

Obioma Eromosele Prosper

Chemical Engineering

16/ENG01/014

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]

p=inv(A)

V=p*b

syms t

d=1.5*exp(-0.75*t) *sin(0.85*t) +0.375*t

tn=(0:0.01:2.5)

v=diff(d)

vn=subs(v,tn)

figure(1)

plot(tn,vn)

xlabel('time(minutes)')

ylabel('velocity(km/min)')

axis tight

grid on

```
grid minor
```

```
a=diff(v)
```

```
an=subs(a,tn)
```

```
figure(2)
```

```
plot(tn,an)
```

```
xlabel('time(minutes)')
```

```
ylabel('acceleration(km/min^2)')
```

```
axis tight
```

```
grid on
```

```
grid minor
```

```
figure(3)
```

```
plot(tn,vn,tn,an)
```

```
xlabel('time(minutes)')
```

```
ylabel('variable')
```

```
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
```

p =

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

V =

$$\begin{aligned}
 & 4 \\
 & -9.71445146547012e-17 \\
 & 2 \\
 & 6
 \end{aligned}$$

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

v =

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

vn =

$$[33/20, (51*\cos(17/2000)*\exp(-3/400))/40 - (9*\exp(-3/400)*\sin(17/2000))/8 + 3/8, (51*\cos(17/1000)*\exp(-3/200))/40 - (9*\exp(-3/200)*\sin(17/1000))/8 + 3/8,$$

$(51 \cdot \cos(51/2000) \cdot \exp(-9/400))/40 - (9 \cdot \exp(-9/400) \cdot \sin(51/2000))/8 + 3/8,$
 $(51 \cdot \cos(17/500) \cdot \exp(-3/100))/40 - (9 \cdot \exp(-3/100) \cdot \sin(17/500))/8 + 3/8,$
 $(51 \cdot \cos(17/400) \cdot \exp(-3/80))/40 - (9 \cdot \exp(-3/80) \cdot \sin(17/400))/8 + 3/8,$
 $(51 \cdot \cos(51/1000) \cdot \exp(-9/200))/40 - (9 \cdot \exp(-9/200) \cdot \sin(51/1000))/8 + 3/8,$
 $(51 \cdot \cos(119/2000) \cdot \exp(-21/400))/40 - (9 \cdot \exp(-21/400) \cdot \sin(119/2000))/8 + 3/8,$
 $(51 \cdot \cos(17/250) \cdot \exp(-3/50))/40 - (9 \cdot \exp(-3/50) \cdot \sin(17/250))/8 + 3/8,$
 $(51 \cdot \cos(153/2000) \cdot \exp(-27/400))/40 - (9 \cdot \exp(-27/400) \cdot \sin(153/2000))/8 + 3/8,$
 $(51 \cdot \cos(17/200) \cdot \exp(-3/40))/40 - (9 \cdot \exp(-3/40) \cdot \sin(17/200))/8 + 3/8,$
 $(51 \cdot \cos(187/2000) \cdot \exp(-33/400))/40 - (9 \cdot \exp(-33/400) \cdot \sin(187/2000))/8 + 3/8,$
 $(51 \cdot \cos(51/500) \cdot \exp(-9/100))/40 - (9 \cdot \exp(-9/100) \cdot \sin(51/500))/8 + 3/8,$
 $(51 \cdot \cos(221/2000) \cdot \exp(-39/400))/40 - (9 \cdot \exp(-39/400) \cdot \sin(221/2000))/8 + 3/8,$
 $(51 \cdot \cos(119/1000) \cdot \exp(-21/200))/40 - (9 \cdot \exp(-21/200) \cdot \sin(119/1000))/8 + 3/8,$
 $(51 \cdot \cos(51/400) \cdot \exp(-9/80))/40 - (9 \cdot \exp(-9/80) \cdot \sin(51/400))/8 + 3/8,$
 $(51 \cdot \cos(17/125) \cdot \exp(-3/25))/40 - (9 \cdot \exp(-3/25) \cdot \sin(17/125))/8 + 3/8,$
 $(51 \cdot \cos(289/2000) \cdot \exp(-51/400))/40 - (9 \cdot \exp(-51/400) \cdot \sin(289/2000))/8 + 3/8,$
 $(51 \cdot \cos(153/1000) \cdot \exp(-27/200))/40 - (9 \cdot \exp(-27/200) \cdot \sin(153/1000))/8 + 3/8,$
 $(51 \cdot \cos(323/2000) \cdot \exp(-57/400))/40 - (9 \cdot \exp(-57/400) \cdot \sin(323/2000))/8 + 3/8,$
 $(51 \cdot \cos(17/100) \cdot \exp(-3/20))/40 - (9 \cdot \exp(-3/20) \cdot \sin(17/100))/8 + 3/8,$
 $(51 \cdot \cos(357/2000) \cdot \exp(-63/400))/40 - (9 \cdot \exp(-63/400) \cdot \sin(357/2000))/8 + 3/8,$
 $(51 \cdot \cos(187/1000) \cdot \exp(-33/200))/40 - (9 \cdot \exp(-33/200) \cdot \sin(187/1000))/8 + 3/8,$
 $(51 \cdot \cos(391/2000) \cdot \exp(-69/400))/40 - (9 \cdot \exp(-69/400) \cdot \sin(391/2000))/8 + 3/8,$
 $(51 \cdot \cos(51/250) \cdot \exp(-9/50))/40 - (9 \cdot \exp(-9/50) \cdot \sin(51/250))/8 + 3/8,$
 $(51 \cdot \cos(17/80) \cdot \exp(-3/16))/40 - (9 \cdot \exp(-3/16) \cdot \sin(17/80))/8 + 3/8,$
 $(51 \cdot \cos(221/1000) \cdot \exp(-39/200))/40 - (9 \cdot \exp(-39/200) \cdot \sin(221/1000))/8 + 3/8,$
 $(51 \cdot \cos(459/2000) \cdot \exp(-81/400))/40 - (9 \cdot \exp(-81/400) \cdot \sin(459/2000))/8 + 3/8,$
 $(51 \cdot \cos(119/500) \cdot \exp(-21/100))/40 - (9 \cdot \exp(-21/100) \cdot \sin(119/500))/8 + 3/8,$
 $(51 \cdot \cos(493/2000) \cdot \exp(-87/400))/40 - (9 \cdot \exp(-87/400) \cdot \sin(493/2000))/8 + 3/8,$
 $(51 \cdot \cos(51/200) \cdot \exp(-9/40))/40 - (9 \cdot \exp(-9/40) \cdot \sin(51/200))/8 + 3/8,$
 $(51 \cdot \cos(527/2000) \cdot \exp(-93/400))/40 - (9 \cdot \exp(-93/400) \cdot \sin(527/2000))/8 + 3/8,$
 $(51 \cdot \cos(34/125) \cdot \exp(-6/25))/40 - (9 \cdot \exp(-6/25) \cdot \sin(34/125))/8 + 3/8,$
 $(51 \cdot \cos(561/2000) \cdot \exp(-99/400))/40 - (9 \cdot \exp(-99/400) \cdot \sin(561/2000))/8 + 3/8,$
 $(51 \cdot \cos(289/1000) \cdot \exp(-51/200))/40 - (9 \cdot \exp(-51/200) \cdot \sin(289/1000))/8 + 3/8,$
 $(51 \cdot \cos(119/400) \cdot \exp(-21/80))/40 - (9 \cdot \exp(-21/80) \cdot \sin(119/400))/8 + 3/8,$

$(51 \cdot \cos(153/500) \cdot \exp(-27/100))/40 - (9 \cdot \exp(-27/100) \cdot \sin(153/500))/8 + 3/8,$
 $(51 \cdot \cos(629/2000) \cdot \exp(-111/400))/40 - (9 \cdot \exp(-111/400) \cdot \sin(629/2000))/8 +$
 $3/8, (51 \cdot \cos(323/1000) \cdot \exp(-57/200))/40 - (9 \cdot \exp(-57/200) \cdot \sin(323/1000))/8 +$
 $3/8, (51 \cdot \cos(663/2000) \cdot \exp(-117/400))/40 - (9 \cdot \exp(-117/400) \cdot \sin(663/2000))/8$
 $+ 3/8, (51 \cdot \cos(17/50) \cdot \exp(-3/10))/40 - (9 \cdot \exp(-3/10) \cdot \sin(17/50))/8 + 3/8,$
 $(51 \cdot \cos(697/2000) \cdot \exp(-123/400))/40 - (9 \cdot \exp(-123/400) \cdot \sin(697/2000))/8 +$
 $3/8, (51 \cdot \cos(357/1000) \cdot \exp(-63/200))/40 - (9 \cdot \exp(-63/200) \cdot \sin(357/1000))/8 +$
 $3/8, (51 \cdot \cos(731/2000) \cdot \exp(-129/400))/40 - (9 \cdot \exp(-129/400) \cdot \sin(731/2000))/8$
 $+ 3/8, (51 \cdot \cos(187/500) \cdot \exp(-33/100))/40 - (9 \cdot \exp(-33/100) \cdot \sin(187/500))/8 +$
 $3/8, (51 \cdot \cos(153/400) \cdot \exp(-27/80))/40 - (9 \cdot \exp(-27/80) \cdot \sin(153/400))/8 + 3/8,$
 $(51 \cdot \cos(391/1000) \cdot \exp(-69/200))/40 - (9 \cdot \exp(-69/200) \cdot \sin(391/1000))/8 + 3/8,$
 $(51 \cdot \cos(799/2000) \cdot \exp(-141/400))/40 - (9 \cdot \exp(-141/400) \cdot \sin(799/2000))/8 +$
 $3/8, (51 \cdot \cos(51/125) \cdot \exp(-9/25))/40 - (9 \cdot \exp(-9/25) \cdot \sin(51/125))/8 + 3/8,$
 $(51 \cdot \cos(833/2000) \cdot \exp(-147/400))/40 - (9 \cdot \exp(-147/400) \cdot \sin(833/2000))/8 +$
 $3/8, (51 \cdot \cos(17/40) \cdot \exp(-3/8))/40 - (9 \cdot \exp(-3/8) \cdot \sin(17/40))/8 + 3/8,$
 $(51 \cdot \cos(867/2000) \cdot \exp(-153/400))/40 - (9 \cdot \exp(-153/400) \cdot \sin(867/2000))/8 +$
 $3/8, (51 \cdot \cos(221/500) \cdot \exp(-39/100))/40 - (9 \cdot \exp(-39/100) \cdot \sin(221/500))/8 + 3/8,$
 $(51 \cdot \cos(901/2000) \cdot \exp(-159/400))/40 - (9 \cdot \exp(-159/400) \cdot \sin(901/2000))/8 +$
 $3/8, (51 \cdot \cos(459/1000) \cdot \exp(-81/200))/40 - (9 \cdot \exp(-81/200) \cdot \sin(459/1000))/8 +$
 $3/8, (51 \cdot \cos(187/400) \cdot \exp(-33/80))/40 - (9 \cdot \exp(-33/80) \cdot \sin(187/400))/8 + 3/8,$
 $(51 \cdot \cos(119/250) \cdot \exp(-21/50))/40 - (9 \cdot \exp(-21/50) \cdot \sin(119/250))/8 + 3/8,$
 $(51 \cdot \cos(969/2000) \cdot \exp(-171/400))/40 - (9 \cdot \exp(-171/400) \cdot \sin(969/2000))/8 +$
 $3/8, (51 \cdot \cos(493/1000) \cdot \exp(-87/200))/40 - (9 \cdot \exp(-87/200) \cdot \sin(493/1000))/8 +$
 $3/8, (51 \cdot \cos(1003/2000) \cdot \exp(-177/400))/40 - (9 \cdot \exp(-$
 $177/400) \cdot \sin(1003/2000))/8 + 3/8, (51 \cdot \cos(51/100) \cdot \exp(-9/20))/40 - (9 \cdot \exp(-$
 $9/20) \cdot \sin(51/100))/8 + 3/8, (51 \cdot \cos(1037/2000) \cdot \exp(-183/400))/40 - (9 \cdot \exp(-$
 $183/400) \cdot \sin(1037/2000))/8 + 3/8, (51 \cdot \cos(527/1000) \cdot \exp(-93/200))/40 -$
 $(9 \cdot \exp(-93/200) \cdot \sin(527/1000))/8 + 3/8, (51 \cdot \cos(1071/2000) \cdot \exp(-189/400))/40$
 $- (9 \cdot \exp(-189/400) \cdot \sin(1071/2000))/8 + 3/8, (51 \cdot \cos(68/125) \cdot \exp(-12/25))/40 -$
 $(9 \cdot \exp(-12/25) \cdot \sin(68/125))/8 + 3/8, (51 \cdot \cos(221/400) \cdot \exp(-39/80))/40 -$
 $(9 \cdot \exp(-39/80) \cdot \sin(221/400))/8 + 3/8, (51 \cdot \cos(561/1000) \cdot \exp(-99/200))/40 -$
 $(9 \cdot \exp(-99/200) \cdot \sin(561/1000))/8 + 3/8, (51 \cdot \cos(1139/2000) \cdot \exp(-201/400))/40$
 $- (9 \cdot \exp(-201/400) \cdot \sin(1139/2000))/8 + 3/8, (51 \cdot \cos(289/500) \cdot \exp(-51/100))/40$

- (9*exp(-51/100)*sin(289/500))/8 + 3/8, (51*cos(1173/2000)*exp(-207/400))/40
- (9*exp(-207/400)*sin(1173/2000))/8 + 3/8, (51*cos(119/200)*exp(-21/40))/40 -
(9*exp(-21/40)*sin(119/200))/8 + 3/8, (51*cos(1207/2000)*exp(-213/400))/40 -
(9*exp(-213/400)*sin(1207/2000))/8 + 3/8, (51*cos(153/250)*exp(-27/50))/40 -
(9*exp(-27/50)*sin(153/250))/8 + 3/8, (51*cos(1241/2000)*exp(-219/400))/40 -
(9*exp(-219/400)*sin(1241/2000))/8 + 3/8, (51*cos(629/1000)*exp(-
111/200))/40 - (9*exp(-111/200)*sin(629/1000))/8 + 3/8, (51*cos(51/80)*exp(-
9/16))/40 - (9*exp(-9/16)*sin(51/80))/8 + 3/8, (51*cos(323/500)*exp(-
57/100))/40 - (9*exp(-57/100)*sin(323/500))/8 + 3/8, (51*cos(1309/2000)*exp(-
231/400))/40 - (9*exp(-231/400)*sin(1309/2000))/8 + 3/8,
(51*cos(663/1000)*exp(-117/200))/40 - (9*exp(-117/200)*sin(663/1000))/8 +
3/8, (51*cos(1343/2000)*exp(-237/400))/40 - (9*exp(-
237/400)*sin(1343/2000))/8 + 3/8, (51*cos(17/25)*exp(-3/5))/40 - (9*exp(-
3/5)*sin(17/25))/8 + 3/8, (51*cos(1377/2000)*exp(-243/400))/40 - (9*exp(-
243/400)*sin(1377/2000))/8 + 3/8, (51*cos(697/1000)*exp(-123/200))/40 -
(9*exp(-123/200)*sin(697/1000))/8 + 3/8, (51*cos(1411/2000)*exp(-
249/400))/40 - (9*exp(-249/400)*sin(1411/2000))/8 + 3/8,
(51*cos(357/500)*exp(-63/100))/40 - (9*exp(-63/100)*sin(357/500))/8 + 3/8,
(51*cos(289/400)*exp(-51/80))/40 - (9*exp(-51/80)*sin(289/400))/8 + 3/8,
(51*cos(731/1000)*exp(-129/200))/40 - (9*exp(-129/200)*sin(731/1000))/8 +
3/8, (51*cos(1479/2000)*exp(-261/400))/40 - (9*exp(-
261/400)*sin(1479/2000))/8 + 3/8, (51*cos(187/250)*exp(-33/50))/40 - (9*exp(-
33/50)*sin(187/250))/8 + 3/8, (51*cos(1513/2000)*exp(-267/400))/40 - (9*exp(-
267/400)*sin(1513/2000))/8 + 3/8, (51*cos(153/200)*exp(-27/40))/40 - (9*exp(-
27/40)*sin(153/200))/8 + 3/8, (51*cos(1547/2000)*exp(-273/400))/40 - (9*exp(-
273/400)*sin(1547/2000))/8 + 3/8, (51*cos(391/500)*exp(-69/100))/40 - (9*exp(-
69/100)*sin(391/500))/8 + 3/8, (51*cos(1581/2000)*exp(-279/400))/40 - (9*exp(-
279/400)*sin(1581/2000))/8 + 3/8, (51*cos(799/1000)*exp(-141/200))/40 -
(9*exp(-141/200)*sin(799/1000))/8 + 3/8, (51*cos(323/400)*exp(-57/80))/40 -
(9*exp(-57/80)*sin(323/400))/8 + 3/8, (51*cos(102/125)*exp(-18/25))/40 -
(9*exp(-18/25)*sin(102/125))/8 + 3/8, (51*cos(1649/2000)*exp(-291/400))/40 -
(9*exp(-291/400)*sin(1649/2000))/8 + 3/8, (51*cos(833/1000)*exp(-
147/200))/40 - (9*exp(-147/200)*sin(833/1000))/8 + 3/8,

$(51 \cdot \cos(1683/2000) \cdot \exp(-297/400))/40 - (9 \cdot \exp(-297/400) \cdot \sin(1683/2000))/8 + 3/8,$
 $(51 \cdot \cos(17/20) \cdot \exp(-3/4))/40 - (9 \cdot \exp(-3/4) \cdot \sin(17/20))/8 + 3/8,$
 $(51 \cdot \cos(1717/2000) \cdot \exp(-303/400))/40 - (9 \cdot \exp(-303/400) \cdot \sin(1717/2000))/8 + 3/8,$
 $(51 \cdot \cos(867/1000) \cdot \exp(-153/200))/40 - (9 \cdot \exp(-153/200) \cdot \sin(867/1000))/8 + 3/8,$
 $(51 \cdot \cos(1751/2000) \cdot \exp(-309/400))/40 - (9 \cdot \exp(-309/400) \cdot \sin(1751/2000))/8 + 3/8,$
 $(51 \cdot \cos(221/250) \cdot \exp(-39/50))/40 - (9 \cdot \exp(-39/50) \cdot \sin(221/250))/8 + 3/8,$
 $(51 \cdot \cos(357/400) \cdot \exp(-63/80))/40 - (9 \cdot \exp(-63/80) \cdot \sin(357/400))/8 + 3/8,$
 $(51 \cdot \cos(901/1000) \cdot \exp(-159/200))/40 - (9 \cdot \exp(-159/200) \cdot \sin(901/1000))/8 + 3/8,$
 $(51 \cdot \cos(1819/2000) \cdot \exp(-321/400))/40 - (9 \cdot \exp(-321/400) \cdot \sin(1819/2000))/8 + 3/8,$
 $(51 \cdot \cos(459/500) \cdot \exp(-81/100))/40 - (9 \cdot \exp(-81/100) \cdot \sin(459/500))/8 + 3/8,$
 $(51 \cdot \cos(1853/2000) \cdot \exp(-327/400))/40 - (9 \cdot \exp(-327/400) \cdot \sin(1853/2000))/8 + 3/8,$
 $(51 \cdot \cos(187/200) \cdot \exp(-33/40))/40 - (9 \cdot \exp(-33/40) \cdot \sin(187/200))/8 + 3/8,$
 $(51 \cdot \cos(1887/2000) \cdot \exp(-333/400))/40 - (9 \cdot \exp(-333/400) \cdot \sin(1887/2000))/8 + 3/8,$
 $(51 \cdot \cos(119/125) \cdot \exp(-21/25))/40 - (9 \cdot \exp(-21/25) \cdot \sin(119/125))/8 + 3/8,$
 $(51 \cdot \cos(1921/2000) \cdot \exp(-339/400))/40 - (9 \cdot \exp(-339/400) \cdot \sin(1921/2000))/8 + 3/8,$
 $(51 \cdot \cos(969/1000) \cdot \exp(-171/200))/40 - (9 \cdot \exp(-171/200) \cdot \sin(969/1000))/8 + 3/8,$
 $(51 \cdot \cos(391/400) \cdot \exp(-69/80))/40 - (9 \cdot \exp(-69/80) \cdot \sin(391/400))/8 + 3/8,$
 $(51 \cdot \cos(493/500) \cdot \exp(-87/100))/40 - (9 \cdot \exp(-87/100) \cdot \sin(493/500))/8 + 3/8,$
 $(51 \cdot \cos(1989/2000) \cdot \exp(-351/400))/40 - (9 \cdot \exp(-351/400) \cdot \sin(1989/2000))/8 + 3/8,$
 $(51 \cdot \cos(1003/1000) \cdot \exp(-177/200))/40 - (9 \cdot \exp(-177/200) \cdot \sin(1003/1000))/8 + 3/8,$
 $(51 \cdot \cos(2023/2000) \cdot \exp(-357/400))/40 - (9 \cdot \exp(-357/400) \cdot \sin(2023/2000))/8 + 3/8,$
 $(51 \cdot \cos(51/50) \cdot \exp(-9/10))/40 - (9 \cdot \exp(-9/10) \cdot \sin(51/50))/8 + 3/8,$
 $(51 \cdot \cos(2057/2000) \cdot \exp(-363/400))/40 - (9 \cdot \exp(-363/400) \cdot \sin(2057/2000))/8 + 3/8,$
 $(51 \cdot \cos(1037/1000) \cdot \exp(-183/200))/40 - (9 \cdot \exp(-183/200) \cdot \sin(1037/1000))/8 + 3/8,$
 $(51 \cdot \cos(2091/2000) \cdot \exp(-369/400))/40 - (9 \cdot \exp(-369/400) \cdot \sin(2091/2000))/8 + 3/8,$
 $(51 \cdot \cos(527/500) \cdot \exp(-93/100))/40 - (9 \cdot \exp(-93/100) \cdot \sin(527/500))/8 + 3/8,$
 $(51 \cdot \cos(17/16) \cdot \exp(-15/16))/40 - (9 \cdot \exp(-15/16) \cdot \sin(17/16))/8 + 3/8,$
 $(51 \cdot \cos(1071/1000) \cdot \exp(-189/200))/40 - (9 \cdot \exp(-189/200) \cdot \sin(1071/1000))/8 + 3/8,$
 $(51 \cdot \cos(2159/2000) \cdot \exp(-381/400))/40 - (9 \cdot \exp(-381/400) \cdot \sin(2159/2000))/8 + 3/8,$
 $(51 \cdot \cos(136/125) \cdot \exp(-24/25))/40 - (9 \cdot \exp(-24/25) \cdot \sin(136/125))/8 + 3/8,$
 $(51 \cdot \cos(2193/2000) \cdot \exp(-387/400))/40 - (9 \cdot \exp(-387/400) \cdot \sin(2193/2000))/8 + 3/8,$

$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*\cos(1343/1000)*\exp(-237/200))/40 - (9*\exp(-237/200)*\sin(1343/1000))/8 + 3/8, (51*\cos(2703/2000)*\exp(-477/400))/40 - (9*\exp(-477/400)*\sin(2703/2000))/8 +$

$3/8, (51 \cdot \cos(34/25) \cdot \exp(-6/5))/40 - (9 \cdot \exp(-6/5) \cdot \sin(34/25))/8 + 3/8,$
 $(51 \cdot \cos(2737/2000) \cdot \exp(-483/400))/40 - (9 \cdot \exp(-483/400) \cdot \sin(2737/2000))/8 +$
 $3/8, (51 \cdot \cos(1377/1000) \cdot \exp(-243/200))/40 - (9 \cdot \exp(-$
 $243/200) \cdot \sin(1377/1000))/8 + 3/8, (51 \cdot \cos(2771/2000) \cdot \exp(-489/400))/40 -$
 $(9 \cdot \exp(-489/400) \cdot \sin(2771/2000))/8 + 3/8, (51 \cdot \cos(697/500) \cdot \exp(-123/100))/40$
 $- (9 \cdot \exp(-123/100) \cdot \sin(697/500))/8 + 3/8, (51 \cdot \cos(561/400) \cdot \exp(-99/80))/40 -$
 $(9 \cdot \exp(-99/80) \cdot \sin(561/400))/8 + 3/8, (51 \cdot \cos(1411/1000) \cdot \exp(-249/200))/40 -$
 $(9 \cdot \exp(-249/200) \cdot \sin(1411/1000))/8 + 3/8, (51 \cdot \cos(2839/2000) \cdot \exp(-$
 $501/400))/40 - (9 \cdot \exp(-501/400) \cdot \sin(2839/2000))/8 + 3/8,$
 $(51 \cdot \cos(357/250) \cdot \exp(-63/50))/40 - (9 \cdot \exp(-63/50) \cdot \sin(357/250))/8 + 3/8,$
 $(51 \cdot \cos(2873/2000) \cdot \exp(-507/400))/40 - (9 \cdot \exp(-507/400) \cdot \sin(2873/2000))/8 +$
 $3/8, (51 \cdot \cos(289/200) \cdot \exp(-51/40))/40 - (9 \cdot \exp(-51/40) \cdot \sin(289/200))/8 + 3/8,$
 $(51 \cdot \cos(2907/2000) \cdot \exp(-513/400))/40 - (9 \cdot \exp(-513/400) \cdot \sin(2907/2000))/8 +$
 $3/8, (51 \cdot \cos(731/500) \cdot \exp(-129/100))/40 - (9 \cdot \exp(-129/100) \cdot \sin(731/500))/8 +$
 $3/8, (51 \cdot \cos(2941/2000) \cdot \exp(-519/400))/40 - (9 \cdot \exp(-$
 $519/400) \cdot \sin(2941/2000))/8 + 3/8, (51 \cdot \cos(1479/1000) \cdot \exp(-261/200))/40 -$
 $(9 \cdot \exp(-261/200) \cdot \sin(1479/1000))/8 + 3/8, (51 \cdot \cos(119/80) \cdot \exp(-21/16))/40 -$
 $(9 \cdot \exp(-21/16) \cdot \sin(119/80))/8 + 3/8, (51 \cdot \cos(187/125) \cdot \exp(-33/25))/40 -$
 $(9 \cdot \exp(-33/25) \cdot \sin(187/125))/8 + 3/8, (51 \cdot \cos(3009/2000) \cdot \exp(-531/400))/40 -$
 $(9 \cdot \exp(-531/400) \cdot \sin(3009/2000))/8 + 3/8, (51 \cdot \cos(1513/1000) \cdot \exp(-$
 $267/200))/40 - (9 \cdot \exp(-267/200) \cdot \sin(1513/1000))/8 + 3/8,$
 $(51 \cdot \cos(3043/2000) \cdot \exp(-537/400))/40 - (9 \cdot \exp(-537/400) \cdot \sin(3043/2000))/8 +$
 $3/8, (51 \cdot \cos(153/100) \cdot \exp(-27/20))/40 - (9 \cdot \exp(-27/20) \cdot \sin(153/100))/8 + 3/8,$
 $(51 \cdot \cos(3077/2000) \cdot \exp(-543/400))/40 - (9 \cdot \exp(-543/400) \cdot \sin(3077/2000))/8 +$
 $3/8, (51 \cdot \cos(1547/1000) \cdot \exp(-273/200))/40 - (9 \cdot \exp(-$
 $273/200) \cdot \sin(1547/1000))/8 + 3/8, (51 \cdot \cos(3111/2000) \cdot \exp(-549/400))/40 -$
 $(9 \cdot \exp(-549/400) \cdot \sin(3111/2000))/8 + 3/8, (51 \cdot \cos(391/250) \cdot \exp(-69/50))/40 -$
 $(9 \cdot \exp(-69/50) \cdot \sin(391/250))/8 + 3/8, (51 \cdot \cos(629/400) \cdot \exp(-111/80))/40 -$
 $(9 \cdot \exp(-111/80) \cdot \sin(629/400))/8 + 3/8, (51 \cdot \cos(1581/1000) \cdot \exp(-279/200))/40 -$
 $(9 \cdot \exp(-279/200) \cdot \sin(1581/1000))/8 + 3/8, (51 \cdot \cos(3179/2000) \cdot \exp(-$
 $561/400))/40 - (9 \cdot \exp(-561/400) \cdot \sin(3179/2000))/8 + 3/8,$
 $(51 \cdot \cos(799/500) \cdot \exp(-141/100))/40 - (9 \cdot \exp(-141/100) \cdot \sin(799/500))/8 + 3/8,$
 $(51 \cdot \cos(3213/2000) \cdot \exp(-567/400))/40 - (9 \cdot \exp(-567/400) \cdot \sin(3213/2000))/8 +$

$3/8, (51 \cdot \cos(323/200) \cdot \exp(-57/40))/40 - (9 \cdot \exp(-57/40) \cdot \sin(323/200))/8 + 3/8,$
 $(51 \cdot \cos(3247/2000) \cdot \exp(-573/400))/40 - (9 \cdot \exp(-573/400) \cdot \sin(3247/2000))/8 +$
 $3/8, (51 \cdot \cos(204/125) \cdot \exp(-36/25))/40 - (9 \cdot \exp(-36/25) \cdot \sin(204/125))/8 + 3/8,$
 $(51 \cdot \cos(3281/2000) \cdot \exp(-579/400))/40 - (9 \cdot \exp(-579/400) \cdot \sin(3281/2000))/8 +$
 $3/8, (51 \cdot \cos(1649/1000) \cdot \exp(-291/200))/40 - (9 \cdot \exp(-$
 $291/200) \cdot \sin(1649/1000))/8 + 3/8, (51 \cdot \cos(663/400) \cdot \exp(-117/80))/40 - (9 \cdot \exp(-$
 $117/80) \cdot \sin(663/400))/8 + 3/8, (51 \cdot \cos(833/500) \cdot \exp(-147/100))/40 - (9 \cdot \exp(-$
 $147/100) \cdot \sin(833/500))/8 + 3/8, (51 \cdot \cos(3349/2000) \cdot \exp(-591/400))/40 -$
 $(9 \cdot \exp(-591/400) \cdot \sin(3349/2000))/8 + 3/8, (51 \cdot \cos(1683/1000) \cdot \exp(-$
 $297/200))/40 - (9 \cdot \exp(-297/200) \cdot \sin(1683/1000))/8 + 3/8,$
 $(51 \cdot \cos(3383/2000) \cdot \exp(-597/400))/40 - (9 \cdot \exp(-597/400) \cdot \sin(3383/2000))/8 +$
 $3/8, (51 \cdot \cos(17/10) \cdot \exp(-3/2))/40 - (9 \cdot \exp(-3/2) \cdot \sin(17/10))/8 + 3/8,$
 $(51 \cdot \cos(3417/2000) \cdot \exp(-603/400))/40 - (9 \cdot \exp(-603/400) \cdot \sin(3417/2000))/8 +$
 $3/8, (51 \cdot \cos(1717/1000) \cdot \exp(-303/200))/40 - (9 \cdot \exp(-$
 $303/200) \cdot \sin(1717/1000))/8 + 3/8, (51 \cdot \cos(3451/2000) \cdot \exp(-609/400))/40 -$
 $(9 \cdot \exp(-609/400) \cdot \sin(3451/2000))/8 + 3/8, (51 \cdot \cos(867/500) \cdot \exp(-153/100))/40$
 $- (9 \cdot \exp(-153/100) \cdot \sin(867/500))/8 + 3/8, (51 \cdot \cos(697/400) \cdot \exp(-123/80))/40 -$
 $(9 \cdot \exp(-123/80) \cdot \sin(697/400))/8 + 3/8, (51 \cdot \cos(1751/1000) \cdot \exp(-309/200))/40 -$
 $(9 \cdot \exp(-309/200) \cdot \sin(1751/1000))/8 + 3/8, (51 \cdot \cos(3519/2000) \cdot \exp(-$
 $621/400))/40 - (9 \cdot \exp(-621/400) \cdot \sin(3519/2000))/8 + 3/8,$
 $(51 \cdot \cos(221/125) \cdot \exp(-39/25))/40 - (9 \cdot \exp(-39/25) \cdot \sin(221/125))/8 + 3/8,$
 $(51 \cdot \cos(3553/2000) \cdot \exp(-627/400))/40 - (9 \cdot \exp(-627/400) \cdot \sin(3553/2000))/8 +$
 $3/8, (51 \cdot \cos(357/200) \cdot \exp(-63/40))/40 - (9 \cdot \exp(-63/40) \cdot \sin(357/200))/8 + 3/8,$
 $(51 \cdot \cos(3587/2000) \cdot \exp(-633/400))/40 - (9 \cdot \exp(-633/400) \cdot \sin(3587/2000))/8 +$
 $3/8, (51 \cdot \cos(901/500) \cdot \exp(-159/100))/40 - (9 \cdot \exp(-159/100) \cdot \sin(901/500))/8 +$
 $3/8, (51 \cdot \cos(3621/2000) \cdot \exp(-639/400))/40 - (9 \cdot \exp(-$
 $639/400) \cdot \sin(3621/2000))/8 + 3/8, (51 \cdot \cos(1819/1000) \cdot \exp(-321/200))/40 -$
 $(9 \cdot \exp(-321/200) \cdot \sin(1819/1000))/8 + 3/8, (51 \cdot \cos(731/400) \cdot \exp(-129/80))/40 -$
 $(9 \cdot \exp(-129/80) \cdot \sin(731/400))/8 + 3/8, (51 \cdot \cos(459/250) \cdot \exp(-81/50))/40 -$
 $(9 \cdot \exp(-81/50) \cdot \sin(459/250))/8 + 3/8, (51 \cdot \cos(3689/2000) \cdot \exp(-651/400))/40 -$
 $(9 \cdot \exp(-651/400) \cdot \sin(3689/2000))/8 + 3/8, (51 \cdot \cos(1853/1000) \cdot \exp(-$
 $327/200))/40 - (9 \cdot \exp(-327/200) \cdot \sin(1853/1000))/8 + 3/8,$
 $(51 \cdot \cos(3723/2000) \cdot \exp(-657/400))/40 - (9 \cdot \exp(-657/400) \cdot \sin(3723/2000))/8 +$

$3/8, (51 \cdot \cos(187/100) \cdot \exp(-33/20))/40 - (9 \cdot \exp(-33/20) \cdot \sin(187/100))/8 + 3/8,$
 $(51 \cdot \cos(3757/2000) \cdot \exp(-663/400))/40 - (9 \cdot \exp(-663/400) \cdot \sin(3757/2000))/8 +$
 $3/8, (51 \cdot \cos(1887/1000) \cdot \exp(-333/200))/40 - (9 \cdot \exp(-$
 $333/200) \cdot \sin(1887/1000))/8 + 3/8, (51 \cdot \cos(3791/2000) \cdot \exp(-669/400))/40 -$
 $(9 \cdot \exp(-669/400) \cdot \sin(3791/2000))/8 + 3/8, (51 \cdot \cos(238/125) \cdot \exp(-42/25))/40 -$
 $(9 \cdot \exp(-42/25) \cdot \sin(238/125))/8 + 3/8, (51 \cdot \cos(153/80) \cdot \exp(-27/16))/40 -$
 $(9 \cdot \exp(-27/16) \cdot \sin(153/80))/8 + 3/8, (51 \cdot \cos(1921/1000) \cdot \exp(-339/200))/40 -$
 $(9 \cdot \exp(-339/200) \cdot \sin(1921/1000))/8 + 3/8, (51 \cdot \cos(3859/2000) \cdot \exp(-$
 $681/400))/40 - (9 \cdot \exp(-681/400) \cdot \sin(3859/2000))/8 + 3/8,$
 $(51 \cdot \cos(969/500) \cdot \exp(-171/100))/40 - (9 \cdot \exp(-171/100) \cdot \sin(969/500))/8 + 3/8,$
 $(51 \cdot \cos(3893/2000) \cdot \exp(-687/400))/40 - (9 \cdot \exp(-687/400) \cdot \sin(3893/2000))/8 +$
 $3/8, (51 \cdot \cos(391/200) \cdot \exp(-69/40))/40 - (9 \cdot \exp(-69/40) \cdot \sin(391/200))/8 + 3/8,$
 $(51 \cdot \cos(3927/2000) \cdot \exp(-693/400))/40 - (9 \cdot \exp(-693/400) \cdot \sin(3927/2000))/8 +$
 $3/8, (51 \cdot \cos(493/250) \cdot \exp(-87/50))/40 - (9 \cdot \exp(-87/50) \cdot \sin(493/250))/8 + 3/8,$
 $(51 \cdot \cos(3961/2000) \cdot \exp(-699/400))/40 - (9 \cdot \exp(-699/400) \cdot \sin(3961/2000))/8 +$
 $3/8, (51 \cdot \cos(1989/1000) \cdot \exp(-351/200))/40 - (9 \cdot \exp(-$
 $351/200) \cdot \sin(1989/1000))/8 + 3/8, (51 \cdot \cos(799/400) \cdot \exp(-141/80))/40 - (9 \cdot \exp(-$
 $141/80) \cdot \sin(799/400))/8 + 3/8, (51 \cdot \cos(1003/500) \cdot \exp(-177/100))/40 - (9 \cdot \exp(-$
 $177/100) \cdot \sin(1003/500))/8 + 3/8, (51 \cdot \cos(4029/2000) \cdot \exp(-711/400))/40 -$
 $(9 \cdot \exp(-711/400) \cdot \sin(4029/2000))/8 + 3/8, (51 \cdot \cos(2023/1000) \cdot \exp(-$
 $357/200))/40 - (9 \cdot \exp(-357/200) \cdot \sin(2023/1000))/8 + 3/8,$
 $(51 \cdot \cos(4063/2000) \cdot \exp(-717/400))/40 - (9 \cdot \exp(-717/400) \cdot \sin(4063/2000))/8 +$
 $3/8, (51 \cdot \cos(51/25) \cdot \exp(-9/5))/40 - (9 \cdot \exp(-9/5) \cdot \sin(51/25))/8 + 3/8,$
 $(51 \cdot \cos(4097/2000) \cdot \exp(-723/400))/40 - (9 \cdot \exp(-723/400) \cdot \sin(4097/2000))/8 +$
 $3/8, (51 \cdot \cos(2057/1000) \cdot \exp(-363/200))/40 - (9 \cdot \exp(-$
 $363/200) \cdot \sin(2057/1000))/8 + 3/8, (51 \cdot \cos(4131/2000) \cdot \exp(-729/400))/40 -$
 $(9 \cdot \exp(-729/400) \cdot \sin(4131/2000))/8 + 3/8, (51 \cdot \cos(1037/500) \cdot \exp(-$
 $183/100))/40 - (9 \cdot \exp(-183/100) \cdot \sin(1037/500))/8 + 3/8, (51 \cdot \cos(833/400) \cdot \exp(-$
 $147/80))/40 - (9 \cdot \exp(-147/80) \cdot \sin(833/400))/8 + 3/8, (51 \cdot \cos(2091/1000) \cdot \exp(-$
 $369/200))/40 - (9 \cdot \exp(-369/200) \cdot \sin(2091/1000))/8 + 3/8,$
 $(51 \cdot \cos(4199/2000) \cdot \exp(-741/400))/40 - (9 \cdot \exp(-741/400) \cdot \sin(4199/2000))/8 +$
 $3/8, (51 \cdot \cos(527/250) \cdot \exp(-93/50))/40 - (9 \cdot \exp(-93/50) \cdot \sin(527/250))/8 + 3/8,$

$$(51*\cos(4233/2000)*\exp(-747/400))/40 - (9*\exp(-747/400)*\sin(4233/2000))/8 + 3/8, (51*\cos(17/8)*\exp(-15/8))/40 - (9*\exp(-15/8)*\sin(17/8))/8 + 3/8]$$

a =

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

an =

$$[-153/80, - (153*\cos(17/2000)*\exp(-3/400))/80 - (6*\exp(-3/400)*\sin(17/2000))/25, - (153*\cos(17/1000)*\exp(-3/200))/80 - (6*\exp(-3/200)*\sin(17/1000))/25, - (153*\cos(51/2000)*\exp(-9/400))/80 - (6*\exp(-9/400)*\sin(51/2000))/25, - (153*\cos(17/500)*\exp(-3/100))/80 - (6*\exp(-3/100)*\sin(17/500))/25, - (153*\cos(17/400)*\exp(-3/80))/80 - (6*\exp(-3/80)*\sin(17/400))/25, - (153*\cos(51/1000)*\exp(-9/200))/80 - (6*\exp(-9/200)*\sin(51/1000))/25, - (153*\cos(119/2000)*\exp(-21/400))/80 - (6*\exp(-21/400)*\sin(119/2000))/25, - (153*\cos(17/250)*\exp(-3/50))/80 - (6*\exp(-3/50)*\sin(17/250))/25, - (153*\cos(153/2000)*\exp(-27/400))/80 - (6*\exp(-27/400)*\sin(153/2000))/25, - (153*\cos(17/200)*\exp(-3/40))/80 - (6*\exp(-3/40)*\sin(17/200))/25, - (153*\cos(187/2000)*\exp(-33/400))/80 - (6*\exp(-33/400)*\sin(187/2000))/25, - (153*\cos(51/500)*\exp(-9/100))/80 - (6*\exp(-9/100)*\sin(51/500))/25, - (153*\cos(221/2000)*\exp(-39/400))/80 - (6*\exp(-39/400)*\sin(221/2000))/25, - (153*\cos(119/1000)*\exp(-21/200))/80 - (6*\exp(-21/200)*\sin(119/1000))/25, - (153*\cos(51/400)*\exp(-9/80))/80 - (6*\exp(-9/80)*\sin(51/400))/25, - (153*\cos(17/125)*\exp(-3/25))/80 - (6*\exp(-3/25)*\sin(17/125))/25, - (153*\cos(289/2000)*\exp(-51/400))/80 - (6*\exp(-$$

$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(-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 -$

$(6 \cdot \exp(-249/400) \cdot \sin(1411/2000))/25, - (153 \cdot \cos(357/500) \cdot \exp(-63/100))/80 -$
 $(6 \cdot \exp(-63/100) \cdot \sin(357/500))/25, - (153 \cdot \cos(289/400) \cdot \exp(-51/80))/80 -$
 $(6 \cdot \exp(-51/80) \cdot \sin(289/400))/25, - (153 \cdot \cos(731/1000) \cdot \exp(-129/200))/80 -$
 $(6 \cdot \exp(-129/200) \cdot \sin(731/1000))/25, - (153 \cdot \cos(1479/2000) \cdot \exp(-261/400))/80 -$
 $(6 \cdot \exp(-261/400) \cdot \sin(1479/2000))/25, - (153 \cdot \cos(187/250) \cdot \exp(-33/50))/80 -$
 $(6 \cdot \exp(-33/50) \cdot \sin(187/250))/25, - (153 \cdot \cos(1513/2000) \cdot \exp(-267/400))/80 -$
 $(6 \cdot \exp(-267/400) \cdot \sin(1513/2000))/25, - (153 \cdot \cos(153/200) \cdot \exp(-27/40))/80 -$
 $(6 \cdot \exp(-27/40) \cdot \sin(153/200))/25, - (153 \cdot \cos(1547/2000) \cdot \exp(-273/400))/80 -$
 $(6 \cdot \exp(-273/400) \cdot \sin(1547/2000))/25, - (153 \cdot \cos(391/500) \cdot \exp(-69/100))/80 -$
 $(6 \cdot \exp(-69/100) \cdot \sin(391/500))/25, - (153 \cdot \cos(1581/2000) \cdot \exp(-279/400))/80 -$
 $(6 \cdot \exp(-279/400) \cdot \sin(1581/2000))/25, - (153 \cdot \cos(799/1000) \cdot \exp(-141/200))/80 -$
 $(6 \cdot \exp(-141/200) \cdot \sin(799/1000))/25, - (153 \cdot \cos(323/400) \cdot \exp(-57/80))/80 -$
 $(6 \cdot \exp(-57/80) \cdot \sin(323/400))/25, - (153 \cdot \cos(102/125) \cdot \exp(-18/25))/80 - (6 \cdot \exp(-$
 $18/25) \cdot \sin(102/125))/25, - (153 \cdot \cos(1649/2000) \cdot \exp(-291/400))/80 - (6 \cdot \exp(-$
 $291/400) \cdot \sin(1649/2000))/25, - (153 \cdot \cos(833/1000) \cdot \exp(-147/200))/80 -$
 $(6 \cdot \exp(-147/200) \cdot \sin(833/1000))/25, - (153 \cdot \cos(1683/2000) \cdot \exp(-297/400))/80 -$
 $(6 \cdot \exp(-297/400) \cdot \sin(1683/2000))/25, - (153 \cdot \cos(17/20) \cdot \exp(-3/4))/80 - (6 \cdot \exp(-$
 $3/4) \cdot \sin(17/20))/25, - (153 \cdot \cos(1717/2000) \cdot \exp(-303/400))/80 - (6 \cdot \exp(-$
 $303/400) \cdot \sin(1717/2000))/25, - (153 \cdot \cos(867/1000) \cdot \exp(-153/200))/80 -$
 $(6 \cdot \exp(-153/200) \cdot \sin(867/1000))/25, - (153 \cdot \cos(1751/2000) \cdot \exp(-309/400))/80 -$
 $(6 \cdot \exp(-309/400) \cdot \sin(1751/2000))/25, - (153 \cdot \cos(221/250) \cdot \exp(-39/50))/80 -$
 $(6 \cdot \exp(-39/50) \cdot \sin(221/250))/25, - (153 \cdot \cos(357/400) \cdot \exp(-63/80))/80 - (6 \cdot \exp(-$
 $63/80) \cdot \sin(357/400))/25, - (153 \cdot \cos(901/1000) \cdot \exp(-159/200))/80 - (6 \cdot \exp(-$
 $159/200) \cdot \sin(901/1000))/25, - (153 \cdot \cos(1819/2000) \cdot \exp(-321/400))/80 -$
 $(6 \cdot \exp(-321/400) \cdot \sin(1819/2000))/25, - (153 \cdot \cos(459/500) \cdot \exp(-81/100))/80 -$
 $(6 \cdot \exp(-81/100) \cdot \sin(459/500))/25, - (153 \cdot \cos(1853/2000) \cdot \exp(-327/400))/80 -$
 $(6 \cdot \exp(-327/400) \cdot \sin(1853/2000))/25, - (153 \cdot \cos(187/200) \cdot \exp(-33/40))/80 -$
 $(6 \cdot \exp(-33/40) \cdot \sin(187/200))/25, - (153 \cdot \cos(1887/2000) \cdot \exp(-333/400))/80 -$
 $(6 \cdot \exp(-333/400) \cdot \sin(1887/2000))/25, - (153 \cdot \cos(119/125) \cdot \exp(-21/25))/80 -$
 $(6 \cdot \exp(-21/25) \cdot \sin(119/125))/25, - (153 \cdot \cos(1921/2000) \cdot \exp(-339/400))/80 -$
 $(6 \cdot \exp(-339/400) \cdot \sin(1921/2000))/25, - (153 \cdot \cos(969/1000) \cdot \exp(-171/200))/80 -$
 $(6 \cdot \exp(-171/200) \cdot \sin(969/1000))/25, - (153 \cdot \cos(391/400) \cdot \exp(-69/80))/80 -$
 $(6 \cdot \exp(-69/80) \cdot \sin(391/400))/25, - (153 \cdot \cos(493/500) \cdot \exp(-87/100))/80 -$

$(6 \cdot \exp(-87/100) \cdot \sin(493/500))/25, - (153 \cdot \cos(1989/2000) \cdot \exp(-351/400))/80 -$
 $(6 \cdot \exp(-351/400) \cdot \sin(1989/2000))/25, - (153 \cdot \cos(1003/1000) \cdot \exp(-177/200))/80$
 $- (6 \cdot \exp(-177/200) \cdot \sin(1003/1000))/25, - (153 \cdot \cos(2023/2000) \cdot \exp(-$
 $357/400))/80 - (6 \cdot \exp(-357/400) \cdot \sin(2023/2000))/25, - (153 \cdot \cos(51/50) \cdot \exp(-$
 $9/10))/80 - (6 \cdot \exp(-9/10) \cdot \sin(51/50))/25, - (153 \cdot \cos(2057/2000) \cdot \exp(-$
 $363/400))/80 - (6 \cdot \exp(-363/400) \cdot \sin(2057/2000))/25, -$
 $(153 \cdot \cos(1037/1000) \cdot \exp(-183/200))/80 - (6 \cdot \exp(-183/200) \cdot \sin(1037/1000))/25,$
 $- (153 \cdot \cos(2091/2000) \cdot \exp(-369/400))/80 - (6 \cdot \exp(-$
 $369/400) \cdot \sin(2091/2000))/25, - (153 \cdot \cos(527/500) \cdot \exp(-93/100))/80 - (6 \cdot \exp(-$
 $93/100) \cdot \sin(527/500))/25, - (153 \cdot \cos(17/16) \cdot \exp(-15/16))/80 - (6 \cdot \exp(-$
 $15/16) \cdot \sin(17/16))/25, - (153 \cdot \cos(1071/1000) \cdot \exp(-189/200))/80 - (6 \cdot \exp(-$
 $189/200) \cdot \sin(1071/1000))/25, - (153 \cdot \cos(2159/2000) \cdot \exp(-381/400))/80 -$
 $(6 \cdot \exp(-381/400) \cdot \sin(2159/2000))/25, - (153 \cdot \cos(136/125) \cdot \exp(-24/25))/80 -$
 $(6 \cdot \exp(-24/25) \cdot \sin(136/125))/25, - (153 \cdot \cos(2193/2000) \cdot \exp(-387/400))/80 -$
 $(6 \cdot \exp(-387/400) \cdot \sin(2193/2000))/25, - (153 \cdot \cos(221/200) \cdot \exp(-39/40))/80 -$
 $(6 \cdot \exp(-39/40) \cdot \sin(221/200))/25, - (153 \cdot \cos(2227/2000) \cdot \exp(-393/400))/80 -$
 $(6 \cdot \exp(-393/400) \cdot \sin(2227/2000))/25, - (153 \cdot \cos(561/500) \cdot \exp(-99/100))/80 -$
 $(6 \cdot \exp(-99/100) \cdot \sin(561/500))/25, - (153 \cdot \cos(2261/2000) \cdot \exp(-399/400))/80 -$
 $(6 \cdot \exp(-399/400) \cdot \sin(2261/2000))/25, - (153 \cdot \cos(1139/1000) \cdot \exp(-201/200))/80$
 $- (6 \cdot \exp(-201/200) \cdot \sin(1139/1000))/25, - (153 \cdot \cos(459/400) \cdot \exp(-81/80))/80 -$
 $(6 \cdot \exp(-81/80) \cdot \sin(459/400))/25, - (153 \cdot \cos(289/250) \cdot \exp(-51/50))/80 - (6 \cdot \exp(-$
 $51/50) \cdot \sin(289/250))/25, - (153 \cdot \cos(2329/2000) \cdot \exp(-411/400))/80 - (6 \cdot \exp(-$
 $411/400) \cdot \sin(2329/2000))/25, - (153 \cdot \cos(1173/1000) \cdot \exp(-207/200))/80 -$
 $(6 \cdot \exp(-207/200) \cdot \sin(1173/1000))/25, - (153 \cdot \cos(2363/2000) \cdot \exp(-417/400))/80$
 $- (6 \cdot \exp(-417/400) \cdot \sin(2363/2000))/25, - (153 \cdot \cos(119/100) \cdot \exp(-21/20))/80 -$
 $(6 \cdot \exp(-21/20) \cdot \sin(119/100))/25, - (153 \cdot \cos(2397/2000) \cdot \exp(-423/400))/80 -$
 $(6 \cdot \exp(-423/400) \cdot \sin(2397/2000))/25, - (153 \cdot \cos(1207/1000) \cdot \exp(-213/200))/80$
 $- (6 \cdot \exp(-213/200) \cdot \sin(1207/1000))/25, - (153 \cdot \cos(2431/2000) \cdot \exp(-$
 $429/400))/80 - (6 \cdot \exp(-429/400) \cdot \sin(2431/2000))/25, - (153 \cdot \cos(153/125) \cdot \exp(-$
 $27/25))/80 - (6 \cdot \exp(-27/25) \cdot \sin(153/125))/25, - (153 \cdot \cos(493/400) \cdot \exp(-$
 $87/80))/80 - (6 \cdot \exp(-87/80) \cdot \sin(493/400))/25, - (153 \cdot \cos(1241/1000) \cdot \exp(-$
 $219/200))/80 - (6 \cdot \exp(-219/200) \cdot \sin(1241/1000))/25, -$
 $(153 \cdot \cos(2499/2000) \cdot \exp(-441/400))/80 - (6 \cdot \exp(-441/400) \cdot \sin(2499/2000))/25,$

- (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 -
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- (6*exp(-477/400)*sin(2703/2000))/25, - (153*cos(34/25)*exp(-6/5))/80 -
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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 -
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(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 -

$(6 \cdot \exp(-27/20) \cdot \sin(153/100))/25, - (153 \cdot \cos(3077/2000) \cdot \exp(-543/400))/80 -$
 $(6 \cdot \exp(-543/400) \cdot \sin(3077/2000))/25, - (153 \cdot \cos(1547/1000) \cdot \exp(-273/200))/80$
 $- (6 \cdot \exp(-273/200) \cdot \sin(1547/1000))/25, - (153 \cdot \cos(3111/2000) \cdot \exp(-$
 $549/400))/80 - (6 \cdot \exp(-549/400) \cdot \sin(3111/2000))/25, - (153 \cdot \cos(391/250) \cdot \exp(-$
 $69/50))/80 - (6 \cdot \exp(-69/50) \cdot \sin(391/250))/25, - (153 \cdot \cos(629/400) \cdot \exp(-$
 $111/80))/80 - (6 \cdot \exp(-111/80) \cdot \sin(629/400))/25, - (153 \cdot \cos(1581/1000) \cdot \exp(-$
 $279/200))/80 - (6 \cdot \exp(-279/200) \cdot \sin(1581/1000))/25, -$
 $(153 \cdot \cos(3179/2000) \cdot \exp(-561/400))/80 - (6 \cdot \exp(-561/400) \cdot \sin(3179/2000))/25,$
 $- (153 \cdot \cos(799/500) \cdot \exp(-141/100))/80 - (6 \cdot \exp(-141/100) \cdot \sin(799/500))/25, -$
 $(153 \cdot \cos(3213/2000) \cdot \exp(-567/400))/80 - (6 \cdot \exp(-567/400) \cdot \sin(3213/2000))/25,$
 $- (153 \cdot \cos(323/200) \cdot \exp(-57/40))/80 - (6 \cdot \exp(-57/40) \cdot \sin(323/200))/25, -$
 $(153 \cdot \cos(3247/2000) \cdot \exp(-573/400))/80 - (6 \cdot \exp(-573/400) \cdot \sin(3247/2000))/25,$
 $- (153 \cdot \cos(204/125) \cdot \exp(-36/25))/80 - (6 \cdot \exp(-36/25) \cdot \sin(204/125))/25, -$
 $(153 \cdot \cos(3281/2000) \cdot \exp(-579/400))/80 - (6 \cdot \exp(-579/400) \cdot \sin(3281/2000))/25,$
 $- (153 \cdot \cos(1649/1000) \cdot \exp(-291/200))/80 - (6 \cdot \exp(-$
 $291/200) \cdot \sin(1649/1000))/25, - (153 \cdot \cos(663/400) \cdot \exp(-117/80))/80 - (6 \cdot \exp(-$
 $117/80) \cdot \sin(663/400))/25, - (153 \cdot \cos(833/500) \cdot \exp(-147/100))/80 - (6 \cdot \exp(-$
 $147/100) \cdot \sin(833/500))/25, - (153 \cdot \cos(3349/2000) \cdot \exp(-591/400))/80 - (6 \cdot \exp(-$
 $591/400) \cdot \sin(3349/2000))/25, - (153 \cdot \cos(1683/1000) \cdot \exp(-297/200))/80 -$
 $(6 \cdot \exp(-297/200) \cdot \sin(1683/1000))/25, - (153 \cdot \cos(3383/2000) \cdot \exp(-597/400))/80$
 $- (6 \cdot \exp(-597/400) \cdot \sin(3383/2000))/25, - (153 \cdot \cos(17/10) \cdot \exp(-3/2))/80 -$
 $(6 \cdot \exp(-3/2) \cdot \sin(17/10))/25, - (153 \cdot \cos(3417/2000) \cdot \exp(-603/400))/80 - (6 \cdot \exp(-$
 $603/400) \cdot \sin(3417/2000))/25, - (153 \cdot \cos(1717/1000) \cdot \exp(-303/200))/80 -$
 $(6 \cdot \exp(-303/200) \cdot \sin(1717/1000))/25, - (153 \cdot \cos(3451/2000) \cdot \exp(-609/400))/80$
 $- (6 \cdot \exp(-609/400) \cdot \sin(3451/2000))/25, - (153 \cdot \cos(867/500) \cdot \exp(-153/100))/80 -$
 $(6 \cdot \exp(-153/100) \cdot \sin(867/500))/25, - (153 \cdot \cos(697/400) \cdot \exp(-123/80))/80 -$
 $(6 \cdot \exp(-123/80) \cdot \sin(697/400))/25, - (153 \cdot \cos(1751/1000) \cdot \exp(-309/200))/80 -$
 $(6 \cdot \exp(-309/200) \cdot \sin(1751/1000))/25, - (153 \cdot \cos(3519/2000) \cdot \exp(-621/400))/80$
 $- (6 \cdot \exp(-621/400) \cdot \sin(3519/2000))/25, - (153 \cdot \cos(221/125) \cdot \exp(-39/25))/80 -$
 $(6 \cdot \exp(-39/25) \cdot \sin(221/125))/25, - (153 \cdot \cos(3553/2000) \cdot \exp(-627/400))/80 -$
 $(6 \cdot \exp(-627/400) \cdot \sin(3553/2000))/25, - (153 \cdot \cos(357/200) \cdot \exp(-63/40))/80 -$
 $(6 \cdot \exp(-63/40) \cdot \sin(357/200))/25, - (153 \cdot \cos(3587/2000) \cdot \exp(-633/400))/80 -$
 $(6 \cdot \exp(-633/400) \cdot \sin(3587/2000))/25, - (153 \cdot \cos(901/500) \cdot \exp(-159/100))/80 -$

$(6 \cdot \exp(-159/100) \cdot \sin(901/500))/25, - (153 \cdot \cos(3621/2000) \cdot \exp(-639/400))/80 -$
 $(6 \cdot \exp(-639/400) \cdot \sin(3621/2000))/25, - (153 \cdot \cos(1819/1000) \cdot \exp(-321/200))/80$
 $- (6 \cdot \exp(-321/200) \cdot \sin(1819/1000))/25, - (153 \cdot \cos(731/400) \cdot \exp(-129/80))/80 -$
 $(6 \cdot \exp(-129/80) \cdot \sin(731/400))/25, - (153 \cdot \cos(459/250) \cdot \exp(-81/50))/80 -$
 $(6 \cdot \exp(-81/50) \cdot \sin(459/250))/25, - (153 \cdot \cos(3689/2000) \cdot \exp(-651/400))/80 -$
 $(6 \cdot \exp(-651/400) \cdot \sin(3689/2000))/25, - (153 \cdot \cos(1853/1000) \cdot \exp(-327/200))/80$
 $- (6 \cdot \exp(-327/200) \cdot \sin(1853/1000))/25, - (153 \cdot \cos(3723/2000) \cdot \exp(-$
 $657/400))/80 - (6 \cdot \exp(-657/400) \cdot \sin(3723/2000))/25, - (153 \cdot \cos(187/100) \cdot \exp(-$
 $33/20))/80 - (6 \cdot \exp(-33/20) \cdot \sin(187/100))/25, - (153 \cdot \cos(3757/2000) \cdot \exp(-$
 $663/400))/80 - (6 \cdot \exp(-663/400) \cdot \sin(3757/2000))/25, -$
 $(153 \cdot \cos(1887/1000) \cdot \exp(-333/200))/80 - (6 \cdot \exp(-333/200) \cdot \sin(1887/1000))/25,$
 $- (153 \cdot \cos(3791/2000) \cdot \exp(-669/400))/80 - (6 \cdot \exp(-$
 $669/400) \cdot \sin(3791/2000))/25, - (153 \cdot \cos(238/125) \cdot \exp(-42/25))/80 - (6 \cdot \exp(-$
 $42/25) \cdot \sin(238/125))/25, - (153 \cdot \cos(153/80) \cdot \exp(-27/16))/80 - (6 \cdot \exp(-$
 $27/16) \cdot \sin(153/80))/25, - (153 \cdot \cos(1921/1000) \cdot \exp(-339/200))/80 - (6 \cdot \exp(-$
 $339/200) \cdot \sin(1921/1000))/25, - (153 \cdot \cos(3859/2000) \cdot \exp(-681/400))/80 -$
 $(6 \cdot \exp(-681/400) \cdot \sin(3859/2000))/25, - (153 \cdot \cos(969/500) \cdot \exp(-171/100))/80 -$
 $(6 \cdot \exp(-171/100) \cdot \sin(969/500))/25, - (153 \cdot \cos(3893/2000) \cdot \exp(-687/400))/80 -$
 $(6 \cdot \exp(-687/400) \cdot \sin(3893/2000))/25, - (153 \cdot \cos(391/200) \cdot \exp(-69/40))/80 -$
 $(6 \cdot \exp(-69/40) \cdot \sin(391/200))/25, - (153 \cdot \cos(3927/2000) \cdot \exp(-693/400))/80 -$
 $(6 \cdot \exp(-693/400) \cdot \sin(3927/2000))/25, - (153 \cdot \cos(493/250) \cdot \exp(-87/50))/80 -$
 $(6 \cdot \exp(-87/50) \cdot \sin(493/250))/25, - (153 \cdot \cos(3961/2000) \cdot \exp(-699/400))/80 -$
 $(6 \cdot \exp(-699/400) \cdot \sin(3961/2000))/25, - (153 \cdot \cos(1989/1000) \cdot \exp(-351/200))/80$
 $- (6 \cdot \exp(-351/200) \cdot \sin(1989/1000))/25, - (153 \cdot \cos(799/400) \cdot \exp(-141/80))/80 -$
 $(6 \cdot \exp(-141/80) \cdot \sin(799/400))/25, - (153 \cdot \cos(1003/500) \cdot \exp(-177/100))/80 -$
 $(6 \cdot \exp(-177/100) \cdot \sin(1003/500))/25, - (153 \cdot \cos(4029/2000) \cdot \exp(-711/400))/80 -$
 $(6 \cdot \exp(-711/400) \cdot \sin(4029/2000))/25, - (153 \cdot \cos(2023/1000) \cdot \exp(-357/200))/80$
 $- (6 \cdot \exp(-357/200) \cdot \sin(2023/1000))/25, - (153 \cdot \cos(4063/2000) \cdot \exp(-$
 $717/400))/80 - (6 \cdot \exp(-717/400) \cdot \sin(4063/2000))/25, - (153 \cdot \cos(51/25) \cdot \exp(-$
 $9/5))/80 - (6 \cdot \exp(-9/5) \cdot \sin(51/25))/25, - (153 \cdot \cos(4097/2000) \cdot \exp(-723/400))/80$
 $- (6 \cdot \exp(-723/400) \cdot \sin(4097/2000))/25, - (153 \cdot \cos(2057/1000) \cdot \exp(-$
 $363/200))/80 - (6 \cdot \exp(-363/200) \cdot \sin(2057/1000))/25, -$
 $(153 \cdot \cos(4131/2000) \cdot \exp(-729/400))/80 - (6 \cdot \exp(-729/400) \cdot \sin(4131/2000))/25,$

$$\begin{aligned}
& - (153 \cdot \cos(1037/500) \cdot \exp(-183/100))/80 - (6 \cdot \exp(-183/100) \cdot \sin(1037/500))/25, - \\
& (153 \cdot \cos(833/400) \cdot \exp(-147/80))/80 - (6 \cdot \exp(-147/80) \cdot \sin(833/400))/25, - \\
& (153 \cdot \cos(2091/1000) \cdot \exp(-369/200))/80 - (6 \cdot \exp(-369/200) \cdot \sin(2091/1000))/25, \\
& - (153 \cdot \cos(4199/2000) \cdot \exp(-741/400))/80 - (6 \cdot \exp(- \\
& 741/400) \cdot \sin(4199/2000))/25, - (153 \cdot \cos(527/250) \cdot \exp(-93/50))/80 - (6 \cdot \exp(- \\
& 93/50) \cdot \sin(527/250))/25, - (153 \cdot \cos(4233/2000) \cdot \exp(-747/400))/80 - (6 \cdot \exp(- \\
& 747/400) \cdot \sin(4233/2000))/25, - (153 \cdot \cos(17/8) \cdot \exp(-15/8))/80 - (6 \cdot \exp(- \\
& 15/8) \cdot \sin(17/8))/25]
\end{aligned}$$

$$y =$$

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

$$b =$$

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

$$z =$$

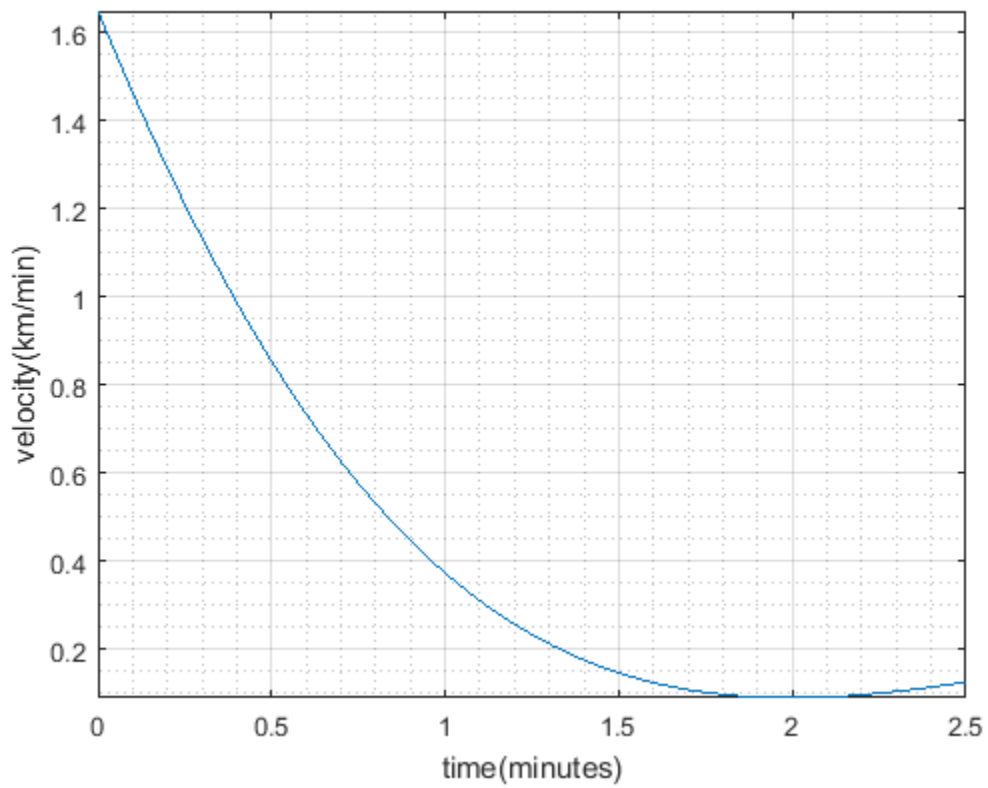
$$\begin{aligned}
& \pi \cdot ((1575 \cdot x)/256 - (525 \cdot \sin(10 \cdot x))/512 + (75 \cdot \sin(20 \cdot x))/256 - \\
& (75 \cdot \sin(30 \cdot x))/1024 + (25 \cdot \sin(40 \cdot x))/2048 - \sin(50 \cdot x)/1024)
\end{aligned}$$

zint =

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

zintdd =

95.3806362724067



>>

