

```
commandwindow
clear
clc
close all
A=[0,10,4,-2;-3,-17,1,2;1,1,1,0;8,-34,16,-10]
B=[-4;2;6;4]
C=inv(A)
V=C*B
syms t
d=1.5*exp(-0.75*t) *sin(0.85*t) +0.375*t
tn=(0:0.01:2.5)
dp=diff(d)
dpn=subs(dp,tn)
figure(1)
plot(tn,dpn)
xlabel('tn')
ylabel('dpn')
axis tight
grid on
grid minor
ds=diff(dp)
dsn=subs(ds,tn)
figure(2)
plot(tn,dsn)
xlabel('tn')
```

```
ylabel('dsn')
axis tight
grid on
grid minor
figure(3)
plot(tn,dpn,tn,dsn)
xlabel('x')
ylabel('y')
grid on
grid minor
legend('velocity(m/min)','acceleration(m/min^2)','location','best')
syms x
y=5*sin(5*x)^5
b=y^2
z=int(b)*pi
zint=int(z,0,pi)
zintdd=double(zint)
format short g
format long g
```

A =

```
0 10 4 -2
-3 -17 1 2
1 1 1 0
```

8 -34 16 -10

B =

-4

2

6

4

C =

-0.178571428571429	-0.102040816326531	0.571428571428571	0.0153061224489796
0.0357142857142857	-0.0153061224489796	0.0357142857142857	-
0.0102040816326531			
0.142857142857143	0.11734693877551	0.392857142857143	-0.00510204081632653
-0.0357142857142857	0.158163265306122	0.964285714285714	-0.0612244897959184

V =

4

-9.71445146547012e-17

2

6

d =

$$(3*t)/8 + (3*\sin((17*t)/20)*\exp(-(3*t)/4))/2$$

tn =

Columns 1 through 4

0            0.01            0.02            0.03

Columns 5 through 8

0.04            0.05            0.06            0.07

Columns 9 through 12

0.08            0.09            0.1            0.11

Columns 13 through 16

0.12            0.13            0.14            0.15

Columns 17 through 20

0.16	0.17	0.18	0.19
------	------	------	------

Columns 21 through 24

0.2	0.21	0.22	0.23
-----	------	------	------

Columns 25 through 28

0.24	0.25	0.26	0.27
------	------	------	------

Columns 29 through 32

0.28	0.29	0.3	0.31
------	------	-----	------

Columns 33 through 36

0.32	0.33	0.34	0.35
------	------	------	------

Columns 37 through 40

0.36	0.37	0.38	0.39
------	------	------	------

Columns 41 through 44

0.4            0.41            0.42            0.43

Columns 45 through 48

0.44            0.45            0.46            0.47

Columns 49 through 52

0.48            0.49            0.5            0.51

Columns 53 through 56

0.52            0.53            0.54            0.55

Columns 57 through 60

0.56            0.57            0.58            0.59

Columns 61 through 64

0.6            0.61            0.62            0.63

Columns 65 through 68

0.64      0.65      0.66      0.67

Columns 69 through 72

0.68      0.69      0.7      0.71

Columns 73 through 76

0.72      0.73      0.74      0.75

Columns 77 through 80

0.76      0.77      0.78      0.79

Columns 81 through 84

0.8      0.81      0.82      0.83

Columns 85 through 88

0.84      0.85      0.86      0.87

Columns 89 through 92

0.88      0.89      0.9      0.91

Columns 93 through 96

0.92	0.93	0.94	0.95
------	------	------	------

Columns 97 through 100

0.96	0.97	0.98	0.99
------	------	------	------

Columns 101 through 104

1	1.01	1.02	1.03
---	------	------	------

Columns 105 through 108

1.04	1.05	1.06	1.07
------	------	------	------

Columns 109 through 112

1.08	1.09	1.1	1.11
------	------	-----	------

Columns 113 through 116

1.12	1.13	1.14	1.15
------	------	------	------

Columns 117 through 120

1.16	1.17	1.18	1.19
------	------	------	------

Columns 121 through 124

1.2	1.21	1.22	1.23
-----	------	------	------

Columns 125 through 128

1.24	1.25	1.26	1.27
------	------	------	------

Columns 129 through 132

1.28	1.29	1.3	1.31
------	------	-----	------

Columns 133 through 136

1.32	1.33	1.34	1.35
------	------	------	------

Columns 137 through 140

1.36	1.37	1.38	1.39
------	------	------	------

Columns 141 through 144

1.4            1.41            1.42            1.43

Columns 145 through 148

1.44            1.45            1.46            1.47

Columns 149 through 152

1.48            1.49            1.5            1.51

Columns 153 through 156

1.52            1.53            1.54            1.55

Columns 157 through 160

1.56            1.57            1.58            1.59

Columns 161 through 164

1.6            1.61            1.62            1.63

Columns 165 through 168

1.64            1.65            1.66            1.67

Columns 169 through 172

1.68            1.69            1.7            1.71

Columns 173 through 176

1.72            1.73            1.74            1.75

Columns 177 through 180

1.76            1.77            1.78            1.79

Columns 181 through 184

1.8            1.81            1.82            1.83

Columns 185 through 188

1.84            1.85            1.86            1.87

Columns 189 through 192

1.88            1.89            1.9            1.91

Columns 193 through 196

1.92      1.93      1.94      1.95

Columns 197 through 200

1.96      1.97      1.98      1.99

Columns 201 through 204

2      2.01      2.02      2.03

Columns 205 through 208

2.04      2.05      2.06      2.07

Columns 209 through 212

2.08      2.09      2.1      2.11

Columns 213 through 216

2.12      2.13      2.14      2.15

Columns 217 through 220

2.16	2.17	2.18	2.19
------	------	------	------

Columns 221 through 224

2.2	2.21	2.22	2.23
-----	------	------	------

Columns 225 through 228

2.24	2.25	2.26	2.27
------	------	------	------

Columns 229 through 232

2.28	2.29	2.3	2.31
------	------	-----	------

Columns 233 through 236

2.32	2.33	2.34	2.35
------	------	------	------

Columns 237 through 240

2.36	2.37	2.38	2.39
------	------	------	------

Columns 241 through 244

2.4                    2.41                    2.42                    2.43

Columns 245 through 248

2.44                    2.45                    2.46                    2.47

Columns 249 through 251

2.48                    2.49                    2.5

dp =

$$(51*\cos((17*t)/20)*\exp(-(3*t)/4))/40 - (9*\sin((17*t)/20)*\exp(-(3*t)/4))/8 + 3/8$$

dpn =

$$\begin{aligned} & [ 33/20, (51*\cos(17/2000)*\exp(-3/400))/40 - (9*\exp(-3/400)*\sin(17/2000))/8 + 3/8, \\ & (51*\cos(17/1000)*\exp(-3/200))/40 - (9*\exp(-3/200)*\sin(17/1000))/8 + 3/8, (51*\cos(51/2000)*\exp(- \\ & 9/400))/40 - (9*\exp(-9/400)*\sin(51/2000))/8 + 3/8, (51*\cos(17/500)*\exp(-3/100))/40 - (9*\exp(- \\ & 3/100)*\sin(17/500))/8 + 3/8, (51*\cos(17/400)*\exp(-3/80))/40 - (9*\exp(-3/80)*\sin(17/400))/8 + 3/8, \\ & (51*\cos(51/1000)*\exp(-9/200))/40 - (9*\exp(-9/200)*\sin(51/1000))/8 + 3/8, (51*\cos(119/2000)*\exp(- \\ & 21/400))/40 - (9*\exp(-21/400)*\sin(119/2000))/8 + 3/8, (51*\cos(17/250)*\exp(-3/50))/40 - (9*\exp(- \\ & 3/50)*\sin(17/250))/8 + 3/8, (51*\cos(153/2000)*\exp(-27/400))/40 - (9*\exp(-27/400)*\sin(153/2000))/8 + \\ & 3/8, (51*\cos(17/200)*\exp(-3/40))/40 - (9*\exp(-3/40)*\sin(17/200))/8 + 3/8, (51*\cos(187/2000)*\exp(- \\ & 33/400))/40 - (9*\exp(-33/400)*\sin(187/2000))/8 + 3/8, (51*\cos(51/500)*\exp(-9/100))/40 - (9*\exp(- \\ & 9/100)*\sin(51/500))/8 + 3/8, (51*\cos(221/2000)*\exp(-39/400))/40 - (9*\exp(-39/400)*\sin(221/2000))/8 \end{aligned}$$

$+ 3/8, (51*\cos(119/1000)*\exp(-21/200))/40 - (9*\exp(-21/200)*\sin(119/1000))/8 + 3/8,$   
 $(51*\cos(51/400)*\exp(-9/80))/40 - (9*\exp(-9/80)*\sin(51/400))/8 + 3/8, (51*\cos(17/125)*\exp(-3/25))/40 -$   
 $(9*\exp(-3/25)*\sin(17/125))/8 + 3/8, (51*\cos(289/2000)*\exp(-51/400))/40 - (9*\exp(-$   
 $51/400)*\sin(289/2000))/8 + 3/8, (51*\cos(153/1000)*\exp(-27/200))/40 - (9*\exp(-$   
 $27/200)*\sin(153/1000))/8 + 3/8, (51*\cos(323/2000)*\exp(-57/400))/40 - (9*\exp(-$   
 $57/400)*\sin(323/2000))/8 + 3/8, (51*\cos(17/100)*\exp(-3/20))/40 - (9*\exp(-3/20)*\sin(17/100))/8 + 3/8,$   
 $(51*\cos(357/2000)*\exp(-63/400))/40 - (9*\exp(-63/400)*\sin(357/2000))/8 + 3/8,$   
 $(51*\cos(187/1000)*\exp(-33/200))/40 - (9*\exp(-33/200)*\sin(187/1000))/8 + 3/8,$   
 $(51*\cos(391/2000)*\exp(-69/400))/40 - (9*\exp(-69/400)*\sin(391/2000))/8 + 3/8, (51*\cos(51/250)*\exp(-$   
 $9/50))/40 - (9*\exp(-9/50)*\sin(51/250))/8 + 3/8, (51*\cos(17/80)*\exp(-3/16))/40 - (9*\exp(-$   
 $3/16)*\sin(17/80))/8 + 3/8, (51*\cos(221/1000)*\exp(-39/200))/40 - (9*\exp(-39/200)*\sin(221/1000))/8 +$   
 $3/8, (51*\cos(459/2000)*\exp(-81/400))/40 - (9*\exp(-81/400)*\sin(459/2000))/8 + 3/8,$   
 $(51*\cos(119/500)*\exp(-21/100))/40 - (9*\exp(-21/100)*\sin(119/500))/8 + 3/8, (51*\cos(493/2000)*\exp(-$   
 $87/400))/40 - (9*\exp(-87/400)*\sin(493/2000))/8 + 3/8, (51*\cos(51/200)*\exp(-9/40))/40 - (9*\exp(-$   
 $9/40)*\sin(51/200))/8 + 3/8, (51*\cos(527/2000)*\exp(-93/400))/40 - (9*\exp(-93/400)*\sin(527/2000))/8 +$   
 $3/8, (51*\cos(34/125)*\exp(-6/25))/40 - (9*\exp(-6/25)*\sin(34/125))/8 + 3/8, (51*\cos(561/2000)*\exp(-$   
 $99/400))/40 - (9*\exp(-99/400)*\sin(561/2000))/8 + 3/8, (51*\cos(289/1000)*\exp(-51/200))/40 - (9*\exp(-$   
 $51/200)*\sin(289/1000))/8 + 3/8, (51*\cos(119/400)*\exp(-21/80))/40 - (9*\exp(-21/80)*\sin(119/400))/8 +$   
 $3/8, (51*\cos(153/500)*\exp(-27/100))/40 - (9*\exp(-27/100)*\sin(153/500))/8 + 3/8,$   
 $(51*\cos(629/2000)*\exp(-111/400))/40 - (9*\exp(-111/400)*\sin(629/2000))/8 + 3/8,$   
 $(51*\cos(323/1000)*\exp(-57/200))/40 - (9*\exp(-57/200)*\sin(323/1000))/8 + 3/8,$   
 $(51*\cos(663/2000)*\exp(-117/400))/40 - (9*\exp(-117/400)*\sin(663/2000))/8 + 3/8, (51*\cos(17/50)*\exp(-$   
 $3/10))/40 - (9*\exp(-3/10)*\sin(17/50))/8 + 3/8, (51*\cos(697/2000)*\exp(-123/400))/40 - (9*\exp(-$   
 $123/400)*\sin(697/2000))/8 + 3/8, (51*\cos(357/1000)*\exp(-63/200))/40 - (9*\exp(-$   
 $63/200)*\sin(357/1000))/8 + 3/8, (51*\cos(731/2000)*\exp(-129/400))/40 - (9*\exp(-$   
 $129/400)*\sin(731/2000))/8 + 3/8, (51*\cos(187/500)*\exp(-33/100))/40 - (9*\exp(-$   
 $33/100)*\sin(187/500))/8 + 3/8, (51*\cos(153/400)*\exp(-27/80))/40 - (9*\exp(-27/80)*\sin(153/400))/8 +$   
 $3/8, (51*\cos(391/1000)*\exp(-69/200))/40 - (9*\exp(-69/200)*\sin(391/1000))/8 + 3/8,$   
 $(51*\cos(799/2000)*\exp(-141/400))/40 - (9*\exp(-141/400)*\sin(799/2000))/8 + 3/8,$   
 $(51*\cos(51/125)*\exp(-9/25))/40 - (9*\exp(-9/25)*\sin(51/125))/8 + 3/8, (51*\cos(833/2000)*\exp(-$   
 $147/400))/40 - (9*\exp(-147/400)*\sin(833/2000))/8 + 3/8, (51*\cos(17/40)*\exp(-3/8))/40 - (9*\exp(-$   
 $3/8)*\sin(17/40))/8 + 3/8, (51*\cos(867/2000)*\exp(-153/400))/40 - (9*\exp(-153/400)*\sin(867/2000))/8 +$   
 $3/8, (51*\cos(221/500)*\exp(-39/100))/40 - (9*\exp(-39/100)*\sin(221/500))/8 + 3/8,$   
 $(51*\cos(901/2000)*\exp(-159/400))/40 - (9*\exp(-159/400)*\sin(901/2000))/8 + 3/8,$   
 $(51*\cos(459/1000)*\exp(-81/200))/40 - (9*\exp(-81/200)*\sin(459/1000))/8 + 3/8, (51*\cos(187/400)*\exp(-$   
 $33/80))/40 - (9*\exp(-33/80)*\sin(187/400))/8 + 3/8, (51*\cos(119/250)*\exp(-21/50))/40 - (9*\exp(-$   
 $21/50)*\sin(119/250))/8 + 3/8, (51*\cos(969/2000)*\exp(-171/400))/40 - (9*\exp(-$   
 $171/400)*\sin(969/2000))/8 + 3/8, (51*\cos(493/1000)*\exp(-87/200))/40 - (9*\exp(-$   
 $87/200)*\sin(493/1000))/8 + 3/8, (51*\cos(1003/2000)*\exp(-177/400))/40 - (9*\exp(-$   
 $177/400)*\sin(1003/2000))/8 + 3/8, (51*\cos(51/100)*\exp(-9/20))/40 - (9*\exp(-9/20)*\sin(51/100))/8 +$   
 $3/8, (51*\cos(1037/2000)*\exp(-183/400))/40 - (9*\exp(-183/400)*\sin(1037/2000))/8 + 3/8,$   
 $(51*\cos(527/1000)*\exp(-93/200))/40 - (9*\exp(-93/200)*\sin(527/1000))/8 + 3/8,$

$(51 \cdot \cos(1071/2000) \cdot \exp(-189/400))/40 - (9 \cdot \exp(-189/400) \cdot \sin(1071/2000))/8 + 3/8,$   
 $(51 \cdot \cos(68/125) \cdot \exp(-12/25))/40 - (9 \cdot \exp(-12/25) \cdot \sin(68/125))/8 + 3/8, (51 \cdot \cos(221/400) \cdot \exp(-39/80))/40 - (9 \cdot \exp(-39/80) \cdot \sin(221/400))/8 + 3/8, (51 \cdot \cos(561/1000) \cdot \exp(-99/200))/40 - (9 \cdot \exp(-99/200) \cdot \sin(561/1000))/8 + 3/8, (51 \cdot \cos(1139/2000) \cdot \exp(-201/400))/40 - (9 \cdot \exp(-201/400) \cdot \sin(1139/2000))/8 + 3/8, (51 \cdot \cos(289/500) \cdot \exp(-51/100))/40 - (9 \cdot \exp(-51/100) \cdot \sin(289/500))/8 + 3/8, (51 \cdot \cos(1173/2000) \cdot \exp(-207/400))/40 - (9 \cdot \exp(-207/400) \cdot \sin(1173/2000))/8 + 3/8, (51 \cdot \cos(119/200) \cdot \exp(-21/40))/40 - (9 \cdot \exp(-21/40) \cdot \sin(119/200))/8 + 3/8, (51 \cdot \cos(1207/2000) \cdot \exp(-213/400))/40 - (9 \cdot \exp(-213/400) \cdot \sin(1207/2000))/8 + 3/8, (51 \cdot \cos(153/250) \cdot \exp(-27/50))/40 - (9 \cdot \exp(-27/50) \cdot \sin(153/250))/8 + 3/8, (51 \cdot \cos(1241/2000) \cdot \exp(-219/400))/40 - (9 \cdot \exp(-219/400) \cdot \sin(1241/2000))/8 + 3/8, (51 \cdot \cos(629/1000) \cdot \exp(-111/200))/40 - (9 \cdot \exp(-111/200) \cdot \sin(629/1000))/8 + 3/8, (51 \cdot \cos(51/80) \cdot \exp(-9/16))/40 - (9 \cdot \exp(-9/16) \cdot \sin(51/80))/8 + 3/8, (51 \cdot \cos(323/500) \cdot \exp(-57/100))/40 - (9 \cdot \exp(-57/100) \cdot \sin(323/500))/8 + 3/8, (51 \cdot \cos(1309/2000) \cdot \exp(-231/400))/40 - (9 \cdot \exp(-231/400) \cdot \sin(1309/2000))/8 + 3/8, (51 \cdot \cos(663/1000) \cdot \exp(-117/200))/40 - (9 \cdot \exp(-117/200) \cdot \sin(663/1000))/8 + 3/8, (51 \cdot \cos(1343/2000) \cdot \exp(-237/400))/40 - (9 \cdot \exp(-237/400) \cdot \sin(1343/2000))/8 + 3/8, (51 \cdot \cos(17/25) \cdot \exp(-3/5))/40 - (9 \cdot \exp(-3/5) \cdot \sin(17/25))/8 + 3/8, (51 \cdot \cos(1377/2000) \cdot \exp(-243/400))/40 - (9 \cdot \exp(-243/400) \cdot \sin(1377/2000))/8 + 3/8, (51 \cdot \cos(697/1000) \cdot \exp(-123/200))/40 - (9 \cdot \exp(-123/200) \cdot \sin(697/1000))/8 + 3/8, (51 \cdot \cos(1411/2000) \cdot \exp(-249/400))/40 - (9 \cdot \exp(-249/400) \cdot \sin(1411/2000))/8 + 3/8, (51 \cdot \cos(357/500) \cdot \exp(-63/100))/40 - (9 \cdot \exp(-63/100) \cdot \sin(357/500))/8 + 3/8, (51 \cdot \cos(289/400) \cdot \exp(-51/80))/40 - (9 \cdot \exp(-51/80) \cdot \sin(289/400))/8 + 3/8, (51 \cdot \cos(731/1000) \cdot \exp(-129/200))/40 - (9 \cdot \exp(-129/200) \cdot \sin(731/1000))/8 + 3/8, (51 \cdot \cos(1479/2000) \cdot \exp(-261/400))/40 - (9 \cdot \exp(-261/400) \cdot \sin(1479/2000))/8 + 3/8, (51 \cdot \cos(187/250) \cdot \exp(-33/50))/40 - (9 \cdot \exp(-33/50) \cdot \sin(187/250))/8 + 3/8, (51 \cdot \cos(1513/2000) \cdot \exp(-267/400))/40 - (9 \cdot \exp(-267/400) \cdot \sin(1513/2000))/8 + 3/8, (51 \cdot \cos(153/200) \cdot \exp(-27/40))/40 - (9 \cdot \exp(-27/40) \cdot \sin(153/200))/8 + 3/8, (51 \cdot \cos(1547/2000) \cdot \exp(-273/400))/40 - (9 \cdot \exp(-273/400) \cdot \sin(1547/2000))/8 + 3/8, (51 \cdot \cos(391/500) \cdot \exp(-69/100))/40 - (9 \cdot \exp(-69/100) \cdot \sin(391/500))/8 + 3/8, (51 \cdot \cos(1581/2000) \cdot \exp(-279/400))/40 - (9 \cdot \exp(-279/400) \cdot \sin(1581/2000))/8 + 3/8, (51 \cdot \cos(799/1000) \cdot \exp(-141/200))/40 - (9 \cdot \exp(-141/200) \cdot \sin(799/1000))/8 + 3/8, (51 \cdot \cos(323/400) \cdot \exp(-57/80))/40 - (9 \cdot \exp(-57/80) \cdot \sin(323/400))/8 + 3/8, (51 \cdot \cos(102/125) \cdot \exp(-18/25))/40 - (9 \cdot \exp(-18/25) \cdot \sin(102/125))/8 + 3/8, (51 \cdot \cos(1649/2000) \cdot \exp(-291/400))/40 - (9 \cdot \exp(-291/400) \cdot \sin(1649/2000))/8 + 3/8, (51 \cdot \cos(833/1000) \cdot \exp(-147/200))/40 - (9 \cdot \exp(-147/200) \cdot \sin(833/1000))/8 + 3/8, (51 \cdot \cos(1683/2000) \cdot \exp(-297/400))/40 - (9 \cdot \exp(-297/400) \cdot \sin(1683/2000))/8 + 3/8, (51 \cdot \cos(17/20) \cdot \exp(-3/4))/40 - (9 \cdot \exp(-3/4) \cdot \sin(17/20))/8 + 3/8, (51 \cdot \cos(1717/2000) \cdot \exp(-303/400))/40 - (9 \cdot \exp(-303/400) \cdot \sin(1717/2000))/8 + 3/8, (51 \cdot \cos(867/1000) \cdot \exp(-153/200))/40 - (9 \cdot \exp(-153/200) \cdot \sin(867/1000))/8 + 3/8, (51 \cdot \cos(1751/2000) \cdot \exp(-309/400))/40 - (9 \cdot \exp(-309/400) \cdot \sin(1751/2000))/8 + 3/8, (51 \cdot \cos(221/250) \cdot \exp(-39/50))/40 - (9 \cdot \exp(-39/50) \cdot \sin(221/250))/8 + 3/8, (51 \cdot \cos(357/400) \cdot \exp(-63/80))/40 - (9 \cdot \exp(-63/80) \cdot \sin(357/400))/8 + 3/8, (51 \cdot \cos(901/1000) \cdot \exp(-159/200))/40 - (9 \cdot \exp(-159/200) \cdot \sin(901/1000))/8 + 3/8, (51 \cdot \cos(1819/2000) \cdot \exp(-321/400))/40 - (9 \cdot \exp(-321/400) \cdot \sin(1819/2000))/8 + 3/8, (51 \cdot \cos(459/500) \cdot \exp(-81/100))/40 - (9 \cdot \exp(-81/100) \cdot \sin(459/500))/8 + 3/8, (51 \cdot \cos(1853/2000) \cdot \exp(-327/400))/40 - (9 \cdot \exp(-327/400) \cdot \sin(1853/2000))/8 + 3/8, (51 \cdot \cos(187/200) \cdot \exp(-33/40))/40 - (9 \cdot \exp(-33/40) \cdot \sin(187/200))/8 + 3/8,$

$33/40 * \sin(187/200))/8 + 3/8, (51 * \cos(1887/2000) * \exp(-333/400))/40 - (9 * \exp(-333/400) * \sin(1887/2000))/8 + 3/8, (51 * \cos(119/125) * \exp(-21/25))/40 - (9 * \exp(-21/25) * \sin(119/125))/8 + 3/8, (51 * \cos(1921/2000) * \exp(-339/400))/40 - (9 * \exp(-339/400) * \sin(1921/2000))/8 + 3/8, (51 * \cos(969/1000) * \exp(-171/200))/40 - (9 * \exp(-171/200) * \sin(969/1000))/8 + 3/8, (51 * \cos(391/400) * \exp(-69/80))/40 - (9 * \exp(-69/80) * \sin(391/400))/8 + 3/8, (51 * \cos(493/500) * \exp(-87/100))/40 - (9 * \exp(-87/100) * \sin(493/500))/8 + 3/8, (51 * \cos(1989/2000) * \exp(-351/400))/40 - (9 * \exp(-351/400) * \sin(1989/2000))/8 + 3/8, (51 * \cos(1003/1000) * \exp(-177/200))/40 - (9 * \exp(-177/200) * \sin(1003/1000))/8 + 3/8, (51 * \cos(2023/2000) * \exp(-357/400))/40 - (9 * \exp(-357/400) * \sin(2023/2000))/8 + 3/8, (51 * \cos(51/50) * \exp(-9/10))/40 - (9 * \exp(-9/10) * \sin(51/50))/8 + 3/8, (51 * \cos(2057/2000) * \exp(-363/400))/40 - (9 * \exp(-363/400) * \sin(2057/2000))/8 + 3/8, (51 * \cos(1037/1000) * \exp(-183/200))/40 - (9 * \exp(-183/200) * \sin(1037/1000))/8 + 3/8, (51 * \cos(2091/2000) * \exp(-369/400))/40 - (9 * \exp(-369/400) * \sin(2091/2000))/8 + 3/8, (51 * \cos(527/500) * \exp(-93/100))/40 - (9 * \exp(-93/100) * \sin(527/500))/8 + 3/8, (51 * \cos(17/16) * \exp(-15/16))/40 - (9 * \exp(-15/16) * \sin(17/16))/8 + 3/8, (51 * \cos(1071/1000) * \exp(-189/200))/40 - (9 * \exp(-189/200) * \sin(1071/1000))/8 + 3/8, (51 * \cos(2159/2000) * \exp(-381/400))/40 - (9 * \exp(-381/400) * \sin(2159/2000))/8 + 3/8, (51 * \cos(136/125) * \exp(-24/25))/40 - (9 * \exp(-24/25) * \sin(136/125))/8 + 3/8, (51 * \cos(2193/2000) * \exp(-387/400))/40 - (9 * \exp(-387/400) * \sin(2193/2000))/8 + 3/8, (51 * \cos(221/200) * \exp(-39/40))/40 - (9 * \exp(-39/40) * \sin(221/200))/8 + 3/8, (51 * \cos(2227/2000) * \exp(-393/400))/40 - (9 * \exp(-393/400) * \sin(2227/2000))/8 + 3/8, (51 * \cos(561/500) * \exp(-99/100))/40 - (9 * \exp(-99/100) * \sin(561/500))/8 + 3/8, (51 * \cos(2261/2000) * \exp(-399/400))/40 - (9 * \exp(-399/400) * \sin(2261/2000))/8 + 3/8, (51 * \cos(1139/1000) * \exp(-201/200))/40 - (9 * \exp(-201/200) * \sin(1139/1000))/8 + 3/8, (51 * \cos(459/400) * \exp(-81/80))/40 - (9 * \exp(-81/80) * \sin(459/400))/8 + 3/8, (51 * \cos(289/250) * \exp(-51/50))/40 - (9 * \exp(-51/50) * \sin(289/250))/8 + 3/8, (51 * \cos(2329/2000) * \exp(-411/400))/40 - (9 * \exp(-411/400) * \sin(2329/2000))/8 + 3/8, (51 * \cos(1173/1000) * \exp(-207/200))/40 - (9 * \exp(-207/200) * \sin(1173/1000))/8 + 3/8, (51 * \cos(2363/2000) * \exp(-417/400))/40 - (9 * \exp(-417/400) * \sin(2363/2000))/8 + 3/8, (51 * \cos(119/100) * \exp(-21/20))/40 - (9 * \exp(-21/20) * \sin(119/100))/8 + 3/8, (51 * \cos(2397/2000) * \exp(-423/400))/40 - (9 * \exp(-423/400) * \sin(2397/2000))/8 + 3/8, (51 * \cos(1207/1000) * \exp(-213/200))/40 - (9 * \exp(-213/200) * \sin(1207/1000))/8 + 3/8, (51 * \cos(2431/2000) * \exp(-429/400))/40 - (9 * \exp(-429/400) * \sin(2431/2000))/8 + 3/8, (51 * \cos(153/125) * \exp(-27/25))/40 - (9 * \exp(-27/25) * \sin(153/125))/8 + 3/8, (51 * \cos(493/400) * \exp(-87/80))/40 - (9 * \exp(-87/80) * \sin(493/400))/8 + 3/8, (51 * \cos(1241/1000) * \exp(-219/200))/40 - (9 * \exp(-219/200) * \sin(1241/1000))/8 + 3/8, (51 * \cos(2499/2000) * \exp(-441/400))/40 - (9 * \exp(-441/400) * \sin(2499/2000))/8 + 3/8, (51 * \cos(629/500) * \exp(-111/100))/40 - (9 * \exp(-111/100) * \sin(629/500))/8 + 3/8, (51 * \cos(2533/2000) * \exp(-447/400))/40 - (9 * \exp(-447/400) * \sin(2533/2000))/8 + 3/8, (51 * \cos(51/40) * \exp(-9/8))/40 - (9 * \exp(-9/8) * \sin(51/40))/8 + 3/8, (51 * \cos(2567/2000) * \exp(-453/400))/40 - (9 * \exp(-453/400) * \sin(2567/2000))/8 + 3/8, (51 * \cos(323/250) * \exp(-57/50))/40 - (9 * \exp(-57/50) * \sin(323/250))/8 + 3/8, (51 * \cos(2601/2000) * \exp(-459/400))/40 - (9 * \exp(-459/400) * \sin(2601/2000))/8 + 3/8, (51 * \cos(1309/1000) * \exp(-231/200))/40 - (9 * \exp(-231/200) * \sin(1309/1000))/8 + 3/8, (51 * \cos(527/400) * \exp(-93/80))/40 - (9 * \exp(-93/80) * \sin(527/400))/8 + 3/8, (51 * \cos(663/500) * \exp(-117/100))/40 - (9 * \exp(-117/100) * \sin(663/500))/8 + 3/8, (51 * \cos(2669/2000) * \exp(-471/400))/40 - (9 * \exp(-471/400) * \sin(2669/2000))/8 + 3/8,$

$(51 \cdot \cos(1343/1000) \cdot \exp(-237/200))/40 - (9 \cdot \exp(-237/200) \cdot \sin(1343/1000))/8 + 3/8,$   
 $(51 \cdot \cos(2703/2000) \cdot \exp(-477/400))/40 - (9 \cdot \exp(-477/400) \cdot \sin(2703/2000))/8 + 3/8,$   
 $(51 \cdot \cos(34/25) \cdot \exp(-6/5))/40 - (9 \cdot \exp(-6/5) \cdot \sin(34/25))/8 + 3/8, (51 \cdot \cos(2737/2000) \cdot \exp(-$   
 $483/400))/40 - (9 \cdot \exp(-483/400) \cdot \sin(2737/2000))/8 + 3/8, (51 \cdot \cos(1377/1000) \cdot \exp(-243/200))/40 -$   
 $(9 \cdot \exp(-243/200) \cdot \sin(1377/1000))/8 + 3/8, (51 \cdot \cos(2771/2000) \cdot \exp(-489/400))/40 - (9 \cdot \exp(-$   
 $489/400) \cdot \sin(2771/2000))/8 + 3/8, (51 \cdot \cos(697/500) \cdot \exp(-123/100))/40 - (9 \cdot \exp(-$   
 $123/100) \cdot \sin(697/500))/8 + 3/8, (51 \cdot \cos(561/400) \cdot \exp(-99/80))/40 - (9 \cdot \exp(-99/80) \cdot \sin(561/400))/8 +$   
 $3/8, (51 \cdot \cos(1411/1000) \cdot \exp(-249/200))/40 - (9 \cdot \exp(-249/200) \cdot \sin(1411/1000))/8 + 3/8,$   
 $(51 \cdot \cos(2839/2000) \cdot \exp(-501/400))/40 - (9 \cdot \exp(-501/400) \cdot \sin(2839/2000))/8 + 3/8,$   
 $(51 \cdot \cos(357/250) \cdot \exp(-63/50))/40 - (9 \cdot \exp(-63/50) \cdot \sin(357/250))/8 + 3/8, (51 \cdot \cos(2873/2000) \cdot \exp(-$   
 $507/400))/40 - (9 \cdot \exp(-507/400) \cdot \sin(2873/2000))/8 + 3/8, (51 \cdot \cos(289/200) \cdot \exp(-51/40))/40 - (9 \cdot \exp(-$   
 $51/40) \cdot \sin(289/200))/8 + 3/8, (51 \cdot \cos(2907/2000) \cdot \exp(-513/400))/40 - (9 \cdot \exp(-$   
 $513/400) \cdot \sin(2907/2000))/8 + 3/8, (51 \cdot \cos(731/500) \cdot \exp(-129/100))/40 - (9 \cdot \exp(-$   
 $129/100) \cdot \sin(731/500))/8 + 3/8, (51 \cdot \cos(2941/2000) \cdot \exp(-519/400))/40 - (9 \cdot \exp(-$   
 $519/400) \cdot \sin(2941/2000))/8 + 3/8, (51 \cdot \cos(1479/1000) \cdot \exp(-261/200))/40 - (9 \cdot \exp(-$   
 $261/200) \cdot \sin(1479/1000))/8 + 3/8, (51 \cdot \cos(119/80) \cdot \exp(-21/16))/40 - (9 \cdot \exp(-21/16) \cdot \sin(119/80))/8 +$   
 $3/8, (51 \cdot \cos(187/125) \cdot \exp(-33/25))/40 - (9 \cdot \exp(-33/25) \cdot \sin(187/125))/8 + 3/8,$   
 $(51 \cdot \cos(3009/2000) \cdot \exp(-531/400))/40 - (9 \cdot \exp(-531/400) \cdot \sin(3009/2000))/8 + 3/8,$   
 $(51 \cdot \cos(1513/1000) \cdot \exp(-267/200))/40 - (9 \cdot \exp(-267/200) \cdot \sin(1513/1000))/8 + 3/8,$   
 $(51 \cdot \cos(3043/2000) \cdot \exp(-537/400))/40 - (9 \cdot \exp(-537/400) \cdot \sin(3043/2000))/8 + 3/8,$   
 $(51 \cdot \cos(153/100) \cdot \exp(-27/20))/40 - (9 \cdot \exp(-27/20) \cdot \sin(153/100))/8 + 3/8, (51 \cdot \cos(3077/2000) \cdot \exp(-$   
 $543/400))/40 - (9 \cdot \exp(-543/400) \cdot \sin(3077/2000))/8 + 3/8, (51 \cdot \cos(1547/1000) \cdot \exp(-273/200))/40 -$   
 $(9 \cdot \exp(-273/200) \cdot \sin(1547/1000))/8 + 3/8, (51 \cdot \cos(3111/2000) \cdot \exp(-549/400))/40 - (9 \cdot \exp(-$   
 $549/400) \cdot \sin(3111/2000))/8 + 3/8, (51 \cdot \cos(391/250) \cdot \exp(-69/50))/40 - (9 \cdot \exp(-69/50) \cdot \sin(391/250))/8$   
 $+ 3/8, (51 \cdot \cos(629/400) \cdot \exp(-111/80))/40 - (9 \cdot \exp(-111/80) \cdot \sin(629/400))/8 + 3/8,$   
 $(51 \cdot \cos(1581/1000) \cdot \exp(-279/200))/40 - (9 \cdot \exp(-279/200) \cdot \sin(1581/1000))/8 + 3/8,$   
 $(51 \cdot \cos(3179/2000) \cdot \exp(-561/400))/40 - (9 \cdot \exp(-561/400) \cdot \sin(3179/2000))/8 + 3/8,$   
 $(51 \cdot \cos(799/500) \cdot \exp(-141/100))/40 - (9 \cdot \exp(-141/100) \cdot \sin(799/500))/8 + 3/8,$   
 $(51 \cdot \cos(3213/2000) \cdot \exp(-567/400))/40 - (9 \cdot \exp(-567/400) \cdot \sin(3213/2000))/8 + 3/8,$   
 $(51 \cdot \cos(323/200) \cdot \exp(-57/40))/40 - (9 \cdot \exp(-57/40) \cdot \sin(323/200))/8 + 3/8, (51 \cdot \cos(3247/2000) \cdot \exp(-$   
 $573/400))/40 - (9 \cdot \exp(-573/400) \cdot \sin(3247/2000))/8 + 3/8, (51 \cdot \cos(204/125) \cdot \exp(-36/25))/40 - (9 \cdot \exp(-$   
 $36/25) \cdot \sin(204/125))/8 + 3/8, (51 \cdot \cos(3281/2000) \cdot \exp(-579/400))/40 - (9 \cdot \exp(-$   
 $579/400) \cdot \sin(3281/2000))/8 + 3/8, (51 \cdot \cos(1649/1000) \cdot \exp(-291/200))/40 - (9 \cdot \exp(-$   
 $291/200) \cdot \sin(1649/1000))/8 + 3/8, (51 \cdot \cos(663/400) \cdot \exp(-117/80))/40 - (9 \cdot \exp(-$   
 $117/80) \cdot \sin(663/400))/8 + 3/8, (51 \cdot \cos(833/500) \cdot \exp(-147/100))/40 - (9 \cdot \exp(-$   
 $147/100) \cdot \sin(833/500))/8 + 3/8, (51 \cdot \cos(3349/2000) \cdot \exp(-591/400))/40 - (9 \cdot \exp(-$   
 $591/400) \cdot \sin(3349/2000))/8 + 3/8, (51 \cdot \cos(1683/1000) \cdot \exp(-297/200))/40 - (9 \cdot \exp(-$   
 $297/200) \cdot \sin(1683/1000))/8 + 3/8, (51 \cdot \cos(3383/2000) \cdot \exp(-597/400))/40 - (9 \cdot \exp(-$   
 $597/400) \cdot \sin(3383/2000))/8 + 3/8, (51 \cdot \cos(17/10) \cdot \exp(-3/2))/40 - (9 \cdot \exp(-3/2) \cdot \sin(17/10))/8 + 3/8,$   
 $(51 \cdot \cos(3417/2000) \cdot \exp(-603/400))/40 - (9 \cdot \exp(-603/400) \cdot \sin(3417/2000))/8 + 3/8,$   
 $(51 \cdot \cos(1717/1000) \cdot \exp(-303/200))/40 - (9 \cdot \exp(-303/200) \cdot \sin(1717/1000))/8 + 3/8,$   
 $(51 \cdot \cos(3451/2000) \cdot \exp(-609/400))/40 - (9 \cdot \exp(-609/400) \cdot \sin(3451/2000))/8 + 3/8,$

$(51 \cdot \cos(867/500) \cdot \exp(-153/100))/40 - (9 \cdot \exp(-153/100) \cdot \sin(867/500))/8 + 3/8, (51 \cdot \cos(697/400) \cdot \exp(-123/80))/40 - (9 \cdot \exp(-123/80) \cdot \sin(697/400))/8 + 3/8, (51 \cdot \cos(1751/1000) \cdot \exp(-309/200))/40 - (9 \cdot \exp(-309/200) \cdot \sin(1751/1000))/8 + 3/8, (51 \cdot \cos(3519/2000) \cdot \exp(-621/400))/40 - (9 \cdot \exp(-621/400) \cdot \sin(3519/2000))/8 + 3/8, (51 \cdot \cos(221/125) \cdot \exp(-39/25))/40 - (9 \cdot \exp(-39/25) \cdot \sin(221/125))/8 + 3/8, (51 \cdot \cos(3553/2000) \cdot \exp(-627/400))/40 - (9 \cdot \exp(-627/400) \cdot \sin(3553/2000))/8 + 3/8, (51 \cdot \cos(357/200) \cdot \exp(-63/40))/40 - (9 \cdot \exp(-63/40) \cdot \sin(357/200))/8 + 3/8, (51 \cdot \cos(3587/2000) \cdot \exp(-633/400))/40 - (9 \cdot \exp(-633/400) \cdot \sin(3587/2000))/8 + 3/8, (51 \cdot \cos(901/500) \cdot \exp(-159/100))/40 - (9 \cdot \exp(-159/100) \cdot \sin(901/500))/8 + 3/8, (51 \cdot \cos(3621/2000) \cdot \exp(-639/400))/40 - (9 \cdot \exp(-639/400) \cdot \sin(3621/2000))/8 + 3/8, (51 \cdot \cos(1819/1000) \cdot \exp(-321/200))/40 - (9 \cdot \exp(-321/200) \cdot \sin(1819/1000))/8 + 3/8, (51 \cdot \cos(731/400) \cdot \exp(-129/80))/40 - (9 \cdot \exp(-129/80) \cdot \sin(731/400))/8 + 3/8, (51 \cdot \cos(459/250) \cdot \exp(-81/50))/40 - (9 \cdot \exp(-81/50) \cdot \sin(459/250))/8 + 3/8, (51 \cdot \cos(3689/2000) \cdot \exp(-651/400))/40 - (9 \cdot \exp(-651/400) \cdot \sin(3689/2000))/8 + 3/8, (51 \cdot \cos(1853/1000) \cdot \exp(-327/200))/40 - (9 \cdot \exp(-327/200) \cdot \sin(1853/1000))/8 + 3/8, (51 \cdot \cos(3723/2000) \cdot \exp(-657/400))/40 - (9 \cdot \exp(-657/400) \cdot \sin(3723/2000))/8 + 3/8, (51 \cdot \cos(187/100) \cdot \exp(-33/20))/40 - (9 \cdot \exp(-33/20) \cdot \sin(187/100))/8 + 3/8, (51 \cdot \cos(3757/2000) \cdot \exp(-663/400))/40 - (9 \cdot \exp(-663/400) \cdot \sin(3757/2000))/8 + 3/8, (51 \cdot \cos(1887/1000) \cdot \exp(-333/200))/40 - (9 \cdot \exp(-333/200) \cdot \sin(1887/1000))/8 + 3/8, (51 \cdot \cos(3791/2000) \cdot \exp(-669/400))/40 - (9 \cdot \exp(-669/400) \cdot \sin(3791/2000))/8 + 3/8, (51 \cdot \cos(238/125) \cdot \exp(-42/25))/40 - (9 \cdot \exp(-42/25) \cdot \sin(238/125))/8 + 3/8, (51 \cdot \cos(153/80) \cdot \exp(-27/16))/40 - (9 \cdot \exp(-27/16) \cdot \sin(153/80))/8 + 3/8, (51 \cdot \cos(1921/1000) \cdot \exp(-339/200))/40 - (9 \cdot \exp(-339/200) \cdot \sin(1921/1000))/8 + 3/8, (51 \cdot \cos(3859/2000) \cdot \exp(-681/400))/40 - (9 \cdot \exp(-681/400) \cdot \sin(3859/2000))/8 + 3/8, (51 \cdot \cos(969/500) \cdot \exp(-171/100))/40 - (9 \cdot \exp(-171/100) \cdot \sin(969/500))/8 + 3/8, (51 \cdot \cos(3893/2000) \cdot \exp(-687/400))/40 - (9 \cdot \exp(-687/400) \cdot \sin(3893/2000))/8 + 3/8, (51 \cdot \cos(391/200) \cdot \exp(-69/40))/40 - (9 \cdot \exp(-69/40) \cdot \sin(391/200))/8 + 3/8, (51 \cdot \cos(3927/2000) \cdot \exp(-693/400))/40 - (9 \cdot \exp(-693/400) \cdot \sin(3927/2000))/8 + 3/8, (51 \cdot \cos(493/250) \cdot \exp(-87/50))/40 - (9 \cdot \exp(-87/50) \cdot \sin(493/250))/8 + 3/8, (51 \cdot \cos(3961/2000) \cdot \exp(-699/400))/40 - (9 \cdot \exp(-699/400) \cdot \sin(3961/2000))/8 + 3/8, (51 \cdot \cos(1989/1000) \cdot \exp(-351/200))/40 - (9 \cdot \exp(-351/200) \cdot \sin(1989/1000))/8 + 3/8, (51 \cdot \cos(799/400) \cdot \exp(-141/80))/40 - (9 \cdot \exp(-141/80) \cdot \sin(799/400))/8 + 3/8, (51 \cdot \cos(1003/500) \cdot \exp(-177/100))/40 - (9 \cdot \exp(-177/100) \cdot \sin(1003/500))/8 + 3/8, (51 \cdot \cos(4029/2000) \cdot \exp(-711/400))/40 - (9 \cdot \exp(-711/400) \cdot \sin(4029/2000))/8 + 3/8, (51 \cdot \cos(2023/1000) \cdot \exp(-357/200))/40 - (9 \cdot \exp(-357/200) \cdot \sin(2023/1000))/8 + 3/8, (51 \cdot \cos(4063/2000) \cdot \exp(-717/400))/40 - (9 \cdot \exp(-717/400) \cdot \sin(4063/2000))/8 + 3/8, (51 \cdot \cos(51/25) \cdot \exp(-9/5))/40 - (9 \cdot \exp(-9/5) \cdot \sin(51/25))/8 + 3/8, (51 \cdot \cos(4097/2000) \cdot \exp(-723/400))/40 - (9 \cdot \exp(-723/400) \cdot \sin(4097/2000))/8 + 3/8, (51 \cdot \cos(2057/1000) \cdot \exp(-363/200))/40 - (9 \cdot \exp(-363/200) \cdot \sin(2057/1000))/8 + 3/8, (51 \cdot \cos(4131/2000) \cdot \exp(-729/400))/40 - (9 \cdot \exp(-729/400) \cdot \sin(4131/2000))/8 + 3/8, (51 \cdot \cos(1037/500) \cdot \exp(-183/100))/40 - (9 \cdot \exp(-183/100) \cdot \sin(1037/500))/8 + 3/8, (51 \cdot \cos(833/400) \cdot \exp(-147/80))/40 - (9 \cdot \exp(-147/80) \cdot \sin(833/400))/8 + 3/8, (51 \cdot \cos(2091/1000) \cdot \exp(-369/200))/40 - (9 \cdot \exp(-369/200) \cdot \sin(2091/1000))/8 + 3/8, (51 \cdot \cos(4199/2000) \cdot \exp(-741/400))/40 - (9 \cdot \exp(-741/400) \cdot \sin(4199/2000))/8 + 3/8, (51 \cdot \cos(527/250) \cdot \exp(-93/50))/40 - (9 \cdot \exp(-93/50) \cdot \sin(527/250))/8 + 3/8, (51 \cdot \cos(4233/2000) \cdot \exp(-747/400))/40 - (9 \cdot \exp(-747/400) \cdot \sin(4233/2000))/8 + 3/8, (51 \cdot \cos(17/8) \cdot \exp(-15/8))/40 - (9 \cdot \exp(-15/8) \cdot \sin(17/8))/8 + 3/8]$

ds =

$$-(153*\cos((17*t)/20)*\exp(-3*t/4))/80 - (6*\sin((17*t)/20)*\exp(-3*t/4))/25$$

dsn =

$$\begin{aligned} & [-153/80, -(153*\cos(17/2000)*\exp(-3/400))/80 - (6*\exp(-3/400)*\sin(17/2000))/25, - \\ & (153*\cos(17/1000)*\exp(-3/200))/80 - (6*\exp(-3/200)*\sin(17/1000))/25, -(153*\cos(51/2000)*\exp(- \\ & 9/400))/80 - (6*\exp(-9/400)*\sin(51/2000))/25, -(153*\cos(17/500)*\exp(-3/100))/80 - (6*\exp(- \\ & 3/100)*\sin(17/500))/25, -(153*\cos(17/400)*\exp(-3/80))/80 - (6*\exp(-3/80)*\sin(17/400))/25, - \\ & (153*\cos(51/1000)*\exp(-9/200))/80 - (6*\exp(-9/200)*\sin(51/1000))/25, -(153*\cos(119/2000)*\exp(- \\ & 21/400))/80 - (6*\exp(-21/400)*\sin(119/2000))/25, -(153*\cos(17/250)*\exp(-3/50))/80 - (6*\exp(- \\ & 3/50)*\sin(17/250))/25, -(153*\cos(153/2000)*\exp(-27/400))/80 - (6*\exp(-27/400)*\sin(153/2000))/25, - \\ & (153*\cos(17/200)*\exp(-3/40))/80 - (6*\exp(-3/40)*\sin(17/200))/25, -(153*\cos(187/2000)*\exp(- \\ & 33/400))/80 - (6*\exp(-33/400)*\sin(187/2000))/25, -(153*\cos(51/500)*\exp(-9/100))/80 - (6*\exp(- \\ & 9/100)*\sin(51/500))/25, -(153*\cos(221/2000)*\exp(-39/400))/80 - (6*\exp(-39/400)*\sin(221/2000))/25, - \\ & (153*\cos(119/1000)*\exp(-21/200))/80 - (6*\exp(-21/200)*\sin(119/1000))/25, -(153*\cos(51/400)*\exp(- \\ & 9/80))/80 - (6*\exp(-9/80)*\sin(51/400))/25, -(153*\cos(17/125)*\exp(-3/25))/80 - (6*\exp(- \\ & 3/25)*\sin(17/125))/25, -(153*\cos(289/2000)*\exp(-51/400))/80 - (6*\exp(-51/400)*\sin(289/2000))/25, - \\ & (153*\cos(153/1000)*\exp(-27/200))/80 - (6*\exp(-27/200)*\sin(153/1000))/25, - \\ & (153*\cos(323/2000)*\exp(-57/400))/80 - (6*\exp(-57/400)*\sin(323/2000))/25, -(153*\cos(17/100)*\exp(- \\ & 3/20))/80 - (6*\exp(-3/20)*\sin(17/100))/25, -(153*\cos(357/2000)*\exp(-63/400))/80 - (6*\exp(- \\ & 63/400)*\sin(357/2000))/25, -(153*\cos(187/1000)*\exp(-33/200))/80 - (6*\exp(- \\ & 33/200)*\sin(187/1000))/25, -(153*\cos(391/2000)*\exp(-69/400))/80 - (6*\exp(- \\ & 69/400)*\sin(391/2000))/25, -(153*\cos(51/250)*\exp(-9/50))/80 - (6*\exp(-9/50)*\sin(51/250))/25, - \\ & (153*\cos(17/80)*\exp(-3/16))/80 - (6*\exp(-3/16)*\sin(17/80))/25, -(153*\cos(221/1000)*\exp(- \\ & 39/200))/80 - (6*\exp(-39/200)*\sin(221/1000))/25, -(153*\cos(459/2000)*\exp(-81/400))/80 - (6*\exp(- \\ & 81/400)*\sin(459/2000))/25, -(153*\cos(119/500)*\exp(-21/100))/80 - (6*\exp(-21/100)*\sin(119/500))/25, - \\ & (153*\cos(493/2000)*\exp(-87/400))/80 - (6*\exp(-87/400)*\sin(493/2000))/25, -(153*\cos(51/200)*\exp(- \\ & 9/40))/80 - (6*\exp(-9/40)*\sin(51/200))/25, -(153*\cos(527/2000)*\exp(-93/400))/80 - (6*\exp(- \\ & 93/400)*\sin(527/2000))/25, -(153*\cos(34/125)*\exp(-6/25))/80 - (6*\exp(-6/25)*\sin(34/125))/25, - \\ & (153*\cos(561/2000)*\exp(-99/400))/80 - (6*\exp(-99/400)*\sin(561/2000))/25, - \\ & (153*\cos(289/1000)*\exp(-51/200))/80 - (6*\exp(-51/200)*\sin(289/1000))/25, -(153*\cos(119/400)*\exp(- \end{aligned}$$

$21/80)/80 - (6*\exp(-21/80)*\sin(119/400))/25, - (153*\cos(153/500)*\exp(-27/100))/80 - (6*\exp(-27/100)*\sin(153/500))/25, - (153*\cos(629/2000)*\exp(-111/400))/80 - (6*\exp(-111/400)*\sin(629/2000))/25, - (153*\cos(323/1000)*\exp(-57/200))/80 - (6*\exp(-57/200)*\sin(323/1000))/25, - (153*\cos(663/2000)*\exp(-117/400))/80 - (6*\exp(-117/400)*\sin(663/2000))/25, - (153*\cos(17/50)*\exp(-3/10))/80 - (6*\exp(-3/10)*\sin(17/50))/25, - (153*\cos(697/2000)*\exp(-123/400))/80 - (6*\exp(-123/400)*\sin(697/2000))/25, - (153*\cos(357/1000)*\exp(-63/200))/80 - (6*\exp(-63/200)*\sin(357/1000))/25, - (153*\cos(731/2000)*\exp(-129/400))/80 - (6*\exp(-129/400)*\sin(731/2000))/25, - (153*\cos(187/500)*\exp(-33/100))/80 - (6*\exp(-33/100)*\sin(187/500))/25, - (153*\cos(153/400)*\exp(-27/80))/80 - (6*\exp(-27/80)*\sin(153/400))/25, - (153*\cos(391/1000)*\exp(-69/200))/80 - (6*\exp(-69/200)*\sin(391/1000))/25, - (153*\cos(799/2000)*\exp(-141/400))/80 - (6*\exp(-141/400)*\sin(799/2000))/25, - (153*\cos(51/125)*\exp(-9/25))/80 - (6*\exp(-9/25)*\sin(51/125))/25, - (153*\cos(833/2000)*\exp(-147/400))/80 - (6*\exp(-147/400)*\sin(833/2000))/25, - (153*\cos(17/40)*\exp(-3/8))/80 - (6*\exp(-3/8)*\sin(17/40))/25, - (153*\cos(867/2000)*\exp(-153/400))/80 - (6*\exp(-153/400)*\sin(867/2000))/25, - (153*\cos(221/500)*\exp(-39/100))/80 - (6*\exp(-39/100)*\sin(221/500))/25, - (153*\cos(901/2000)*\exp(-159/400))/80 - (6*\exp(-159/400)*\sin(901/2000))/25, - (153*\cos(459/1000)*\exp(-81/200))/80 - (6*\exp(-81/200)*\sin(459/1000))/25, - (153*\cos(187/400)*\exp(-33/80))/80 - (6*\exp(-33/80)*\sin(187/400))/25, - (153*\cos(119/250)*\exp(-21/50))/80 - (6*\exp(-21/50)*\sin(119/250))/25, - (153*\cos(969/2000)*\exp(-171/400))/80 - (6*\exp(-171/400)*\sin(969/2000))/25, - (153*\cos(493/1000)*\exp(-87/200))/80 - (6*\exp(-87/200)*\sin(493/1000))/25, - (153*\cos(1003/2000)*\exp(-177/400))/80 - (6*\exp(-177/400)*\sin(1003/2000))/25, - (153*\cos(51/100)*\exp(-9/20))/80 - (6*\exp(-9/20)*\sin(51/100))/25, - (153*\cos(1037/2000)*\exp(-183/400))/80 - (6*\exp(-183/400)*\sin(1037/2000))/25, - (153*\cos(527/1000)*\exp(-93/200))/80 - (6*\exp(-93/200)*\sin(527/1000))/25, - (153*\cos(1071/2000)*\exp(-189/400))/80 - (6*\exp(-189/400)*\sin(1071/2000))/25, - (153*\cos(68/125)*\exp(-12/25))/80 - (6*\exp(-12/25)*\sin(68/125))/25, - (153*\cos(221/400)*\exp(-39/80))/80 - (6*\exp(-39/80)*\sin(221/400))/25, - (153*\cos(561/1000)*\exp(-99/200))/80 - (6*\exp(-99/200)*\sin(561/1000))/25, - (153*\cos(1139/2000)*\exp(-201/400))/80 - (6*\exp(-201/400)*\sin(1139/2000))/25, - (153*\cos(289/500)*\exp(-51/100))/80 - (6*\exp(-51/100)*\sin(289/500))/25, - (153*\cos(1173/2000)*\exp(-207/400))/80 - (6*\exp(-207/400)*\sin(1173/2000))/25, - (153*\cos(119/200)*\exp(-21/40))/80 - (6*\exp(-21/40)*\sin(119/200))/25, - (153*\cos(1207/2000)*\exp(-213/400))/80 - (6*\exp(-213/400)*\sin(1207/2000))/25, - (153*\cos(153/250)*\exp(-27/50))/80 - (6*\exp(-27/50)*\sin(153/250))/25, - (153*\cos(1241/2000)*\exp(-219/400))/80 - (6*\exp(-219/400)*\sin(1241/2000))/25, - (153*\cos(629/1000)*\exp(-111/200))/80 - (6*\exp(-111/200)*\sin(629/1000))/25, - (153*\cos(51/80)*\exp(-9/16))/80 - (6*\exp(-9/16)*\sin(51/80))/25, - (153*\cos(323/500)*\exp(-57/100))/80 - (6*\exp(-57/100)*\sin(323/500))/25, - (153*\cos(1309/2000)*\exp(-231/400))/80 - (6*\exp(-231/400)*\sin(1309/2000))/25, - (153*\cos(663/1000)*\exp(-117/200))/80 - (6*\exp(-117/200)*\sin(663/1000))/25, - (153*\cos(1343/2000)*\exp(-237/400))/80 - (6*\exp(-237/400)*\sin(1343/2000))/25, - (153*\cos(17/25)*\exp(-3/5))/80 - (6*\exp(-3/5)*\sin(17/25))/25, - (153*\cos(1377/2000)*\exp(-243/400))/80 - (6*\exp(-243/400)*\sin(1377/2000))/25, - (153*\cos(697/1000)*\exp(-123/200))/80 - (6*\exp(-123/200)*\sin(697/1000))/25, - (153*\cos(1411/2000)*\exp(-249/400))/80 - (6*\exp(-$

$249/400*\sin(1411/2000))/25, - (153*\cos(357/500)*\exp(-63/100))/80 - (6*\exp(-63/100)*\sin(357/500))/25, - (153*\cos(289/400)*\exp(-51/80))/80 - (6*\exp(-51/80)*\sin(289/400))/25, - (153*\cos(731/1000)*\exp(-129/200))/80 - (6*\exp(-129/200)*\sin(731/1000))/25, - (153*\cos(1479/2000)*\exp(-261/400))/80 - (6*\exp(-261/400)*\sin(1479/2000))/25, - (153*\cos(187/250)*\exp(-33/50))/80 - (6*\exp(-33/50)*\sin(187/250))/25, - (153*\cos(1513/2000)*\exp(-267/400))/80 - (6*\exp(-267/400)*\sin(1513/2000))/25, - (153*\cos(153/200)*\exp(-27/40))/80 - (6*\exp(-27/40)*\sin(153/200))/25, - (153*\cos(1547/2000)*\exp(-273/400))/80 - (6*\exp(-273/400)*\sin(1547/2000))/25, - (153*\cos(391/500)*\exp(-69/100))/80 - (6*\exp(-69/100)*\sin(391/500))/25, - (153*\cos(1581/2000)*\exp(-279/400))/80 - (6*\exp(-279/400)*\sin(1581/2000))/25, - (153*\cos(799/1000)*\exp(-141/200))/80 - (6*\exp(-141/200)*\sin(799/1000))/25, - (153*\cos(323/400)*\exp(-57/80))/80 - (6*\exp(-57/80)*\sin(323/400))/25, - (153*\cos(102/125)*\exp(-18/25))/80 - (6*\exp(-18/25)*\sin(102/125))/25, - (153*\cos(1649/2000)*\exp(-291/400))/80 - (6*\exp(-291/400)*\sin(1649/2000))/25, - (153*\cos(833/1000)*\exp(-147/200))/80 - (6*\exp(-147/200)*\sin(833/1000))/25, - (153*\cos(1683/2000)*\exp(-297/400))/80 - (6*\exp(-297/400)*\sin(1683/2000))/25, - (153*\cos(17/20)*\exp(-3/4))/80 - (6*\exp(-3/4)*\sin(17/20))/25, - (153*\cos(1717/2000)*\exp(-303/400))/80 - (6*\exp(-303/400)*\sin(1717/2000))/25, - (153*\cos(867/1000)*\exp(-153/200))/80 - (6*\exp(-153/200)*\sin(867/1000))/25, - (153*\cos(1751/2000)*\exp(-309/400))/80 - (6*\exp(-309/400)*\sin(1751/2000))/25, - (153*\cos(221/250)*\exp(-39/50))/80 - (6*\exp(-39/50)*\sin(221/250))/25, - (153*\cos(357/400)*\exp(-63/80))/80 - (6*\exp(-63/80)*\sin(357/400))/25, - (153*\cos(901/1000)*\exp(-159/200))/80 - (6*\exp(-159/200)*\sin(901/1000))/25, - (153*\cos(1819/2000)*\exp(-321/400))/80 - (6*\exp(-321/400)*\sin(1819/2000))/25, - (153*\cos(459/500)*\exp(-81/100))/80 - (6*\exp(-81/100)*\sin(459/500))/25, - (153*\cos(1853/2000)*\exp(-327/400))/80 - (6*\exp(-327/400)*\sin(1853/2000))/25, - (153*\cos(187/200)*\exp(-33/40))/80 - (6*\exp(-33/40)*\sin(187/200))/25, - (153*\cos(1887/2000)*\exp(-333/400))/80 - (6*\exp(-333/400)*\sin(1887/2000))/25, - (153*\cos(119/125)*\exp(-21/25))/80 - (6*\exp(-21/25)*\sin(119/125))/25, - (153*\cos(1921/2000)*\exp(-339/400))/80 - (6*\exp(-339/400)*\sin(1921/2000))/25, - (153*\cos(969/1000)*\exp(-171/200))/80 - (6*\exp(-171/200)*\sin(969/1000))/25, - (153*\cos(391/400)*\exp(-69/80))/80 - (6*\exp(-69/80)*\sin(391/400))/25, - (153*\cos(493/500)*\exp(-87/100))/80 - (6*\exp(-87/100)*\sin(493/500))/25, - (153*\cos(1989/2000)*\exp(-351/400))/80 - (6*\exp(-351/400)*\sin(1989/2000))/25, - (153*\cos(1003/1000)*\exp(-177/200))/80 - (6*\exp(-177/200)*\sin(1003/1000))/25, - (153*\cos(2023/2000)*\exp(-357/400))/80 - (6*\exp(-357/400)*\sin(2023/2000))/25, - (153*\cos(51/50)*\exp(-9/10))/80 - (6*\exp(-9/10)*\sin(51/50))/25, - (153*\cos(2057/2000)*\exp(-363/400))/80 - (6*\exp(-363/400)*\sin(2057/2000))/25, - (153*\cos(1037/1000)*\exp(-183/200))/80 - (6*\exp(-183/200)*\sin(1037/1000))/25, - (153*\cos(2091/2000)*\exp(-369/400))/80 - (6*\exp(-369/400)*\sin(2091/2000))/25, - (153*\cos(527/500)*\exp(-93/100))/80 - (6*\exp(-93/100)*\sin(527/500))/25, - (153*\cos(17/16)*\exp(-15/16))/80 - (6*\exp(-15/16)*\sin(17/16))/25, - (153*\cos(1071/1000)*\exp(-189/200))/80 - (6*\exp(-189/200)*\sin(1071/1000))/25, - (153*\cos(2159/2000)*\exp(-381/400))/80 - (6*\exp(-381/400)*\sin(2159/2000))/25, - (153*\cos(136/125)*\exp(-24/25))/80 - (6*\exp(-24/25)*\sin(136/125))/25, - (153*\cos(2193/2000)*\exp(-387/400))/80 - (6*\exp(-387/400)*\sin(2193/2000))/25, - (153*\cos(221/200)*\exp(-39/40))/80 - (6*\exp(-39/40)*\sin(221/200))/25, - (153*\cos(2227/2000)*\exp(-393/400))/80 - (6*\exp(-$

$393/400*\sin(2227/2000))/25, - (153*\cos(561/500)*\exp(-99/100))/80 - (6*\exp(-99/100)*\sin(561/500))/25, - (153*\cos(2261/2000)*\exp(-399/400))/80 - (6*\exp(-399/400)*\sin(2261/2000))/25, - (153*\cos(1139/1000)*\exp(-201/200))/80 - (6*\exp(-201/200)*\sin(1139/1000))/25, - (153*\cos(459/400)*\exp(-81/80))/80 - (6*\exp(-81/80)*\sin(459/400))/25, - (153*\cos(289/250)*\exp(-51/50))/80 - (6*\exp(-51/50)*\sin(289/250))/25, - (153*\cos(2329/2000)*\exp(-411/400))/80 - (6*\exp(-411/400)*\sin(2329/2000))/25, - (153*\cos(1173/1000)*\exp(-207/200))/80 - (6*\exp(-207/200)*\sin(1173/1000))/25, - (153*\cos(2363/2000)*\exp(-417/400))/80 - (6*\exp(-417/400)*\sin(2363/2000))/25, - (153*\cos(119/100)*\exp(-21/20))/80 - (6*\exp(-21/20)*\sin(119/100))/25, - (153*\cos(2397/2000)*\exp(-423/400))/80 - (6*\exp(-423/400)*\sin(2397/2000))/25, - (153*\cos(1207/1000)*\exp(-213/200))/80 - (6*\exp(-213/200)*\sin(1207/1000))/25, - (153*\cos(2431/2000)*\exp(-429/400))/80 - (6*\exp(-429/400)*\sin(2431/2000))/25, - (153*\cos(153/125)*\exp(-27/25))/80 - (6*\exp(-27/25)*\sin(153/125))/25, - (153*\cos(493/400)*\exp(-87/80))/80 - (6*\exp(-87/80)*\sin(493/400))/25, - (153*\cos(1241/1000)*\exp(-219/200))/80 - (6*\exp(-219/200)*\sin(1241/1000))/25, - (153*\cos(2499/2000)*\exp(-441/400))/80 - (6*\exp(-441/400)*\sin(2499/2000))/25, - (153*\cos(629/500)*\exp(-111/100))/80 - (6*\exp(-111/100)*\sin(629/500))/25, - (153*\cos(2533/2000)*\exp(-447/400))/80 - (6*\exp(-447/400)*\sin(2533/2000))/25, - (153*\cos(51/40)*\exp(-9/8))/80 - (6*\exp(-9/8)*\sin(51/40))/25, - (153*\cos(2567/2000)*\exp(-453/400))/80 - (6*\exp(-453/400)*\sin(2567/2000))/25, - (153*\cos(323/250)*\exp(-57/50))/80 - (6*\exp(-57/50)*\sin(323/250))/25, - (153*\cos(2601/2000)*\exp(-459/400))/80 - (6*\exp(-459/400)*\sin(2601/2000))/25, - (153*\cos(1309/1000)*\exp(-231/200))/80 - (6*\exp(-231/200)*\sin(1309/1000))/25, - (153*\cos(527/400)*\exp(-93/80))/80 - (6*\exp(-93/80)*\sin(527/400))/25, - (153*\cos(663/500)*\exp(-117/100))/80 - (6*\exp(-117/100)*\sin(663/500))/25, - (153*\cos(2669/2000)*\exp(-471/400))/80 - (6*\exp(-471/400)*\sin(2669/2000))/25, - (153*\cos(1343/1000)*\exp(-237/200))/80 - (6*\exp(-237/200)*\sin(1343/1000))/25, - (153*\cos(2703/2000)*\exp(-477/400))/80 - (6*\exp(-477/400)*\sin(2703/2000))/25, - (153*\cos(34/25)*\exp(-6/5))/80 - (6*\exp(-6/5)*\sin(34/25))/25, - (153*\cos(2737/2000)*\exp(-483/400))/80 - (6*\exp(-483/400)*\sin(2737/2000))/25, - (153*\cos(1377/1000)*\exp(-243/200))/80 - (6*\exp(-243/200)*\sin(1377/1000))/25, - (153*\cos(2771/2000)*\exp(-489/400))/80 - (6*\exp(-489/400)*\sin(2771/2000))/25, - (153*\cos(697/500)*\exp(-123/100))/80 - (6*\exp(-123/100)*\sin(697/500))/25, - (153*\cos(561/400)*\exp(-99/80))/80 - (6*\exp(-99/80)*\sin(561/400))/25, - (153*\cos(1411/1000)*\exp(-249/200))/80 - (6*\exp(-249/200)*\sin(1411/1000))/25, - (153*\cos(2839/2000)*\exp(-501/400))/80 - (6*\exp(-501/400)*\sin(2839/2000))/25, - (153*\cos(357/250)*\exp(-63/50))/80 - (6*\exp(-63/50)*\sin(357/250))/25, - (153*\cos(2873/2000)*\exp(-507/400))/80 - (6*\exp(-507/400)*\sin(2873/2000))/25, - (153*\cos(289/200)*\exp(-51/40))/80 - (6*\exp(-51/40)*\sin(289/200))/25, - (153*\cos(2907/2000)*\exp(-513/400))/80 - (6*\exp(-513/400)*\sin(2907/2000))/25, - (153*\cos(731/500)*\exp(-129/100))/80 - (6*\exp(-129/100)*\sin(731/500))/25, - (153*\cos(2941/2000)*\exp(-519/400))/80 - (6*\exp(-519/400)*\sin(2941/2000))/25, - (153*\cos(1479/1000)*\exp(-261/200))/80 - (6*\exp(-261/200)*\sin(1479/1000))/25, - (153*\cos(119/80)*\exp(-21/16))/80 - (6*\exp(-21/16)*\sin(119/80))/25, - (153*\cos(187/125)*\exp(-33/25))/80 - (6*\exp(-33/25)*\sin(187/125))/25, - (153*\cos(3009/2000)*\exp(-531/400))/80 - (6*\exp(-531/400)*\sin(3009/2000))/25, - (153*\cos(1513/1000)*\exp(-267/200))/80 - (6*\exp(-267/200)*\sin(1513/1000))/25, - (153*\cos(3043/2000)*\exp(-537/400))/80 - (6*\exp(-$

$537/400*\sin(3043/2000))/25, - (153*\cos(153/100)*\exp(-27/20))/80 - (6*\exp(-27/20)*\sin(153/100))/25,$   
 $- (153*\cos(3077/2000)*\exp(-543/400))/80 - (6*\exp(-543/400)*\sin(3077/2000))/25, -$   
 $(153*\cos(1547/1000)*\exp(-273/200))/80 - (6*\exp(-273/200)*\sin(1547/1000))/25, -$   
 $(153*\cos(3111/2000)*\exp(-549/400))/80 - (6*\exp(-549/400)*\sin(3111/2000))/25, -$   
 $(153*\cos(391/250)*\exp(-69/50))/80 - (6*\exp(-69/50)*\sin(391/250))/25, - (153*\cos(629/400)*\exp(-$   
 $111/80))/80 - (6*\exp(-111/80)*\sin(629/400))/25, - (153*\cos(1581/1000)*\exp(-279/200))/80 - (6*\exp(-$   
 $279/200)*\sin(1581/1000))/25, - (153*\cos(3179/2000)*\exp(-561/400))/80 - (6*\exp(-$   
 $561/400)*\sin(3179/2000))/25, - (153*\cos(799/500)*\exp(-141/100))/80 - (6*\exp(-$   
 $141/100)*\sin(799/500))/25, - (153*\cos(3213/2000)*\exp(-567/400))/80 - (6*\exp(-$   
 $567/400)*\sin(3213/2000))/25, - (153*\cos(323/200)*\exp(-57/40))/80 - (6*\exp(-57/40)*\sin(323/200))/25,$   
 $- (153*\cos(3247/2000)*\exp(-573/400))/80 - (6*\exp(-573/400)*\sin(3247/2000))/25, -$   
 $(153*\cos(204/125)*\exp(-36/25))/80 - (6*\exp(-36/25)*\sin(204/125))/25, - (153*\cos(3281/2000)*\exp(-$   
 $579/400))/80 - (6*\exp(-579/400)*\sin(3281/2000))/25, - (153*\cos(1649/1000)*\exp(-291/200))/80 -$   
 $(6*\exp(-291/200)*\sin(1649/1000))/25, - (153*\cos(663/400)*\exp(-117/80))/80 - (6*\exp(-$   
 $117/80)*\sin(663/400))/25, - (153*\cos(833/500)*\exp(-147/100))/80 - (6*\exp(-$   
 $147/100)*\sin(833/500))/25, - (153*\cos(3349/2000)*\exp(-591/400))/80 - (6*\exp(-$   
 $591/400)*\sin(3349/2000))/25, - (153*\cos(1683/1000)*\exp(-297/200))/80 - (6*\exp(-$   
 $297/200)*\sin(1683/1000))/25, - (153*\cos(3383/2000)*\exp(-597/400))/80 - (6*\exp(-$   
 $597/400)*\sin(3383/2000))/25, - (153*\cos(17/10)*\exp(-3/2))/80 - (6*\exp(-3/2)*\sin(17/10))/25, -$   
 $(153*\cos(3417/2000)*\exp(-603/400))/80 - (6*\exp(-603/400)*\sin(3417/2000))/25, -$   
 $(153*\cos(1717/1000)*\exp(-303/200))/80 - (6*\exp(-303/200)*\sin(1717/1000))/25, -$   
 $(153*\cos(3451/2000)*\exp(-609/400))/80 - (6*\exp(-609/400)*\sin(3451/2000))/25, -$   
 $(153*\cos(867/500)*\exp(-153/100))/80 - (6*\exp(-153/100)*\sin(867/500))/25, - (153*\cos(697/400)*\exp(-$   
 $123/80))/80 - (6*\exp(-123/80)*\sin(697/400))/25, - (153*\cos(1751/1000)*\exp(-309/200))/80 - (6*\exp(-$   
 $309/200)*\sin(1751/1000))/25, - (153*\cos(3519/2000)*\exp(-621/400))/80 - (6*\exp(-$   
 $621/400)*\sin(3519/2000))/25, - (153*\cos(221/125)*\exp(-39/25))/80 - (6*\exp(-39/25)*\sin(221/125))/25,$   
 $- (153*\cos(3553/2000)*\exp(-627/400))/80 - (6*\exp(-627/400)*\sin(3553/2000))/25, -$   
 $(153*\cos(357/200)*\exp(-63/40))/80 - (6*\exp(-63/40)*\sin(357/200))/25, - (153*\cos(3587/2000)*\exp(-$   
 $633/400))/80 - (6*\exp(-633/400)*\sin(3587/2000))/25, - (153*\cos(901/500)*\exp(-159/100))/80 - (6*\exp(-$   
 $159/100)*\sin(901/500))/25, - (153*\cos(3621/2000)*\exp(-639/400))/80 - (6*\exp(-$   
 $639/400)*\sin(3621/2000))/25, - (153*\cos(1819/1000)*\exp(-321/200))/80 - (6*\exp(-$   
 $321/200)*\sin(1819/1000))/25, - (153*\cos(731/400)*\exp(-129/80))/80 - (6*\exp(-$   
 $129/80)*\sin(731/400))/25, - (153*\cos(459/250)*\exp(-81/50))/80 - (6*\exp(-81/50)*\sin(459/250))/25, -$   
 $(153*\cos(3689/2000)*\exp(-651/400))/80 - (6*\exp(-651/400)*\sin(3689/2000))/25, -$   
 $(153*\cos(1853/1000)*\exp(-327/200))/80 - (6*\exp(-327/200)*\sin(1853/1000))/25, -$   
 $(153*\cos(3723/2000)*\exp(-657/400))/80 - (6*\exp(-657/400)*\sin(3723/2000))/25, -$   
 $(153*\cos(187/100)*\exp(-33/20))/80 - (6*\exp(-33/20)*\sin(187/100))/25, - (153*\cos(3757/2000)*\exp(-$   
 $663/400))/80 - (6*\exp(-663/400)*\sin(3757/2000))/25, - (153*\cos(1887/1000)*\exp(-333/200))/80 -$   
 $(6*\exp(-333/200)*\sin(1887/1000))/25, - (153*\cos(3791/2000)*\exp(-669/400))/80 - (6*\exp(-$   
 $669/400)*\sin(3791/2000))/25, - (153*\cos(238/125)*\exp(-42/25))/80 - (6*\exp(-42/25)*\sin(238/125))/25,$   
 $- (153*\cos(153/80)*\exp(-27/16))/80 - (6*\exp(-27/16)*\sin(153/80))/25, - (153*\cos(1921/1000)*\exp(-$   
 $339/200))/80 - (6*\exp(-339/200)*\sin(1921/1000))/25, - (153*\cos(3859/2000)*\exp(-681/400))/80 -$

$$\begin{aligned}
& (6*\exp(-681/400)*\sin(3859/2000))/25, - (153*\cos(969/500)*\exp(-171/100))/80 - (6*\exp(- \\
& 171/100)*\sin(969/500))/25, - (153*\cos(3893/2000)*\exp(-687/400))/80 - (6*\exp(- \\
& 687/400)*\sin(3893/2000))/25, - (153*\cos(391/200)*\exp(-69/40))/80 - (6*\exp(-69/40)*\sin(391/200))/25, \\
& - (153*\cos(3927/2000)*\exp(-693/400))/80 - (6*\exp(-693/400)*\sin(3927/2000))/25, - \\
& (153*\cos(493/250)*\exp(-87/50))/80 - (6*\exp(-87/50)*\sin(493/250))/25, - (153*\cos(3961/2000)*\exp(- \\
& 699/400))/80 - (6*\exp(-699/400)*\sin(3961/2000))/25, - (153*\cos(1989/1000)*\exp(-351/200))/80 - \\
& (6*\exp(-351/200)*\sin(1989/1000))/25, - (153*\cos(799/400)*\exp(-141/80))/80 - (6*\exp(- \\
& 141/80)*\sin(799/400))/25, - (153*\cos(1003/500)*\exp(-177/100))/80 - (6*\exp(- \\
& 177/100)*\sin(1003/500))/25, - (153*\cos(4029/2000)*\exp(-711/400))/80 - (6*\exp(- \\
& 711/400)*\sin(4029/2000))/25, - (153*\cos(2023/1000)*\exp(-357/200))/80 - (6*\exp(- \\
& 357/200)*\sin(2023/1000))/25, - (153*\cos(4063/2000)*\exp(-717/400))/80 - (6*\exp(- \\
& 717/400)*\sin(4063/2000))/25, - (153*\cos(51/25)*\exp(-9/5))/80 - (6*\exp(-9/5)*\sin(51/25))/25, - \\
& (153*\cos(4097/2000)*\exp(-723/400))/80 - (6*\exp(-723/400)*\sin(4097/2000))/25, - \\
& (153*\cos(2057/1000)*\exp(-363/200))/80 - (6*\exp(-363/200)*\sin(2057/1000))/25, - \\
& (153*\cos(4131/2000)*\exp(-729/400))/80 - (6*\exp(-729/400)*\sin(4131/2000))/25, - \\
& (153*\cos(1037/500)*\exp(-183/100))/80 - (6*\exp(-183/100)*\sin(1037/500))/25, - \\
& (153*\cos(833/400)*\exp(-147/80))/80 - (6*\exp(-147/80)*\sin(833/400))/25, - (153*\cos(2091/1000)*\exp(- \\
& 369/200))/80 - (6*\exp(-369/200)*\sin(2091/1000))/25, - (153*\cos(4199/2000)*\exp(-741/400))/80 - \\
& (6*\exp(-741/400)*\sin(4199/2000))/25, - (153*\cos(527/250)*\exp(-93/50))/80 - (6*\exp(- \\
& 93/50)*\sin(527/250))/25, - (153*\cos(4233/2000)*\exp(-747/400))/80 - (6*\exp(- \\
& 747/400)*\sin(4233/2000))/25, - (153*\cos(17/8)*\exp(-15/8))/80 - (6*\exp(-15/8)*\sin(17/8))/25]
\end{aligned}$$

y =

$$5*\sin(5*x)^5$$

b =

$$25*\sin(5*x)^{10}$$

z =

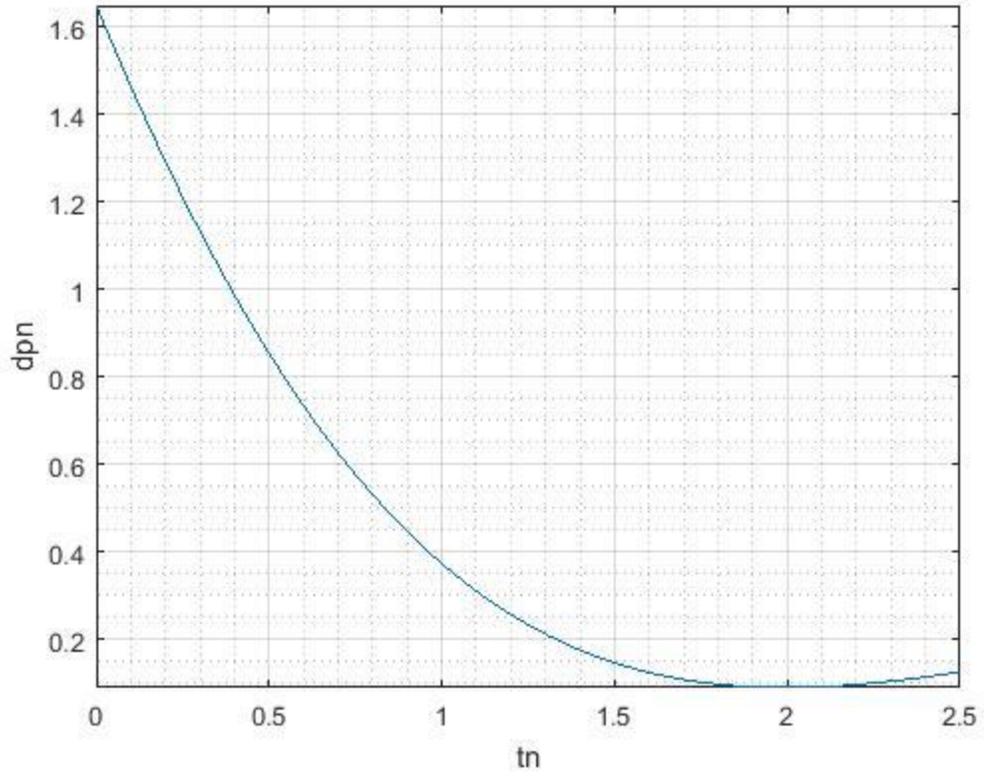
$$\pi * ((1575 * x) / 256 - (525 * \sin(10 * x)) / 512 + (75 * \sin(20 * x)) / 256 - (75 * \sin(30 * x)) / 1024 + (25 * \sin(40 * x)) / 2048 - \sin(50 * x) / 1024)$$

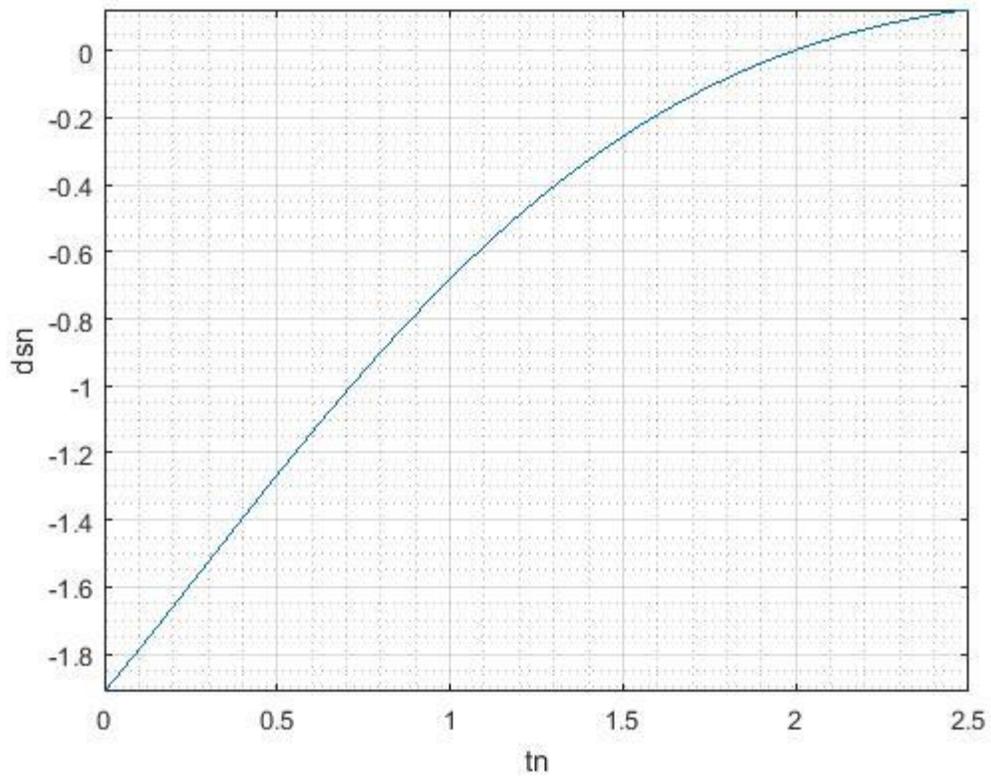
zint =

$$(1575 * \pi^3) / 512$$

zintdd =

$$95.3806362724067$$





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