 2              2
--R          4a %pi\|2 erf((b x + a)\|2 )%e
--R      +
--R      (4b %pi x - 4a %pi)erf(b x + a)
--R      *
--R          2 2              2
--R      2b x  + 4a b x + 2a
--R      %e
--R      /
--R          2 2              2      2 2              2
--R          2      b x  + 2a b x + a  2b x  + 4a b x + 2a  +---+
--R      4b %pi %e              %e              \|%pi
--R                                          Type: Expression(Integer)
--E 32

```

```

--S 33 of 395
a0006:= integrate(t0006,x)
--R
--R
--R      >> Error detected within library code:
--R      Sorry - cannot handle that integrand yet
--R
--R      Continuing to read the file...
--R
--E 33

```

```

--S 34 of 395
--m0006:= a0006-r0006
--E 34

```

```

--S 35 of 395
--d0006:= D(m0006,x)
--E 35

```

```

--S 36 of 395

```

```

t0007:= x^2*erf(a+b*x)^2
--R
--R
--R      2      2
--R      x erf(b x + a)
--R
--R                                          Type: Expression(Integer)
--E 36

```

```

--S 37 of 395
r0007:= -1/6/b^3*(4*a/(exp(1)^(2*(a+b*x)^2))/%pi-
2*b*x/(exp(1)^(2*(a+b*x)^2))/%pi-
4*(1+a^2-a*b*x+b^2*x^2)*erf(a+b*x)/exp((a+b*x)^2)/%pi^(1/2)-
3*a*erf(a+b*x)^2-6*a^2*(a+b*x)*erf(a+b*x)^2+
6*a*(a+b*x)^2*erf(a+b*x)^2-2*(a+b*x)^3*erf(a+b*x)^2+
1/2*(5+12*a^2)*erf(2^(1/2)*(a+b*x))*2^(1/2)/%pi^(1/2))
--R
--R
--R      (16)
--R
--R      3      3      3      2 2      2
--R      (4b %pi x + (4a + 6a)%pi)erf(b x + a) %e
--R
--R      *
--R      2 2      2
--R      2b x + 4a b x + 2a
--R
--R      %e
--R
--R      +
--R      2 2      2
--R      b x + 2a b x + a
--R
--R      (4b x - 8a)%e
--R
--R      *
--R      +---+
--R      \| %pi
--R
--R      +
--R      2 2      2 2      2
--R      (- 12a - 5)%pi\|2 erf((b x + a)\|2 )%e
--R
--R      +
--R      2 2      2
--R      (8b %pi x - 8a b %pi x + (8a + 8)%pi)erf(b x + a)
--R
--R      *
--R      2 2      2
--R      2b x + 4a b x + 2a
--R
--R      %e
--R
--R      /
--R      3      2 2      2 2 2      2
--R      12b %pi %e b x + 2a b x + a 2b x + 4a b x + 2a +---+
--R
--R
--R                                          \| %pi
--R                                          Type: Expression(Integer)
--E 37

```

```

--S 38 of 395
a0007:= integrate(t0007,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 38

--S 39 of 395
--m0007:= a0007-r0007
--E 39

--S 40 of 395
--d0007:= D(m0007,x)
--E 40

--S 41 of 395
t0008:= exp(1)^(-b^2*x^2)*erf(b*x)/x^8
--R
--R
--R
--R      2 2
--R      - b x
--R      erf(b x)%e
--R (17) -----
--R      8
--R      x
--R
--R                                          Type: Expression(Integer)
--E 41

--S 42 of 395
r0008:= -1/21*b/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^6+_
8/105*b^3/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^4+_
4/21*b^5/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^2-1/105*(15-6*b^2*x^2+_
4*b^4*x^4-8*b^6*x^6)*erf(b*x)/(exp(1)^(b^2*x^2))/x^7+_
4/105*b^7*pi^(1/2)*erf(b*x)^2-16/35*b^7*Ei(-2*b^2*x^2)/pi^(1/2)
--R
--R
--R (18)
--R
--R      2 2
--R      6 6      4 4      2 2      2b x +----+
--R      (8b x - 4b x + 6b x - 15)erf(b x)%e  \|%pi
--R
--R      +
--R
--R      7 7      2      7 7      2 2      2 2      2 2
--R      (4b %pi x erf(b x) - 48b x Ei(- 2b x ))%e  b x  2b x
--R
--R      +
--R
--R      2 2

```

```

--R          5 5      3 3      b x
--R      (- 20b x + 8b x - 5b x)%e
--R /
--R          2 2      2 2
--R      7 b x 2b x +----+
--R      105x %e %e \|\%pi
--R
--R                                          Type: Expression(Integer)
--E 42

```

```

--S 43 of 395
a0008:= integrate(t0008,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 43

```

```

--S 44 of 395
--m0008:= a0008-r0008
--E 44

```

```

--S 45 of 395
--d0008:= D(m0008,x)
--E 45

```

```

--S 46 of 395
t0009:= exp(1)^(-b^2*x^2)*erf(b*x)/x^6
--R
--R
--R          2 2
--R          - b x
--R      erf(b x)%e
--R (19) -----
--R          6
--R          x
--R
--R                                          Type: Expression(Integer)
--E 46

```

```

--S 47 of 395
r0009:= -1/10*b/(exp(1)^(2*b^2*x^2))/\%pi^(1/2)/x^4+_
1/3*b^3/(exp(1)^(2*b^2*x^2))/\%pi^(1/2)/x^2+_
1/15*(3-2*b^2*x^2+4*b^4*x^4)*erf(b*x)/(exp(1)^(b^2*x^2))/x^5+_
2/15*b^5*\%pi^(1/2)*erf(b*x)^2+14/15*b^5*Ei(-2*b^2*x^2)/\%pi^(1/2)
--R
--R
--R (20)
--R
--R          2 2

```

```

--R          4 4      2 2          2b x +----+
--R      (- 8b x + 4b x - 6)erf(b x)%e  \|%pi
--R      +
--R          5      5      2      5 5      2 2      b x      2b x
--R      (- 4b %pi x erf(b x) + 28b x Ei(- 2b x ))%e  %e
--R      +
--R          2 2
--R      3 3      b x
--R      (10b x - 3b x)%e
--R      /
--R          2 2      2 2
--R      5 b x      2b x +----+
--R      30x %e      %e  \|%pi
--R
--R                                          Type: Expression(Integer)
--E 47

```

```

--S 48 of 395
a0009:= integrate(t0009,x)
--R
--R
--R      >> Error detected within library code:
--R      Sorry - cannot handle that integrand yet
--R
--R      Continuing to read the file...
--R
--E 48

```

```

--S 49 of 395
--m0009:= a0009-r0009
--E 49

```

```

--S 50 of 395
--d0009:= D(m0009,x)
--E 50

```

```

--S 51 of 395
t0010:= exp(1)^(-b^2*x^2)*erf(b*x)/x^4
--R
--R
--R          2 2
--R          - b x
--R      erf(b x)%e
--R      (21) -----
--R          4
--R          x
--R
--R                                          Type: Expression(Integer)
--E 51

```

```

--S 52 of 395

```

```

r0010:= -1/3*b/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^2-
1/3*(1-2*b^2*x^2)*erf(b*x)/(exp(1)^(b^2*x^2))/x^3+
1/3*b^3*pi^(1/2)*erf(b*x)^2-4/3*b^3*Ei(-2*b^2*x^2)/pi^(1/2)
--R
--R
--R (22)
--R
--R          2 2          2 2
--R      (2b x  - 1)erf(b x)%e      2b x  +----+
--R      +
--R          3      3      2      3 3      2 2      2 2      2 2      2 2
--R      (b %pi x erf(b x)  - 4b x Ei(- 2b x ))%e      %e      - b x %e
--R /
--R          2 2      2 2
--R      3 b x  2b x  +----+
--R      3x %e      %e      \|%pi
--R
--R                                          Type: Expression(Integer)
--E 52

--S 53 of 395
a0010:= integrate(t0010,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 53

--S 54 of 395
--m0010:= a0010-r0010
--E 54

--S 55 of 395
--d0010:= D(m0010,x)
--E 55

--S 56 of 395
t0011:= exp(1)^(-b^2*x^2)*erf(b*x)/x^2
--R
--R
--R          2 2
--R          - b x
--R      erf(b x)%e
--R (23) -----
--R          2
--R          x
--R
--R                                          Type: Expression(Integer)

```

```

--E 56

--S 57 of 395
r0011:= -erf(b*x)/(exp(1)^(b^2*x^2))/x-1/2*b*%pi^(1/2)*erf(b*x)^2+_
        b*Ei(-2*b^2*x^2)/%pi^(1/2)
--R
--R
--R
--R                                     2 2      b x
--R      +----+
--R      - 2erf(b x)\|%pi  + (- b %pi x erf(b x)  + 2b x Ei(- 2b x ))%e
--R (24) -----
--R                                 2 2
--R                                 b x +----+
--R      2x %e  \|%pi
--R
--R                                          Type: Expression(Integer)
--E 57

--S 58 of 395
a0011:= integrate(t0011,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 58

--S 59 of 395
--m0011:= a0011-r0011
--E 59

--S 60 of 395
--d0011:= D(m0011,x)
--E 60

--S 61 of 395
t0012:= x^2*exp(1)^(-b^2*x^2)*erf(b*x)
--R
--R
--R
--R      2 2
--R      - b x
--R (25) x erf(b x)%e
--R
--R                                          Type: Expression(Integer)
--E 61

--S 62 of 395
r0012:= 1/8*exp(-2*b^2*x^2)*(-2-4*x*erf(b*x)*exp(b^2*x^2)*b*%pi^(1/2)+_
        %pi*erf(b*x)^2*exp(2*b^2*x^2))/b^3/%pi^(1/2)
--R

```



```

--R
--R (26)
--R
--R      2 2   2 2
--R      - 2b x   b x +----+
--R      - 4b x erf(b x)%e      %e  \|%pi + %pi erf(b x) %e      2 2   2 2
--R      +
--R      2 2
--R      - 2b x
--R      - 2%e
--R /
--R      3 +----+
--R      8b \|%pi
--R
--R                                          Type: Expression(Integer)
--E 62

```

```

--S 63 of 395
a0012:= integrate(t0012,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 63

```

```

--S 64 of 395
--m0012:= a0012-r0012
--E 64

```

```

--S 65 of 395
--d0012:= D(m0012,x)
--E 65

```

```

--S 66 of 395
t0013:= x^4*exp(1)^(-b^2*x^2)*erf(b*x)
--R
--R
--R      2 2
--R      - b x
--R (27) x erf(b x)%e
--R
--R                                          Type: Expression(Integer)
--E 66

```

```

--S 67 of 395
r0013:= 1/16*exp(-2*b^2*x^2)*(-8-4*b^2*x^2-
12*x*erf(b*x)*exp(b^2*x^2)*b*%pi^(1/2)-
8*x^3*erf(b*x)*exp(b^2*x^2)*b^3*%pi^(1/2)+
3*%pi*erf(b*x)^2*exp(2*b^2*x^2))/b^5/%pi^(1/2)
--R

```

```

--R
--R (28)
--R
--R      2 2 2 2
--R      - 2b x  b x +----+
--R      3 3      erf(b x)%e      %e      \|%pi
--R      (- 8b x  - 12b x)
--R
--R      +
--R
--R      2 2 2 2      2 2      2 2
--R      2 - 2b x  2b x      2 2      - 2b x
--R      3%pi erf(b x) %e      %e      + (- 4b x  - 8)%e
--R
--R /
--R
--R      5 +----+
--R      16b \|%pi
--R
--R                                          Type: Expression(Integer)
--E 67

```

```

--S 68 of 395
a0013:= integrate(t0013,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 68

```

```

--S 69 of 395
--m0013:= a0013-r0013
--E 69

```

```

--S 70 of 395
--d0013:= D(m0013,x)
--E 70

```

```

--S 71 of 395
t0014:= x^6*exp(1)^(-b^2*x^2)*erf(b*x)
--R
--R
--R      2 2
--R      - b x
--R      6
--R      (29) x erf(b x)%e
--R
--R                                          Type: Expression(Integer)
--E 71

```

```

--S 72 of 395
r0014:= 1/32*exp(-2*b^2*x^2)*(-44-28*b^2*x^2-8*b^4*x^4-
60*x*erf(b*x)*exp(b^2*x^2)*b*%pi^(1/2)-
40*x^3*erf(b*x)*exp(b^2*x^2)*b^3*%pi^(1/2)-
16*x^5*erf(b*x)*exp(b^2*x^2)*b^5*%pi^(1/2)+
15*%pi*erf(b*x)^2*exp(2*b^2*x^2))/b^7/%pi^(1/2)

```

```

--R
--R
--R (30)
--R
--R      2 2 2 2
--R      5 5 3 3 - 2b x b x +----+
--R      (- 16b x - 40b x - 60b x)erf(b x)%e %e \|%pi
--R
--R      +
--R      2 2 2 2 2 2
--R      2 - 2b x 2b x 4 4 2 2 - 2b x
--R      15%pi erf(b x) %e %e + (- 8b x - 28b x - 44)%e
--R
--R      /
--R      7 +----+
--R      32b \|%pi
--R
--R                                          Type: Expression(Integer)
--E 72

```

```

--S 73 of 395
a0014:= integrate(t0014,x)
--R
--R
--R >> Error detected within library code:
--R Sorry - cannot handle that integrand yet
--R
--R Continuing to read the file...
--R
--E 73

```

```

--S 74 of 395
--m0014:= a0014-r0014
--E 74

```

```

--S 75 of 395
--d0014:= D(m0014,x)
--E 75

```

```

--S 76 of 395
t0015:= erfc(b*x)^2/x^7
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.

```

```

--E 76

--S 77 of 395
r0015:= -1/15*b^2/(exp(1)^(2*b^2*x^2))/pi/x^4+_
        2/9*b^4/(exp(1)^(2*b^2*x^2))/pi/x^2+_
        2/15*b*erfc(b*x)/(exp(1)^(b^2*x^2))/pi^(1/2)/x^5-_
        4/45*b^3*erfc(b*x)/(exp(1)^(b^2*x^2))/pi^(1/2)/x^3+_
        8/45*b^5*erfc(b*x)/(exp(1)^(b^2*x^2))/pi^(1/2)/x-4/_
        45*b^6*erfc(b*x)^2-1/6*erfc(b*x)^2/x^6+28/45*b^6*Ei(-2*b^2*x^2)/pi

--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 77

--S 78 of 395
--a0015:= integrate(t0015,x)
--E 78

--S 79 of 395
--m0015:= a0015-r0015
--E 79

--S 80 of 395
--d0015:= D(m0015,x)
--E 80

--S 81 of 395
t0016:= erfc(b*x)^2/x^5
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,

```

```

--R      or "$" to specify which version of the function you need.
--E 81

--S 82 of 395
r0016:= -1/3*b^2/(exp(1)^(2*b^2*x^2))/pi/x^2+1/3*b*erfc(b*x)/_
      (exp(1)^(b^2*x^2))/pi^(1/2)/x^3-2/3*b^3*erfc(b*x)/_
      (exp(1)^(b^2*x^2))/pi^(1/2)/x+1/3*b^4*erfc(b*x)^2-_
      1/4*erfc(b*x)^2/x^4-4/3*b^4*Ei(-2*b^2*x^2)/pi
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 82

--S 83 of 395
--a0016:= integrate(t0016,x)
--E 83

--S 84 of 395
--m0016:= a0016-r0016
--E 84

--S 85 of 395
--d0016:= D(m0016,x)
--E 85

--S 86 of 395
t0017:= erfc(b*x)^2/x^3
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.

```

```

--E 86

--S 87 of 395
r0017:= 2*b*erfc(b*x)/(exp(1)^(b^2*x^2))/%pi^(1/2)/x-b^2*erfc(b*x)^2-
1/2*erfc(b*x)^2/x^2+2*b^2*Ei(-2*b^2*x^2)/%pi
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 87

--S 88 of 395
--a0017:= integrate(t0017,x)
--E 88

--S 89 of 395
--m0017:= a0017-r0017
--E 89

--S 90 of 395
--d0017:= D(m0017,x)
--E 90

--S 91 of 395
t0018:= erfc(b*x)^2
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 91

--S 92 of 395

```

```

r0018:= -2^(1/2)/%pi^(1/2)*erf(2^(1/2)*b*x)/b-2*erfc(b*x)/_
      (exp(1)^(b^2*x^2))/b/%pi^(1/2)+x*erfc(b*x)^2
--R
--R   There are no library operations named erfc
--R     Use HyperDoc Browse or issue
--R       )what op erfc
--R     to learn if there is any operation containing " erfc " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named erfc
--R     with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 92

--S 93 of 395
--a0018:= integrate(t0018,x)
--E 93

--S 94 of 395
--m0018:= a0018-r0018
--E 94

--S 95 of 395
--d0018:= D(m0018,x)
--E 95

--S 96 of 395
t0019:= x*erfc(b*x)^2
--R
--R   There are no library operations named erfc
--R     Use HyperDoc Browse or issue
--R       )what op erfc
--R     to learn if there is any operation containing " erfc " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named erfc
--R     with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 96

--S 97 of 395
r0019:= 1/2/(exp(1)^(2*b^2*x^2))/b^2/%pi-x*erfc(b*x)/_
      (exp(1)^(b^2*x^2))/b/%pi^(1/2)-1/4*erfc(b*x)^2/b^2+1/2*x^2*erfc(b*x)^2
--R

```

```

--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 97

--S 98 of 395
--a0019:= integrate(t0019,x)
--E 98

--S 99 of 395
--m0019:= a0019-r0019
--E 99

--S 100 of 395
--d0019:= D(m0019,x)
--E 100

--S 101 of 395
t0020:= x^3*erfc(b*x)^2
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 101

--S 102 of 395
r0020:= 1/2/(exp(1)^(2*b^2*x^2))/b^4/%pi+1/4*x^2/_
(exp(1)^(2*b^2*x^2))/b^2/%pi-3/4*x*erfc(b*x)/_
(exp(1)^(b^2*x^2))/b^3/%pi^(1/2)-1/2*x^3*erfc(b*x)/_
(exp(1)^(b^2*x^2))/b/%pi^(1/2)-3/16*erfc(b*x)^2/b^4+1/4*x^4*erfc(b*x)^2
--R
--R There are no library operations named erfc

```



```

--R      Use HyperDoc Browse or issue
--R          )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R          Polynomial(Integer)
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 102

--S 103 of 395
--a0020:= integrate(t0020,x)
--E 103

--S 104 of 395
--m0020:= a0020-r0020
--E 104

--S 105 of 395
--d0020:= D(m0020,x)
--E 105

--S 106 of 395
t0021:= x^5*erfc(b*x)^2
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R          )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R          Polynomial(Integer)
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 106

--S 107 of 395
r0021:= 11/12/(exp(1)^(2*b^2*x^2))/b^6/%pi+7/12*x^2/_
      (exp(1)^(2*b^2*x^2))/b^4/%pi+1/6*x^4/(exp(1)^(2*b^2*x^2))/b^2/%pi-_
      5/4*x*erfc(b*x)/(exp(1)^(b^2*x^2))/b^5/%pi^(1/2)-_
      5/6*x^3*erfc(b*x)/(exp(1)^(b^2*x^2))/b^3/%pi^(1/2)-_
      1/3*x^5*erfc(b*x)/(exp(1)^(b^2*x^2))/b/%pi^(1/2)-_
      5/16*erfc(b*x)^2/b^6+1/6*x^6*erfc(b*x)^2
--R

```

```

--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 107

--S 108 of 395
--a0021:= integrate(t0021,x)
--E 108

--S 109 of 395
--m0021:= a0021-r0021
--E 109

--S 110 of 395
--d0021:= D(m0021,x)
--E 110

--S 111 of 395
t0022:= erfc(a+b*x)^2
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 111

--S 112 of 395
r0022:= -2^(1/2)/%pi^(1/2)*erf(2^(1/2)*(a+b*x))/b-
2*erfc(a+b*x)/exp((a+b*x)^2)/b/%pi^(1/2)+(a+b*x)*erfc(a+b*x)^2/b
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc

```

```

--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 112

--S 113 of 395
--a0022:= integrate(t0022,x)
--E 113

--S 114 of 395
--m0022:= a0022-r0022
--E 114

--S 115 of 395
--d0022:= D(m0022,x)
--E 115

--S 116 of 395
t0023:= x*erfc(a+b*x)^2
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 116

--S 117 of 395
r0023:= 1/4/b^2*(2/(exp(1)^(2*(a+b*x)^2))/pi+4*a*2^(1/2)/pi^(1/2)*_
erf(2^(1/2)*(a+b*x))+erfc(a+b*x)*(4*a/exp((a+b*x)^2)/pi^(1/2)-_
erfc(a+b*x)-4*b*x/exp((a+b*x)^2)/pi^(1/2)-_
4*a*(a+b*x)*erfc(a+b*x)+2*(a+b*x)^2*erfc(a+b*x)))
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its

```

```

--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 117

--S 118 of 395
--a0023:= integrate(t0023,x)
--E 118

--S 119 of 395
--m0023:= a0023-r0023
--E 119

--S 120 of 395
--d0023:= D(m0023,x)
--E 120

--S 121 of 395
t0024:= x^2*erfc(a+b*x)^2
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 121

--S 122 of 395
r0024:= -1/6/b^3*(4*a/(exp(1)^(2*(a+b*x)^2))/pi+_
1/2*(5+12*a^2)*erf(2^(1/2)*(a+b*x))*2^(1/2)/pi^(1/2)+_
4*erfc(a+b*x)/exp((a+b*x)^2)/pi^(1/2)+_
4*(a+b*x)^2*erfc(a+b*x)/exp((a+b*x)^2)/pi^(1/2)-_
3*a*erfc(a+b*x)^2-6*a^2*(a+b*x)*erfc(a+b*x)^2+_
6*a*(a+b*x)^2*erfc(a+b*x)^2-2*(a+b*x)^3*erfc(a+b*x)^2-_
2*b*x*(exp(1)^(-2*(a+b*x)^2))+_
6*a/pi^(1/2)*erfc(a+b*x)/exp((a+b*x)^2))/pi)
--R
--R      There are no library operations named erfc

```

```

--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 122

--S 123 of 395
--a0024:= integrate(t0024,x)
--E 123

--S 124 of 395
--m0024:= a0024-r0024
--E 124

--S 125 of 395
--d0024:= D(m0024,x)
--E 125

--S 126 of 395
t0025:= exp(1)^(-b^2*x^2)*erfc(b*x)/x^8
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 126

--S 127 of 395
r0025:= 1/21*b/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^6-
8/105*b^3/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^4+_
4/21*b^5/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^2-_
1/7*erfc(b*x)/(exp(1)^(b^2*x^2))/x^7+_
2/35*b^2*erfc(b*x)/(exp(1)^(b^2*x^2))/x^5-_
4/105*b^4*erfc(b*x)/(exp(1)^(b^2*x^2))/x^3+_
8/105*b^6*erfc(b*x)/(exp(1)^(b^2*x^2))/x-

```

```

4/105*b^7*pi^(1/2)*erfc(b*x)^2+16/35*b^7*Ei(-2*b^2*x^2)/pi^(1/2)
--R
--R   There are no library operations named erfc
--R   Use HyperDoc Browse or issue
--R   )what op erfc
--R   to learn if there is any operation containing " erfc " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfc
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 127

--S 128 of 395
--a0025:= integrate(t0025,x)
--E 128

--S 129 of 395
--m0025:= a0025-r0025
--E 129

--S 130 of 395
--d0025:= D(m0025,x)
--E 130

--S 131 of 395
t0026:= exp(1)^(-b^2*x^2)*erfc(b*x)/x^6
--R
--R   There are no library operations named erfc
--R   Use HyperDoc Browse or issue
--R   )what op erfc
--R   to learn if there is any operation containing " erfc " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfc
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 131

--S 132 of 395
r0026:= 1/10*b/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^4-_
1/3*b^3/(exp(1)^(2*b^2*x^2))/pi^(1/2)/x^2-_
1/5*erfc(b*x)/(exp(1)^(b^2*x^2))/x^5+_
2/15*b^2*erfc(b*x)/(exp(1)^(b^2*x^2))/x^3-_

```

```

4/15*b^4*erfc(b*x)/(exp(1)^(b^2*x^2))/x+_
2/15*b^5*%pi^(1/2)*erfc(b*x)^2-14/15*b^5*Ei(-2*b^2*x^2)/%pi^(1/2)
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 132

--S 133 of 395
--a0026:= integrate(t0026,x)
--E 133

--S 134 of 395
--m0026:= a0026-r0026
--E 134

--S 135 of 395
--d0026:= D(m0026,x)
--E 135

--S 136 of 395
t0027:= exp(1)^(-b^2*x^2)*erfc(b*x)/x^4
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 136

--S 137 of 395
r0027:= 1/3*b/(exp(1)^(2*b^2*x^2))/%pi^(1/2)/x^2-_
1/3*erfc(b*x)/(exp(1)^(b^2*x^2))/x^3+_
2/3*b^2*erfc(b*x)/(exp(1)^(b^2*x^2))/x-_

```

```

1/3*b^3*pi^(1/2)*erfc(b*x)^2+4/3*b^3*Ei(-2*b^2*x^2)/%pi^(1/2)
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 137

--S 138 of 395
--a0027:= integrate(t0027,x)
--E 138

--S 139 of 395
--m0027:= a0027-r0027
--E 139

--S 140 of 395
--d0027:= D(m0027,x)
--E 140

--S 141 of 395
t0028:= exp(1)^(-b^2*x^2)*erfc(b*x)/x^2
--R
--R There are no library operations named erfc
--R Use HyperDoc Browse or issue
--R )what op erfc
--R to learn if there is any operation containing " erfc " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfc
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 141

--S 142 of 395
r0028:= -erfc(b*x)/(exp(1)^(b^2*x^2))/x+_
1/2*b*pi^(1/2)*erfc(b*x)^2-b*Ei(-2*b^2*x^2)/%pi^(1/2)
--R
--R There are no library operations named erfc

```



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--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 142

--S 143 of 395
--a0028:= integrate(t0028,x)
--E 143

--S 144 of 395
--m0028:= a0028-r0028
--E 144

--S 145 of 395
--d0028:= D(m0028,x)
--E 145

--S 146 of 395
t0029:= x^2*exp(1)^(-b^2*x^2)*erfc(b*x)
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 146

--S 147 of 395
r0029:= 1/4/(exp(1)^(2*b^2*x^2))/b^3/%pi^(1/2)-
1/2*x*erfc(b*x)/(exp(1)^(b^2*x^2))/b^2-1/8*%pi^(1/2)*erfc(b*x)^2/b^3
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its

```

```

--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 147

--S 148 of 395
--a0029:= integrate(t0029,x)
--E 148

--S 149 of 395
--m0029:= a0029-r0029
--E 149

--S 150 of 395
--d0029:= D(m0029,x)
--E 150

--S 151 of 395
t0030:= x^4*exp(1)^(-b^2*x^2)*erfc(b*x)
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 151

--S 152 of 395
r0030:= 1/2/(exp(1)^(2*b^2*x^2))/b^5/%pi^(1/2)+
1/4*x^2/(exp(1)^(2*b^2*x^2))/b^3/%pi^(1/2)-
3/4*x*erfc(b*x)/(exp(1)^(b^2*x^2))/b^4-
1/2*x^3*erfc(b*x)/(exp(1)^(b^2*x^2))/b^2-
3/16*%pi^(1/2)*erfc(b*x)^2/b^5
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its

```

```

--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 152

--S 153 of 395
--a0030:= integrate(t0030,x)
--E 153

--S 154 of 395
--m0030:= a0030-r0030
--E 154

--S 155 of 395
--d0030:= D(m0030,x)
--E 155

--S 156 of 395
t0031:= x^6*exp(1)^(-b^2*x^2)*erfc(b*x)
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue
--R      )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 156

--S 157 of 395
r0031:= 11/8/(exp(1)^(2*b^2*x^2))/b^7/%pi^(1/2)+
7/8*x^2/(exp(1)^(2*b^2*x^2))/b^5/%pi^(1/2)+
1/4*x^4/(exp(1)^(2*b^2*x^2))/b^3/%pi^(1/2)-
15/8*x*erfc(b*x)/(exp(1)^(b^2*x^2))/b^6-
5/4*x^3*erfc(b*x)/(exp(1)^(b^2*x^2))/b^4-
1/2*x^5*erfc(b*x)/(exp(1)^(b^2*x^2))/b^2-
15/32*%pi^(1/2)*erfc(b*x)^2/b^7
--R
--R      There are no library operations named erfc
--R      Use HyperDoc Browse or issue

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--R                                     )what op erfc
--R      to learn if there is any operation containing " erfc " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfc
--R      with argument type(s)
--R                                     Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 157

--S 158 of 395
--a0031:= integrate(t0031,x)
--E 158

--S 159 of 395
--m0031:= a0031-r0031
--E 159

--S 160 of 395
--d0031:= D(m0031,x)
--E 160

--S 161 of 395
t0032:= erfi(b*x)^2/x^7
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R                                     )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R                                     Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 161

--S 162 of 395
r0032:= -1/15*b^2*exp(1)^(2*b^2*x^2)/%pi/x^4-_
2/9*b^4*exp(1)^(2*b^2*x^2)/%pi/x^2-_
2/45*b*exp(1)^(b^2*x^2)*(3+2*b^2*x^2+4*b^4*x^4)*_
erfi(b*x)/%pi^(1/2)/x^5+4/45*b^6*erfi(b*x)^2-_
1/6*erfi(b*x)^2/x^6+28/45*b^6*Ei(2*b^2*x^2)/%pi
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue

```

```

--R                                     )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R                                     Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 162

--S 163 of 395
--a0032:= integrate(t0032,x)
--E 163

--S 164 of 395
--m0032:= a0032-r0032
--E 164

--S 165 of 395
--d0032:= D(m0032,x)
--E 165

--S 166 of 395
t0033:= erfi(b*x)^2/x^5
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R                                     )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R                                     Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 166

--S 167 of 395
r0033:= -1/3*b^2*exp(1)^(2*b^2*x^2)/%pi/x^2-_
1/3*b*exp(1)^(b^2*x^2)*(1+2*b^2*x^2)*erfi(b*x)/%pi^(1/2)/x^3+_
1/3*b^4*erfi(b*x)^2-1/4*erfi(b*x)^2/x^4+4/3*b^4*Ei(2*b^2*x^2)/%pi
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R                                     )what op erfi
--R      to learn if there is any operation containing " erfi " in its

```

```

--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 167

--S 168 of 395
--a0033:= integrate(t0033,x)
--E 168

--S 169 of 395
--m0033:= a0033-r0033
--E 169

--S 170 of 395
--d0033:= D(m0033,x)
--E 170

--S 171 of 395
t0034:= erfi(b*x)^2/x^3
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 171

--S 172 of 395
r0034:= -2*b*exp(1)^(b^2*x^2)*erfi(b*x)/%pi^(1/2)/x+_
      b^2*erfi(b*x)^2-1/2*erfi(b*x)^2/x^2+2*b^2*Ei(2*b^2*x^2)/%pi
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi

```

```

--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 172

--S 173 of 395
--a0034:= integrate(t0034,x)
--E 173

--S 174 of 395
--m0034:= a0034-r0034
--E 174

--S 175 of 395
--d0034:= D(m0034,x)
--E 175

--S 176 of 395
t0035:= erfi(b*x)^2
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 176

--S 177 of 395
r0035:= (-2*exp(b^2*x^2)*erfi(b*x)+x*erfi(b*x)^2*b*%pi^(1/2)+_
2^(1/2)*erfi(2^(1/2)*b*x))/b/%pi^(1/2)
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R

```

```

--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 177

--S 178 of 395
--a0035:= integrate(t0035,x)
--E 178

--S 179 of 395
--m0035:= a0035-r0035
--E 179

--S 180 of 395
--d0035:= D(m0035,x)
--E 180

--S 181 of 395
t0036:= x*erfi(b*x)^2
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 181

--S 182 of 395
r0036:= 1/2*exp(1)^(2*b^2*x^2)/b^2/%pi-
exp(1)^(b^2*x^2)*x*erfi(b*x)/b/%pi^(1/2)+
1/4*erfi(b*x)^2/b^2+1/2*x^2*erfi(b*x)^2
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.

```



```

--E 182

--S 183 of 395
--a0036:= integrate(t0036,x)
--E 183

--S 184 of 395
--m0036:= a0036-r0036
--E 184

--S 185 of 395
--d0036:= D(m0036,x)
--E 185

--S 186 of 395
t0037:= x^2*erfi(b*x)^2
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 186

--S 187 of 395
r0037:= 1/3*exp(1)^(2*b^2*x^2)*x/b^2/%pi+_
2/3*exp(1)^(b^2*x^2)*(1-b^2*x^2)*erfi(b*x)/b^3/%pi^(1/2)+_
1/3*x^3*erfi(b*x)^2-5/12*erfi(2^(1/2)*b*x)/b^3*2^(1/2)/%pi^(1/2)
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 187

```

```

--S 188 of 395
--a0037:= integrate(t0037,x)
--E 188

--S 189 of 395
--m0037:= a0037-r0037
--E 189

--S 190 of 395
--d0037:= D(m0037,x)
--E 190

--S 191 of 395
t0038:= x^3*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 191

--S 192 of 395
r0038:= -1/2*exp(1)^(2*b^2*x^2)/b^4/%pi+1/4*exp(1)^(2*b^2*x^2)*x^2/b^2/%pi+_
1/4*exp(1)^(b^2*x^2)*x*(3-2*b^2*x^2)*erfi(b*x)/b^3/%pi^(1/2)-_
3/16*erfi(b*x)^2/b^4+1/4*x^4*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 192

--S 193 of 395
--a0038:= integrate(t0038,x)

```

```

--E 193

--S 194 of 395
--m0038:= a0038-r0038
--E 194

--S 195 of 395
--d0038:= D(m0038,x)
--E 195

--S 196 of 395
t0039:= x^4*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 196

--S 197 of 395
r0039:= -11/20*exp(1)^(2*b^2*x^2)*x/b^4/%pi+_
1/5*exp(1)^(2*b^2*x^2)*x^3/b^2/%pi-_
2/5*exp(1)^(b^2*x^2)*(2-2*b^2*x^2+b^4*x^4)*erfi(b*x)/b^5/%pi^(1/2)+_
1/5*x^5*erfi(b*x)^2+43/80*erfi(2^(1/2)*b*x)/b^5*2^(1/2)/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 197

--S 198 of 395
--a0039:= integrate(t0039,x)
--E 198

```

```

--S 199 of 395
--m0039:= a0039-r0039
--E 199

--S 200 of 395
--d0039:= D(m0039,x)
--E 200

--S 201 of 395
t0040:= x^5*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R           )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R           Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 201

--S 202 of 395
r0040:= 11/12*exp(1)^(2*b^2*x^2)/b^6/%pi-_
7/12*exp(1)^(2*b^2*x^2)*x^2/b^4/%pi+_
1/6*exp(1)^(2*b^2*x^2)*x^4/b^2/%pi-_
1/12*exp(1)^(b^2*x^2)*x*(15-10*b^2*x^2+_
4*b^4*x^4)*erfi(b*x)/b^5/%pi^(1/2)+5/16*erfi(b*x)^2/b^6+_
1/6*x^6*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R           )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R           Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 202

--S 203 of 395
--a0040:= integrate(t0040,x)

```

```

--E 203

--S 204 of 395
--m0040:= a0040-r0040
--E 204

--S 205 of 395
--d0040:= D(m0040,x)
--E 205

--S 206 of 395
t0041:= x^6*erfi(b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R                                     )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R                                     Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 206

--S 207 of 395
r0041:= 21/16*exp(1)^(2*b^2*x^2)*x/b^6/%pi-_
17/28*exp(1)^(2*b^2*x^2)*x^3/b^4/%pi+_
1/7*exp(1)^(2*b^2*x^2)*x^5/b^2/%pi+_
2/7*exp(1)^(b^2*x^2)*(6-6*b^2*x^2+3*b^4*x^4-_
b^6*x^6)*erfi(b*x)/b^7/%pi^(1/2)+1/7*x^7*erfi(b*x)^2-_
531/448*erfi(2^(1/2)*b*x)/b^7*2^(1/2)/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R                                     )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R                                     Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 207

--S 208 of 395

```

```

--a0041:= integrate(t0041,x)
--E 208

--S 209 of 395
--m0041:= a0041-r0041
--E 209

--S 210 of 395
--d0041:= D(m0041,x)
--E 210

--S 211 of 395
t0042:= erfi(a+b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 211

--S 212 of 395
r0042:= -2*exp((a+b*x)^2)*erfi(a+b*x)/b/%pi^(1/2)+(a+b*x)*_
erfi(a+b*x)^2/b+2^(1/2)/%pi^(1/2)*erfi(2^(1/2)*(a+b*x))/b
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 212

--S 213 of 395
--a0042:= integrate(t0042,x)
--E 213

```

```

--S 214 of 395
--m0042:= a0042-r0042
--E 214

--S 215 of 395
--d0042:= D(m0042,x)
--E 215

--S 216 of 395
t0043:= x*erfi(a+b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 216

--S 217 of 395
r0043:= 1/4/b^2*(2*exp(1)^(2*(a+b*x)^2)/%pi+_
4*exp((a+b*x)^2)*(a-b*x)*erfi(a+b*x)/%pi^(1/2)+_
erfi(a+b*x)^2-4*a*(a+b*x)*erfi(a+b*x)^2+_
2*(a+b*x)^2*erfi(a+b*x)^2-4*a*2^(1/2)/%pi^(1/2)*erfi(2^(1/2)*(a+b*x))
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 217

--S 218 of 395
--a0043:= integrate(t0043,x)
--E 218

--S 219 of 395

```

```

--m0043:= a0043-r0043
--E 219

--S 220 of 395
--d0043:= D(m0043,x)
--E 220

--S 221 of 395
t0044:= x^2*erfi(a+b*x)^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R       )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 221

--S 222 of 395
r0044:= -1/6/b^3*(4*a*exp(1)^(2*(a+b*x)^2)/%pi-_
2*b*exp(1)^(2*(a+b*x)^2)*x/%pi-_
4*exp((a+b*x)^2)*(1-a^2+a*b*x-b^2*x^2)*erfi(a+b*x)/%pi^(1/2)+_
3*a*erfi(a+b*x)^2-6*a^2*(a+b*x)*erfi(a+b*x)^2+_
6*a*(a+b*x)^2*erfi(a+b*x)^2-2*(a+b*x)^3*erfi(a+b*x)^2+_
1/2*(5-12*a^2)*erfi(2^(1/2)*(a+b*x))*2^(1/2)/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R       )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 222

--S 223 of 395
--a0044:= integrate(t0044,x)
--E 223

```



```

--S 224 of 395
--m0044:= a0044-r0044
--E 224

--S 225 of 395
--d0044:= D(m0044,x)
--E 225

--S 226 of 395
t0045:= exp(1)^(b^2*x^2)*erfi(b*x)/x^8
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 226

--S 227 of 395
r0045:= -1/21*b*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^6-_
8/105*b^3*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^4-_
4/21*b^5*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^2-_
1/105*exp(1)^(b^2*x^2)*(15+6*b^2*x^2+4*b^4*x^4+_
8*b^6*x^6)*erfi(b*x)/x^7+4/105*b^7*%pi^(1/2)*erfi(b*x)^2+_
16/35*b^7*Ei(2*b^2*x^2)/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 227

--S 228 of 395
--a0045:= integrate(t0045,x)
--E 228

```

```

--S 229 of 395
--m0045:= a0045-r0045
--E 229

--S 230 of 395
--d0045:= D(m0045,x)
--E 230

--S 231 of 395
t0046:= exp(1)^(b^2*x^2)*erfi(b*x)/x^6
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 231

--S 232 of 395
r0046:= -1/10*b*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^4-_
1/3*b^3*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^2-_
1/15*exp(1)^(b^2*x^2)*(3+2*b^2*x^2+4*b^4*x^4)*erfi(b*x)/x^5+_
2/15*b^5/%pi^(1/2)*erfi(b*x)^2+14/15*b^5*Ei(2*b^2*x^2)/%pi^(1/2)
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 232

--S 233 of 395
--a0046:= integrate(t0046,x)
--E 233

```

```

--S 234 of 395
--m0046:= a0046-r0046
--E 234

--S 235 of 395
--d0046:= D(m0046,x)
--E 235

--S 236 of 395
t0047:= exp(1)^(b^2*x^2)*erfi(b*x)/x^4
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 236

--S 237 of 395
r0047:= -1/3*b*exp(1)^(2*b^2*x^2)/%pi^(1/2)/x^2-
1/3*exp(1)^(b^2*x^2)*(1+2*b^2*x^2)*erfi(b*x)/x^3+
1/3*b^3*%pi^(1/2)*erfi(b*x)^2+4/3*b^3*Ei(2*b^2*x^2)/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 237

--S 238 of 395
--a0047:= integrate(t0047,x)
--E 238

--S 239 of 395
--m0047:= a0047-r0047

```

```

--E 239

--S 240 of 395
--d0047:= D(m0047,x)
--E 240

--S 241 of 395
t0048:= exp(1)^(b^2*x^2)*erfi(b*x)/x^2
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 241

--S 242 of 395
r0048:= -exp(1)^(b^2*x^2)*erfi(b*x)/x+_
1/2*b*%pi^(1/2)*erfi(b*x)^2+b*Ei(2*b^2*x^2)/%pi^(1/2)
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 242

--S 243 of 395
--a0048:= integrate(t0048,x)
--E 243

--S 244 of 395
--m0048:= a0048-r0048
--E 244

--S 245 of 395

```

```

--d0048:= D(m0048,x)
--E 245

--S 246 of 395
t0049:= x*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 246

--S 247 of 395
r0049:= -1/4*(-2*exp(b^2*x^2)*erfi(b*x)+erfi(2^(1/2)*b*x)*2^(1/2))/b^2
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 247

--S 248 of 395
--a0049:= integrate(t0049,x)
--E 248

--S 249 of 395
--m0049:= a0049-r0049
--E 249

--S 250 of 395
--d0049:= D(m0049,x)
--E 250

--S 251 of 395

```

```

t0050:= x^2*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 251

--S 252 of 395
r0050:= -1/8*(2*exp(2*b^2*x^2)-4*exp(b^2*x^2)*x*erfi(b*x)*b*%pi^(1/2)+_
%pi*erfi(b*x)^2)/b^3/%pi^(1/2)
--R
--R   There are no library operations named erfi
--R   Use HyperDoc Browse or issue
--R   )what op erfi
--R   to learn if there is any operation containing " erfi " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named erfi
--R   with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 252

--S 253 of 395
--a0050:= integrate(t0050,x)
--E 253

--S 254 of 395
--m0050:= a0050-r0050
--E 254

--S 255 of 395
--d0050:= D(m0050,x)
--E 255

--S 256 of 395
t0051:= x^3*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R   There are no library operations named erfi

```

```

--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 256

--S 257 of 395
r0051:= -1/4*exp(1)^(2*b^2*x^2)*x/b^3/%pi^(1/2)-
1/2*exp(1)^(b^2*x^2)*(1-b^2*x^2)*erfi(b*x)/b^4+_
5/16*erfi(2^(1/2)*b*x)*2^(1/2)/b^4
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 257

--S 258 of 395
--a0051:= integrate(t0051,x)
--E 258

--S 259 of 395
--m0051:= a0051-r0051
--E 259

--S 260 of 395
--d0051:= D(m0051,x)
--E 260

--S 261 of 395
t0052:= x^4*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R      )what op erfi

```

```

--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R              Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 261

--S 262 of 395
r0052:= -1/16*(-8*exp(2*b^2*x^2)+4*exp(2*b^2*x^2)*x^2*b^2+_
12*exp(b^2*x^2)*x*erfi(b*x)*b*%pi^(1/2)-_
8*exp(b^2*x^2)*x^3*erfi(b*x)*b^3*%pi^(1/2)-_
3*%pi*erfi(b*x)^2)/b^5/%pi^(1/2)
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R              )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R              Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 262

--S 263 of 395
--a0052:= integrate(t0052,x)
--E 263

--S 264 of 395
--m0052:= a0052-r0052
--E 264

--S 265 of 395
--d0052:= D(m0052,x)
--E 265

--S 266 of 395
t0053:= x^5*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R              )what op erfi
--R      to learn if there is any operation containing " erfi " in its

```



```

--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R              Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 266

--S 267 of 395
r0053:= 11/16*exp(1)^(2*b^2*x^2)*x/b^5/%pi^(1/2)-
1/4*exp(1)^(2*b^2*x^2)*x^3/b^3/%pi^(1/2)+
1/2*exp(1)^(b^2*x^2)*(2-2*b^2*x^2+b^4*x^4)*erfi(b*x)/b^6-
43/64*erfi(2^(1/2)*b*x)*2^(1/2)/b^6
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R              )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named erfi
--R      with argument type(s)
--R              Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 267

--S 268 of 395
--a0053:= integrate(t0053,x)
--E 268

--S 269 of 395
--m0053:= a0053-r0053
--E 269

--S 270 of 395
--d0053:= D(m0053,x)
--E 270

--S 271 of 395
t0054:= x^6*exp(1)^(b^2*x^2)*erfi(b*x)
--R
--R      There are no library operations named erfi
--R      Use HyperDoc Browse or issue
--R              )what op erfi
--R      to learn if there is any operation containing " erfi " in its
--R      name.

```

```

--R
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 271

--S 272 of 395
r0054:= -11/8*exp(1)^(2*b^2*x^2)/b^7/%pi^(1/2)+_
7/8*exp(1)^(2*b^2*x^2)*x^2/b^5/%pi^(1/2)-_
1/4*exp(1)^(2*b^2*x^2)*x^4/b^3/%pi^(1/2)+_
1/8*exp(1)^(b^2*x^2)*x*(15-10*b^2*x^2+4*b^4*x^4)*erfi(b*x)/b^6-_
15/32*%pi^(1/2)*erfi(b*x)^2/b^7
--R
--R There are no library operations named erfi
--R Use HyperDoc Browse or issue
--R )what op erfi
--R to learn if there is any operation containing " erfi " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named erfi
--R with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 272

--S 273 of 395
--a0054:= integrate(t0054,x)
--E 273

--S 274 of 395
--m0054:= a0054-r0054
--E 274

--S 275 of 395
--d0054:= D(m0054,x)
--E 275

--S 276 of 395
t0055:= FresnelS(b*x)^2/x^9
--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.

```

```

--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 276

--S 277 of 395
r0055:= -1/336*b^2/x^6+1/1680*b^6*pi^2/x^2+1/336*b^2*cos(b^2*pi*x^2)/x^6-
1/336*b^6*pi^2*cos(b^2*pi*x^2)/x^2+
1/840*b^8*pi^4*FresnelS(b*x)^2-1/8*FresnelS(b*x)^2/x^8-
1/420*b*FresnelS(b*x)*(b^2*pi*_
x^2*(3-b^4*pi^2*x^4)*cos(1/2*b^2*pi*x^2)+
(15-b^4*pi^2*x^4)*sin(1/2*b^2*pi*x^2))/x^7-
1/420*b^4*pi*sin(b^2*pi*x^2)/x^4-1/280*b^8*pi^3*Si(b^2*pi*x^2)
--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 277

--S 278 of 395
--a0055:= integrate(t0055,x)
--E 278

--S 279 of 395
--m0055:= a0055-r0055
--E 279

--S 280 of 395
--d0055:= D(m0055,x)
--E 280

--S 281 of 395
t0056:= FresnelS(b*x)^2/x^5
--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS

```

```

--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 281

--S 282 of 395
r0056:= -1/24*(b^2*x^2-b^2*cos(b^2*%pi*x^2)*x^2+2*b^4*%pi^2*_
FresnelS(b*x)^2*x^4+6*FresnelS(b*x)^2+4*b^3*_
FresnelS(b*x)*x^3*%pi*cos(1/2*b^2*%pi*x^2)+4*_
FresnelS(b*x)*sin(1/2*b^2*%pi*x^2)*b*x-_
2*b^4*%pi*Si(b^2*%pi*x^2)*x^4)/x^4
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 282

--S 283 of 395
--a0056:= integrate(t0056,x)
--E 283

--S 284 of 395
--m0056:= a0056-r0056
--E 284

--S 285 of 395
--d0056:= D(m0056,x)
--E 285

--S 286 of 395
t0057:= x^3*FresnelS(b*x)^2
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS

```

```

--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 286

--S 287 of 395
r0057:= 1/8*(3*b^2*pi*x^2+x^2*cos(b^2*pi*x^2)*b^2*pi+_
6*FresnelS(b*x)^2*pi+2*x^4*FresnelS(b*x)^2*b^4*pi^3+_
4*x^3*FresnelS(b*x)*b^3*pi^2*cos(1/2*b^2*pi*x^2)-_
12*x*FresnelS(b*x)*b*pi*sin(1/2*b^2*pi*x^2)-_
4*sin(b^2*pi*x^2))/b^4/pi^3
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 287

--S 288 of 395
--a0057:= integrate(t0057,x)
--E 288

--S 289 of 395
--m0057:= a0057-r0057
--E 289

--S 290 of 395
--d0057:= D(m0057,x)
--E 290

--S 291 of 395
t0058:= x^7*FresnelS(b*x)^2
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS

```

```

--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 291

--S 292 of 395
r0058:= -105/16*x^2/b^6/%pi^4+7/48*x^6/b^2/%pi^2-_
55/16*x^2*cos(b^2*%pi*x^2)/b^6/%pi^4+_
1/16*x^6*cos(b^2*%pi*x^2)/b^2/%pi^2-_
105/8*FresnelS(b*x)^2/b^8/%pi^4+1/8*x^8*FresnelS(b*x)^2-_
1/4*x*FresnelS(b*x)*(b^2*%pi*x^2*(35-b^4*%pi^2*x^4)*_
cos(1/2*b^2*%pi*x^2)-7*(15-b^4*%pi^2*x^4)*_
sin(1/2*b^2*%pi*x^2))/b^7/%pi^4+10*sin(b^2*%pi*x^2)/b^8/%pi^5-_
5/8*x^4*sin(b^2*%pi*x^2)/b^4/%pi^3
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 292

--S 293 of 395
--a0058:= integrate(t0058,x)
--E 293

--S 294 of 395
--m0058:= a0058-r0058
--E 294

--S 295 of 395
--d0058:= D(m0058,x)
--E 295

--S 296 of 395
t0059:= sin(1/2*b^2*%pi*x^2)*FresnelS(b*x)/x^8
--R

```

```

--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 296

--S 297 of 395
r0059:= -1/84*b/x^6+1/420*b^5*pi^2/x^2+1/84*b*cos(b^2*pi*x^2)/x^6-
1/84*b^5*pi^2*cos(b^2*pi*x^2)/x^2+1/210*b^7*pi^4*FresnelS(b*x)^2-
1/105*FresnelS(b*x)*(b^2*pi*x^2*(3-b^4*pi^2*x^4)*_
cos(1/2*b^2*pi*x^2)+(15-b^4*pi^2*x^4)*_
sin(1/2*b^2*pi*x^2))/x^7-1/105*b^3*pi*_
sin(b^2*pi*x^2)/x^4-1/70*b^7*pi^3*Si(b^2*pi*x^2)

--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 297

--S 298 of 395
--a0059:= integrate(t0059,x)
--E 298

--S 299 of 395
--m0059:= a0059-r0059
--E 299

--S 300 of 395
--d0059:= D(m0059,x)
--E 300

--S 301 of 395
t0060:= sin(1/2*b^2*pi*x^2)*FresnelS(b*x)/x^4

```

```

--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 301

--S 302 of 395
r0060:= -1/12*(b*x-x*cos(b^2*%pi*x^2)*b+2*x^3*FresnelS(b*x)^2*b^3*%pi^2+_
4*FresnelS(b*x)*b^2*%pi*x^2*cos(1/2*b^2*%pi*x^2)+_
4*sin(1/2*b^2*%pi*x^2)*FresnelS(b*x)-_
2*b^3*%pi*Si(b^2*%pi*x^2)*x^3)/x^3
--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 302

--S 303 of 395
--a0060:= integrate(t0060,x)
--E 303

--S 304 of 395
--m0060:= a0060-r0060
--E 304

--S 305 of 395
--d0060:= D(m0060,x)
--E 305

--S 306 of 395
t0061:= x^4*sin(1/2*b^2*%pi*x^2)*FresnelS(b*x)
--R

```



```

--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 306

```

```

--S 307 of 395
r0061:= -1/4*(3*b^2*pi*x^2+x^2*cos(b^2*pi*x^2)*b^2*pi+_
6*FresnelS(b*x)^2*pi+4*x^3*FresnelS(b*x)*_
b^3*pi^2*cos(1/2*b^2*pi*x^2)-12*x*FresnelS(b*x)*b*pi*_
sin(1/2*b^2*pi*x^2)-4*sin(b^2*pi*x^2))/b^5/pi^3

```

```

--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 307

```

```

--S 308 of 395
--a0061:= integrate(t0061,x)
--E 308

```

```

--S 309 of 395
--m0061:= a0061-r0061
--E 309

```

```

--S 310 of 395
--d0061:= D(m0061,x)
--E 310

```

```

--S 311 of 395
t0062:= cos(1/2*b^2*pi*x^2)*FresnelS(b*x)/x^10
--R
--R There are no library operations named FresnelS

```

```

--R      Use HyperDoc Browse or issue
--R      )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 311

--S 312 of 395
r0062:= 1/756*b^3*pi/x^6-1/3780*b^7*pi^3/x^2-
11/3024*b^3*pi*cos(b^2*pi*x^2)/x^6+
5/2016*b^7*pi^3*cos(b^2*pi*x^2)/x^2-
1/1890*b^9*pi^5*FresnelS(b*x)^2-
1/945*FresnelS(b*x)*((105-3*b^4*pi^2*x^4+b^8*pi^4*x^8)*
cos(1/2*b^2*pi*x^2)-b^2*pi*x^2*(15-b^4*pi^2*x^4)*
sin(1/2*b^2*pi*x^2))/x^9-1/144*b*sin(b^2*pi*x^2)/x^8+
67/30240*b^5*pi^2*sin(b^2*pi*x^2)/x^4+
83/30240*b^9*pi^4*Si(b^2*pi*x^2)
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R      )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 312

--S 313 of 395
--a0062:= integrate(t0062,x)
--E 313

--S 314 of 395
--m0062:= a0062-r0062
--E 314

--S 315 of 395
--d0062:= D(m0062,x)
--E 315

```

```

--S 316 of 395
t0063:= cos(1/2*b^2*pi*x^2)*FresnelS(b*x)/x^6
--R
--R   There are no library operations named FresnelS
--R   Use HyperDoc Browse or issue
--R   )what op FresnelS
--R   to learn if there is any operation containing " FresnelS " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelS with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 316

--S 317 of 395
r0063:= 1/60*b^3*pi/x^2-1/24*b^3*pi*cos(b^2*pi*x^2)/x^2+_
1/30*b^5*pi^3*FresnelS(b*x)^2-1/15*FresnelS(b*x)*_
((3-b^4*pi^2*x^4)*cos(1/2*b^2*pi*x^2)-b^2*pi*x^2*_
sin(1/2*b^2*pi*x^2))/x^5-1/40*b*sin(b^2*pi*x^2)/x^4-_
7/120*b^5*pi^2*Si(b^2*pi*x^2)
--R
--R   There are no library operations named FresnelS
--R   Use HyperDoc Browse or issue
--R   )what op FresnelS
--R   to learn if there is any operation containing " FresnelS " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelS with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 317

--S 318 of 395
--a0063:= integrate(t0063,x)
--E 318

--S 319 of 395
--m0063:= a0063-r0063
--E 319

--S 320 of 395
--d0063:= D(m0063,x)
--E 320

```

```

--S 321 of 395
t0064:= cos(1/2*b^2*%pi*x^2)*FresnelS(b*x)/x^2
--R
--R   There are no library operations named FresnelS
--R   Use HyperDoc Browse or issue
--R   )what op FresnelS
--R   to learn if there is any operation containing " FresnelS " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelS with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 321

--S 322 of 395
r0064:= -cos(1/2*b^2*%pi*x^2)*FresnelS(b*x)/x-
1/2*b*%pi*FresnelS(b*x)^2+1/4*b*Si(b^2*%pi*x^2)
--R
--R   There are no library operations named FresnelS
--R   Use HyperDoc Browse or issue
--R   )what op FresnelS
--R   to learn if there is any operation containing " FresnelS " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelS with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 322

--S 323 of 395
--a0064:= integrate(t0064,x)
--E 323

--S 324 of 395
--m0064:= a0064-r0064
--E 324

--S 325 of 395
--d0064:= D(m0064,x)
--E 325

--S 326 of 395
t0065:= x^2*cos(1/2*b^2*%pi*x^2)*FresnelS(b*x)
--R

```

```

--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 326

```

```

--S 327 of 395
r0065:= 1/4*(-b^2*pi*x^2-2*FresnelS(b*x)^2*pi+_
4*x*FresnelS(b*x)*b*pi*sin(1/2*b^2*pi*x^2)+_
sin(b^2*pi*x^2))/b^3/pi^2

```

```

--R
--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue
--R )what op FresnelS
--R to learn if there is any operation containing " FresnelS " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelS with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 327

```

```

--S 328 of 395
--a0065:= integrate(t0065,x)
--E 328

```

```

--S 329 of 395
--m0065:= a0065-r0065
--E 329

```

```

--S 330 of 395
--d0065:= D(m0065,x)
--E 330

```

```

--S 331 of 395
t0066:= x^6*cos(1/2*b^2*pi*x^2)*FresnelS(b*x)
--R

```

```

--R There are no library operations named FresnelS
--R Use HyperDoc Browse or issue

```

```

--R                                     )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 331

--S 332 of 395
r0066:= 1/12*(45*b^2*%pi*x^2-x^6*b^6*%pi^3+_
21*x^2*cos(b^2*%pi*x^2)*b^2*%pi+90*FresnelS(b*x)^2*%pi+_
60*x^3*FresnelS(b*x)*b^3*%pi^2*cos(1/2*b^2*%pi*x^2)-_
180*x*FresnelS(b*x)*b*%pi*sin(1/2*b^2*%pi*x^2)+_
12*x^5*FresnelS(b*x)*b^5*%pi^3*sin(1/2*b^2*%pi*x^2)-_
66*sin(b^2*%pi*x^2)+3*x^4*sin(b^2*%pi*x^2)*b^4*%pi^2)/b^7/%pi^4
--R
--R      There are no library operations named FresnelS
--R      Use HyperDoc Browse or issue
--R                                     )what op FresnelS
--R      to learn if there is any operation containing " FresnelS " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelS with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 332

--S 333 of 395
--a0066:= integrate(t0066,x)
--E 333

--S 334 of 395
--m0066:= a0066-r0066
--E 334

--S 335 of 395
--d0066:= D(m0066,x)
--E 335

--S 336 of 395
t0067:= FresnelC(b*x)^2/x^9
--R
--R      There are no library operations named FresnelC

```

```

--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 336

--S 337 of 395
r0067:= -1/336*b^2/x^6+1/1680*b^6*pi^2/x^2-_
1/336*b^2*cos(b^2*pi*x^2)/x^6+1/336*b^6*pi^2*cos(b^2*pi*x^2)/x^2+_
1/840*b^8*pi^4*FresnelC(b*x)^2-1/8*FresnelC(b*x)^2/x^8-_
1/420*b*FresnelC(b*x)*((15-b^4*pi^2*x^4)*cos(1/2*b^2*pi*x^2)-_
b^2*pi*x^2*(3-b^4*pi^2*x^4)*sin(1/2*b^2*pi*x^2))/x^7+_
1/420*b^4*pi*sin(b^2*pi*x^2)/x^4+1/280*b^8*pi^3*Si(b^2*pi*x^2)
--R
--R      There are no library operations named FresnelC
--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 337

--S 338 of 395
--a0067:= integrate(t0067,x)
--E 338

--S 339 of 395
--m0067:= a0067-r0067
--E 339

--S 340 of 395
--d0067:= D(m0067,x)
--E 340

--S 341 of 395
t0068:= FresnelC(b*x)^2/x^5
--R

```

```

--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 341

```

```

--S 342 of 395
r0068:= -1/24*(b^2*x^2+b^2*cos(b^2*pi*x^2)*x^2+2*b^4*pi^2*_
FresnelC(b*x)^2*x^4+6*FresnelC(b*x)^2+4*FresnelC(b*x)*_
cos(1/2*b^2*pi*x^2)*b*x-4*b^3*FresnelC(b*x)*x^3*pi*_
sin(1/2*b^2*pi*x^2)+2*b^4*pi*Si(b^2*pi*x^2)*x^4)/x^4

```

```

--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 342

```

```

--S 343 of 395
--a0068:= integrate(t0068,x)
--E 343

```

```

--S 344 of 395
--m0068:= a0068-r0068
--E 344

```

```

--S 345 of 395
--d0068:= D(m0068,x)
--E 345

```

```

--S 346 of 395
t0069:= x^3*FresnelC(b*x)^2
--R
--R There are no library operations named FresnelC

```



```

--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 346

--S 347 of 395
r0069:= -1/8*(-3*b^2*%pi*x^2+x^2*cos(b^2*%pi*x^2)*b^2*%pi-
6*FresnelC(b*x)^2*%pi-2*x^4*FresnelC(b*x)^2*b^4*%pi^3+_
12*x*FresnelC(b*x)*b*%pi*cos(1/2*b^2*%pi*x^2)+_
4*x^3*FresnelC(b*x)*b^3*%pi^2*sin(1/2*b^2*%pi*x^2)-_
4*sin(b^2*%pi*x^2))/b^4/%pi^3
--R
--R      There are no library operations named FresnelC
--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 347

--S 348 of 395
--a0069:= integrate(t0069,x)
--E 348

--S 349 of 395
--m0069:= a0069-r0069
--E 349

--S 350 of 395
--d0069:= D(m0069,x)
--E 350

--S 351 of 395
t0070:= x^7*FresnelC(b*x)^2
--R
--R      There are no library operations named FresnelC

```

```

--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 351

--S 352 of 395
r0070:= -105/16*x^2/b^6/%pi^4+7/48*x^6/b^2/%pi^2+_
55/16*x^2*cos(b^2*%pi*x^2)/b^6/%pi^4-_
1/16*x^6*cos(b^2*%pi*x^2)/b^2/%pi^2-105/8*FresnelC(b*x)^2/b^8/%pi^4+_
1/8*x^8*FresnelC(b*x)^2+1/4*x*FresnelC(b*x)*_
(7*(15-b^4*%pi^2*x^4)*cos(1/2*b^2*%pi*x^2)+_
b^2*%pi*x^2*(35-b^4*%pi^2*x^4)*sin(1/2*b^2*%pi*x^2))/b^7/%pi^4-_
10*sin(b^2*%pi*x^2)/b^8/%pi^5+5/8*x^4*sin(b^2*%pi*x^2)/b^4/%pi^3

--R
--R      There are no library operations named FresnelC
--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 352

--S 353 of 395
--a0070:= integrate(t0070,x)
--E 353

--S 354 of 395
--m0070:= a0070-r0070
--E 354

--S 355 of 395
--d0070:= D(m0070,x)
--E 355

--S 356 of 395
t0071:= sin(1/2*b^2*%pi*x^2)*FresnelC(b*x)/x^10

```

```

--R
--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 356

--S 357 of 395
r0071:= -1/756*b^3*pi/x^6+1/3780*b^7*pi^3/x^2-_
11/3024*b^3*pi*cos(b^2*pi*x^2)/x^6+_
5/2016*b^7*pi^3*cos(b^2*pi*x^2)/x^2+_
1/1890*b^9*pi^5*FresnelC(b*x)^2-_
1/945*FresnelC(b*x)*(b^2*pi*x^2*(15-b^4*pi^2*x^4)*_
cos(1/2*b^2*pi*x^2)+(105-3*b^4*pi^2*x^4+b^8*pi^4*x^8)*_
sin(1/2*b^2*pi*x^2))/x^9-1/144*b*sin(b^2*pi*x^2)/x^8+_
67/30240*b^5*pi^2*sin(b^2*pi*x^2)/x^4+83/30240*_
b^9*pi^4*Si(b^2*pi*x^2)
--R
--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 357

--S 358 of 395
--a0071:= integrate(t0071,x)
--E 358

--S 359 of 395
--m0071:= a0071-r0071
--E 359

--S 360 of 395
--d0071:= D(m0071,x)

```

```

--E 360

--S 361 of 395
t0072:= sin(1/2*b^2*%pi*x^2)*FresnelC(b*x)/x^6
--R
--R   There are no library operations named FresnelC
--R     Use HyperDoc Browse or issue
--R       )what op FresnelC
--R     to learn if there is any operation containing " FresnelC " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named
--R     FresnelC with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 361

--S 362 of 395
r0072:= -1/60*b^3*%pi/x^2-1/24*b^3*%pi*cos(b^2*%pi*x^2)/x^2-_
1/30*b^5*%pi^3*FresnelC(b*x)^2-_
1/15*FresnelC(b*x)*(b^2*%pi*x^2*cos(1/2*b^2*%pi*x^2)+_
(3-b^4*%pi^2*x^4)*sin(1/2*b^2*%pi*x^2))/x^5-_
1/40*b*sin(b^2*%pi*x^2)/x^4-7/120*b^5*%pi^2*Si(b^2*%pi*x^2)
--R
--R   There are no library operations named FresnelC
--R     Use HyperDoc Browse or issue
--R       )what op FresnelC
--R     to learn if there is any operation containing " FresnelC " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named
--R     FresnelC with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 362

--S 363 of 395
--a0072:= integrate(t0072,x)
--E 363

--S 364 of 395
--m0072:= a0072-r0072
--E 364

--S 365 of 395
--d0072:= D(m0072,x)

```

```

--E 365

--S 366 of 395
t0073:= sin(1/2*b^2*%pi*x^2)*FresnelC(b*x)/x^2
--R
--R   There are no library operations named FresnelC
--R     Use HyperDoc Browse or issue
--R       )what op FresnelC
--R     to learn if there is any operation containing " FresnelC " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named
--R     FresnelC with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 366

--S 367 of 395
r0073:= 1/2*b*%pi*FresnelC(b*x)^2-FresnelC(b*x)*sin(1/2*b^2*%pi*x^2)/x+_
1/4*b*Si(b^2*%pi*x^2)
--R
--R   There are no library operations named FresnelC
--R     Use HyperDoc Browse or issue
--R       )what op FresnelC
--R     to learn if there is any operation containing " FresnelC " in its
--R     name.
--R
--R   Cannot find a definition or applicable library operation named
--R     FresnelC with argument type(s)
--R       Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 367

--S 368 of 395
--a0073:= integrate(t0073,x)
--E 368

--S 369 of 395
--m0073:= a0073-r0073
--E 369

--S 370 of 395
--d0073:= D(m0073,x)
--E 370

--S 371 of 395

```

```

t0074:= x^2*sin(1/2*b^2*pi*x^2)*FresnelC(b*x)
--R
--R   There are no library operations named FresnelC
--R   Use HyperDoc Browse or issue
--R   )what op FresnelC
--R   to learn if there is any operation containing " FresnelC " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelC with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 371

--S 372 of 395
r0074:= -1/4*(-b^2*pi*x^2+4*x*FresnelC(b*x)*b*pi*cos(1/2*b^2*pi*x^2)-
2*FresnelC(b*x)^2*pi-sin(b^2*pi*x^2))/b^3/pi^2
--R
--R   There are no library operations named FresnelC
--R   Use HyperDoc Browse or issue
--R   )what op FresnelC
--R   to learn if there is any operation containing " FresnelC " in its
--R   name.
--R
--R   Cannot find a definition or applicable library operation named
--R   FresnelC with argument type(s)
--R   Polynomial(Integer)
--R
--R   Perhaps you should use "@" to indicate the required return type,
--R   or "$" to specify which version of the function you need.
--E 372

--S 373 of 395
--a0074:= integrate(t0074,x)
--E 373

--S 374 of 395
--m0074:= a0074-r0074
--E 374

--S 375 of 395
--d0074:= D(m0074,x)
--E 375

--S 376 of 395
t0075:= x^6*sin(1/2*b^2*pi*x^2)*FresnelC(b*x)
--R
--R   There are no library operations named FresnelC

```

```

--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 376

--S 377 of 395
r0075:= -1/12*(45*b^2*%pi*x^2-x^6*b^6*%pi^3-21*x^2*cos(b^2*%pi*x^2)*b^2*%pi+_
90*FresnelC(b*x)^2*%pi-180*x*FresnelC(b*x)*b*_
%pi*cos(1/2*b^2*%pi*x^2)+12*x^5*FresnelC(b*x)*b^5*%pi^3*_
cos(1/2*b^2*%pi*x^2)-60*x^3*FresnelC(b*x)*b^3*%pi^2*_
sin(1/2*b^2*%pi*x^2)+66*sin(b^2*%pi*x^2)-_
3*x^4*sin(b^2*%pi*x^2)*b^4*%pi^2)/b^7/%pi^4
--R
--R      There are no library operations named FresnelC
--R      Use HyperDoc Browse or issue
--R      )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 377

--S 378 of 395
--a0075:= integrate(t0075,x)
--E 378

--S 379 of 395
--m0075:= a0075-r0075
--E 379

--S 380 of 395
--d0075:= D(m0075,x)
--E 380

--S 381 of 395
t0076:= cos(1/2*b^2*%pi*x^2)*FresnelC(b*x)/x^8
--R

```

```

--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 381

--S 382 of 395
r0076:= -1/84*b/x^6+1/420*b^5*pi^2/x^2-1/84*b*cos(b^2*pi*x^2)/x^6+_
1/84*b^5*pi^2*cos(b^2*pi*x^2)/x^2+1/210*b^7*pi^4*FresnelC(b*x)^2-_
1/105*FresnelC(b*x)*((15-b^4*pi^2*x^4)*cos(1/2*b^2*pi*x^2)-_
b^2*pi*x^2*(3-b^4*pi^2*x^4)*sin(1/2*b^2*pi*x^2))/x^7+_
1/105*b^3*pi*sin(b^2*pi*x^2)/x^4+1/70*b^7*pi^3*Si(b^2*pi*x^2)
--R
--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 382

--S 383 of 395
--a0076:= integrate(t0076,x)
--E 383

--S 384 of 395
--m0076:= a0076-r0076
--E 384

--S 385 of 395
--d0076:= D(m0076,x)
--E 385

--S 386 of 395
t0077:= cos(1/2*b^2*pi*x^2)*FresnelC(b*x)/x^4
--R

```



```

--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 386

--S 387 of 395
r0077:= -1/12*(b*x+x*cos(b^2*%pi*x^2)*b+2*x^3*FresnelC(b*x)^2*b^3*%pi^2+_
4*cos(1/2*b^2*%pi*x^2)*FresnelC(b*x)-4*FresnelC(b*x)*b^2*%pi*x^2*_
sin(1/2*b^2*%pi*x^2)+2*b^3*%pi*Si(b^2*%pi*x^2)*x^3)/x^3
--R
--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue
--R )what op FresnelC
--R to learn if there is any operation containing " FresnelC " in its
--R name.
--R
--R Cannot find a definition or applicable library operation named
--R FresnelC with argument type(s)
--R Polynomial(Integer)
--R
--R Perhaps you should use "@" to indicate the required return type,
--R or "$" to specify which version of the function you need.
--E 387

--S 388 of 395
--a0077:= integrate(t0077,x)
--E 388

--S 389 of 395
--m0077:= a0077-r0077
--E 389

--S 390 of 395
--d0077:= D(m0077,x)
--E 390

--S 391 of 395
t0078:= x^4*cos(1/2*b^2*%pi*x^2)*FresnelC(b*x)
--R
--R There are no library operations named FresnelC
--R Use HyperDoc Browse or issue

```

```

--R                                     )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 391

```

```

--S 392 of 395
r0078:= 1/4*(-3*b^2*%pi*x^2+x^2*cos(b^2*%pi*x^2)*b^2*%pi-
6*FresnelC(b*x)^2*%pi+12*x*FresnelC(b*x)*b*%pi*_
cos(1/2*b^2*%pi*x^2)+4*x^3*FresnelC(b*x)*_
b^3*%pi^2*sin(1/2*b^2*%pi*x^2)-4*sin(b^2*%pi*x^2))/b^5/%pi^3

```

```

--R
--R      There are no library operations named FresnelC
--R      Use HyperDoc Browse or issue
--R                                     )what op FresnelC
--R      to learn if there is any operation containing " FresnelC " in its
--R      name.
--R
--R      Cannot find a definition or applicable library operation named
--R      FresnelC with argument type(s)
--R      Polynomial(Integer)
--R
--R      Perhaps you should use "@" to indicate the required return type,
--R      or "$" to specify which version of the function you need.
--E 392

```

```

--S 393 of 395
--a0078:= integrate(t0078,x)
--E 393

```

```

--S 394 of 395
--m0078:= a0078-r0078
--E 394

```

```

--S 395 of 395
--d0078:= D(m0078,x)
--E 395

```

```

)spool

```

## References

- [1] Rich, Albert D. “Rule-based Mathematics” [www.apmaths.uwo.ca/~arich](http://www.apmaths.uwo.ca/~arich)