

NAME : ONYEDUM CHINWOKE JUDE

MATRIC NO: 16/ENG01/017

DEPT: CHEMICAL ENGINEERING

ENG281 TEST

(A)

```
commandwindow
clear
clc
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)
D= C*B
```

COMMANDWINDOW

A =

0	10	4	-2
-3	-17	1	2
1	1	1	0
8	-34	16	-10

B =

-4
2
6
4

C =

-0.1786	-0.1020	0.5714	0.0153
0.0357	-0.0153	0.0357	-0.0102
0.1429	0.1173	0.3929	-0.0051
-0.0357	0.1582	0.9643	-0.0612

D =

4.0000
-0.0000
2.0000
6.0000

(B)

```
commandwindow
clear
clc
```

```

clear all
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(vn,tn)
ylabel('velocity(km/s)')
xlabel('time(minutes)')
axis tight
grid on
grid minor
a= diff(v)
an= subs(a,tn)
figure(2)
plot(an,tn)
ylabel('acceleration(km/s^2)')
xlabel('time(minutes)')
axis tight
grid on
grid minor
figure(3)
plot(vn,tn,an,tn)
ylabel('variable')
xlabel('time(minutes)')
grid on
grid minor
legend('velocity(m/min)', 'acceleration(m/min^2)', 'location', 'best')

```

#### COMMAND WINDOW

d =

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

tn =

Columns 1 through 5

0	0.01	0.02	0.03	0.04
---	------	------	------	------

Columns 6 through 10

0.05	0.06	0.07	0.08	0.09
------	------	------	------	------

Columns 11 through 15

0.1	0.11	0.12	0.13	0.14
-----	------	------	------	------

Columns 16 through 20

0.15	0.16	0.17	0.18	0.19
------	------	------	------	------

Columns 21 through 25

0.2	0.21	0.22	0.23	0.24
Columns 26 through 30				
0.25	0.26	0.27	0.28	0.29
Columns 31 through 35				
0.3	0.31	0.32	0.33	0.34
Columns 36 through 40				
0.35	0.36	0.37	0.38	0.39
Columns 41 through 45				
0.4	0.41	0.42	0.43	0.44
Columns 46 through 50				
0.45	0.46	0.47	0.48	0.49
Columns 51 through 55				
0.5	0.51	0.52	0.53	0.54
Columns 56 through 60				
0.55	0.56	0.57	0.58	0.59
Columns 61 through 65				
0.6	0.61	0.62	0.63	0.64
Columns 66 through 70				
0.65	0.66	0.67	0.68	0.69
Columns 71 through 75				
0.7	0.71	0.72	0.73	0.74
Columns 76 through 80				
0.75	0.76	0.77	0.78	0.79
Columns 81 through 85				
0.8	0.81	0.82	0.83	0.84

Columns 86 through 90

0.85	0.86	0.87	0.88	0.89
------	------	------	------	------

Columns 91 through 95

0.9	0.91	0.92	0.93	0.94
-----	------	------	------	------

Columns 96 through 100

0.95	0.96	0.97	0.98	0.99
------	------	------	------	------

Columns 101 through 105

1	1.01	1.02	1.03	1.04
---	------	------	------	------

Columns 106 through 110

1.05	1.06	1.07	1.08	1.09
------	------	------	------	------

Columns 111 through 115

1.1	1.11	1.12	1.13	1.14
-----	------	------	------	------

Columns 116 through 120

1.15	1.16	1.17	1.18	1.19
------	------	------	------	------

Columns 121 through 125

1.2	1.21	1.22	1.23	1.24
-----	------	------	------	------

Columns 126 through 130

1.25	1.26	1.27	1.28	1.29
------	------	------	------	------

Columns 131 through 135

1.3	1.31	1.32	1.33	1.34
-----	------	------	------	------

Columns 136 through 140

1.35	1.36	1.37	1.38	1.39
------	------	------	------	------

Columns 141 through 145

1.4	1.41	1.42	1.43	1.44
-----	------	------	------	------

Columns 146 through 150

1.45	1.46	1.47	1.48	1.49
Columns 151 through 155				
1.5	1.51	1.52	1.53	1.54
Columns 156 through 160				
1.55	1.56	1.57	1.58	1.59
Columns 161 through 165				
1.6	1.61	1.62	1.63	1.64
Columns 166 through 170				
1.65	1.66	1.67	1.68	1.69
Columns 171 through 175				
1.7	1.71	1.72	1.73	1.74
Columns 176 through 180				
1.75	1.76	1.77	1.78	1.79
Columns 181 through 185				
1.8	1.81	1.82	1.83	1.84
Columns 186 through 190				
1.85	1.86	1.87	1.88	1.89
Columns 191 through 195				
1.9	1.91	1.92	1.93	1.94
Columns 196 through 200				
1.95	1.96	1.97	1.98	1.99
Columns 201 through 205				
2	2.01	2.02	2.03	2.04
Columns 206 through 210				
2.05	2.06	2.07	2.08	2.09

Columns 211 through 215

2.1            2.11            2.12            2.13            2.14

Columns 216 through 220

2.15            2.16            2.17            2.18            2.19

Columns 221 through 225

2.2            2.21            2.22            2.23            2.24

Columns 226 through 230

2.25            2.26            2.27            2.28            2.29

Columns 231 through 235

2.3            2.31            2.32            2.33            2.34

Columns 236 through 240

2.35            2.36            2.37            2.38            2.39

Columns 241 through 245

2.4            2.41            2.42            2.43            2.44

Columns 246 through 250

2.45            2.46            2.47            2.48            2.49

Column 251

2.5

v =

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

vn =

$$[ 33/20, (51 \cdot \cos(17/2000) \cdot \exp(-3/400))/40 - (9 \cdot \exp(-3/400) \cdot \sin(17/2000))/8 + 3/8, (51 \cdot \cos(17/1000) \cdot \exp(-3/200))/40 - (9 \cdot \exp(-3/200) \cdot \sin(17/1000))/8 + 3/8, (51 \cdot \cos(51/2000) \cdot \exp(-9/400))/40 - (9 \cdot \exp(-9/400) \cdot \sin(51/2000))/8 + 3/8, (51 \cdot \cos(17/500) \cdot \exp(-3/100))/40 - (9 \cdot \exp(-3/100) \cdot \sin(17/500))/8 + 3/8, (51 \cdot \cos(17/400) \cdot \exp(-3/80))/40 - (9 \cdot \exp(-3/80) \cdot \sin(17/400))/8 + 3/8, (51 \cdot \cos(51/1000) \cdot \exp(-9/200))/40 - (9 \cdot \exp(-9/200) \cdot \sin(51/1000))/8 + 3/8, (51$$

$\cos(119/2000) \exp(-21/400) / 40 - (9 \exp(-21/400) \sin(119/2000)) / 8 + 3/8$ , (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  
 $\cos(221/2000) \exp(-39/400) / 40 - (9 \exp(-39/400) \sin(221/2000)) / 8 + 3/8$ , (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

$\cos(969/2000) \exp(-171/400) / 40 - (9 \exp(-171/400) \sin(969/2000)) / 8 + 3/8, (51$   
 $\cos(493/1000) \exp(-87/200) / 40 - (9 \exp(-87/200) \sin(493/1000)) / 8 + 3/8, (51$   
 $\cos(1003/2000) \exp(-177/400) / 40 - (9 \exp(-177/400) \sin(1003/2000)) / 8 + 3/8, (51$   
 $\cos(51/100) \exp(-9/20) / 40 - (9 \exp(-9/20) \sin(51/100)) / 8 + 3/8, (51$   
 $\cos(1037/2000) \exp(-183/400) / 40 - (9 \exp(-183/400) \sin(1037/2000)) / 8 + 3/8, (51$   
 $\cos(527/1000) \exp(-93/200) / 40 - (9 \exp(-93/200) \sin(527/1000)) / 8 + 3/8, (51$   
 $\cos(1071/2000) \exp(-189/400) / 40 - (9 \exp(-189/400) \sin(1071/2000)) / 8 + 3/8, (51$   
 $\cos(68/125) \exp(-12/25) / 40 - (9 \exp(-12/25) \sin(68/125)) / 8 + 3/8, (51$   
 $\cos(221/400) \exp(-39/80) / 40 - (9 \exp(-39/80) \sin(221/400)) / 8 + 3/8, (51$   
 $\cos(561/1000) \exp(-99/200) / 40 - (9 \exp(-99/200) \sin(561/1000)) / 8 + 3/8, (51$   
 $\cos(1139/2000) \exp(-201/400) / 40 - (9 \exp(-201/400) \sin(1139/2000)) / 8 + 3/8, (51$   
 $\cos(289/500) \exp(-51/100) / 40 - (9 \exp(-51/100) \sin(289/500)) / 8 + 3/8, (51$   
 $\cos(1173/2000) \exp(-207/400) / 40 - (9 \exp(-207/400) \sin(1173/2000)) / 8 + 3/8, (51$   
 $\cos(119/200) \exp(-21/40) / 40 - (9 \exp(-21/40) \sin(119/200)) / 8 + 3/8, (51$   
 $\cos(1207/2000) \exp(-213/400) / 40 - (9 \exp(-213/400) \sin(1207/2000)) / 8 + 3/8, (51$   
 $\cos(153/250) \exp(-27/50) / 40 - (9 \exp(-27/50) \sin(153/250)) / 8 + 3/8, (51$   
 $\cos(1241/2000) \exp(-219/400) / 40 - (9 \exp(-219/400) \sin(1241/2000)) / 8 + 3/8, (51$   
 $\cos(629/1000) \exp(-111/200) / 40 - (9 \exp(-111/200) \sin(629/1000)) / 8 + 3/8, (51$   
 $\cos(51/80) \exp(-9/16) / 40 - (9 \exp(-9/16) \sin(51/80)) / 8 + 3/8, (51$   
 $\cos(323/500) \exp(-57/100) / 40 - (9 \exp(-57/100) \sin(323/500)) / 8 + 3/8, (51$   
 $\cos(1309/2000) \exp(-231/400) / 40 - (9 \exp(-231/400) \sin(1309/2000)) / 8 + 3/8, (51$   
 $\cos(663/1000) \exp(-117/200) / 40 - (9 \exp(-117/200) \sin(663/1000)) / 8 + 3/8, (51$   
 $\cos(1343/2000) \exp(-237/400) / 40 - (9 \exp(-237/400) \sin(1343/2000)) / 8 + 3/8, (51$   
 $\cos(17/25) \exp(-3/5) / 40 - (9 \exp(-3/5) \sin(17/25)) / 8 + 3/8, (51$   
 $\cos(1377/2000) \exp(-243/400) / 40 - (9 \exp(-243/400) \sin(1377/2000)) / 8 + 3/8, (51$   
 $\cos(697/1000) \exp(-123/200) / 40 - (9 \exp(-123/200) \sin(697/1000)) / 8 + 3/8, (51$   
 $\cos(1411/2000) \exp(-249/400) / 40 - (9 \exp(-249/400) \sin(1411/2000)) / 8 + 3/8, (51$   
 $\cos(357/500) \exp(-63/100) / 40 - (9 \exp(-63/100) \sin(357/500)) / 8 + 3/8, (51$   
 $\cos(289/400) \exp(-51/80) / 40 - (9 \exp(-51/80) \sin(289/400)) / 8 + 3/8, (51$   
 $\cos(731/1000) \exp(-129/200) / 40 - (9 \exp(-129/200) \sin(731/1000)) / 8 + 3/8, (51$   
 $\cos(1479/2000) \exp(-261/400) / 40 - (9 \exp(-261/400) \sin(1479/2000)) / 8 + 3/8, (51$   
 $\cos(187/250) \exp(-33/50) / 40 - (9 \exp(-33/50) \sin(187/250)) / 8 + 3/8, (51$   
 $\cos(1513/2000) \exp(-267/400) / 40 - (9 \exp(-267/400) \sin(1513/2000)) / 8 + 3/8, (51$   
 $\cos(153/200) \exp(-27/40) / 40 - (9 \exp(-27/40) \sin(153/200)) / 8 + 3/8, (51$   
 $\cos(1547/2000) \exp(-273/400) / 40 - (9 \exp(-273/400) \sin(1547/2000)) / 8 + 3/8, (51$   
 $\cos(391/500) \exp(-69/100) / 40 - (9 \exp(-69/100) \sin(391/500)) / 8 + 3/8, (51$   
 $\cos(1581/2000) \exp(-279/400) / 40 - (9 \exp(-279/400) \sin(1581/2000)) / 8 + 3/8, (51$   
 $\cos(799/1000) \exp(-141/200) / 40 - (9 \exp(-141/200) \sin(799/1000)) / 8 + 3/8, (51$   
 $\cos(323/400) \exp(-57/80) / 40 - (9 \exp(-57/80) \sin(323/400)) / 8 + 3/8, (51$   
 $\cos(102/125) \exp(-18/25) / 40 - (9 \exp(-18/25) \sin(102/125)) / 8 + 3/8, (51$   
 $\cos(1649/2000) \exp(-291/400) / 40 - (9 \exp(-291/400) \sin(1649/2000)) / 8 + 3/8, (51$   
 $\cos(833/1000) \exp(-147/200) / 40 - (9 \exp(-147/200) \sin(833/1000)) / 8 + 3/8, (51$   
 $\cos(1683/2000) \exp(-297/400) / 40 - (9 \exp(-297/400) \sin(1683/2000)) / 8 + 3/8, (51$   
 $\cos(17/20) \exp(-3/4) / 40 - (9 \exp(-3/4) \sin(17/20)) / 8 + 3/8, (51$   
 $\cos(1717/2000) \exp(-303/400) / 40 - (9 \exp(-303/400) \sin(1717/2000)) / 8 + 3/8, (51$   
 $\cos(867/1000) \exp(-153/200) / 40 - (9 \exp(-153/200) \sin(867/1000)) / 8 + 3/8, (51$   
 $\cos(1751/2000) \exp(-309/400) / 40 - (9 \exp(-309/400) \sin(1751/2000)) / 8 + 3/8, (51$   
 $\cos(221/250) \exp(-39/50) / 40 - (9 \exp(-39/50) \sin(221/250)) / 8 + 3/8, (51$   
 $\cos(357/400) \exp(-63/80) / 40 - (9 \exp(-63/80) \sin(357/400)) / 8 + 3/8, (51$   
 $\cos(901/1000) \exp(-159/200) / 40 - (9 \exp(-159/200) \sin(901/1000)) / 8 + 3/8, (51$



$\cos(1819/2000) \exp(-321/400) / 40 - (9 \exp(-321/400) \sin(1819/2000)) / 8 + 3/8, (51$   
 $\cos(459/500) \exp(-81/100) / 40 - (9 \exp(-81/100) \sin(459/500)) / 8 + 3/8, (51$   
 $\cos(1853/2000) \exp(-327/400) / 40 - (9 \exp(-327/400) \sin(1853/2000)) / 8 + 3/8, (51$   
 $\cos(187/200) \exp(-33/40) / 40 - (9 \exp(-33/40) \sin(187/200)) / 8 + 3/8, (51$   
 $\cos(1887/2000) \exp(-333/400) / 40 - (9 \exp(-333/400) \sin(1887/2000)) / 8 + 3/8, (51$   
 $\cos(119/125) \exp(-21/25) / 40 - (9 \exp(-21/25) \sin(119/125)) / 8 + 3/8, (51$   
 $\cos(1921/2000) \exp(-339/400) / 40 - (9 \exp(-339/400) \sin(1921/2000)) / 8 + 3/8, (51$   
 $\cos(969/1000) \exp(-171/200) / 40 - (9 \exp(-171/200) \sin(969/1000)) / 8 + 3/8, (51$   
 $\cos(391/400) \exp(-69/80) / 40 - (9 \exp(-69/80) \sin(391/400)) / 8 + 3/8, (51$   
 $\cos(493/500) \exp(-87/100) / 40 - (9 \exp(-87/100) \sin(493/500)) / 8 + 3/8, (51$   
 $\cos(1989/2000) \exp(-351/400) / 40 - (9 \exp(-351/400) \sin(1989/2000)) / 8 + 3/8, (51$   
 $\cos(1003/1000) \exp(-177/200) / 40 - (9 \exp(-177/200) \sin(1003/1000)) / 8 + 3/8, (51$   
 $\cos(2023/2000) \exp(-357/400) / 40 - (9 \exp(-357/400) \sin(2023/2000)) / 8 + 3/8, (51$   
 $\cos(51/50) \exp(-9/10) / 40 - (9 \exp(-9/10) \sin(51/50)) / 8 + 3/8, (51$   
 $\cos(2057/2000) \exp(-363/400) / 40 - (9 \exp(-363/400) \sin(2057/2000)) / 8 + 3/8, (51$   
 $\cos(1037/1000) \exp(-183/200) / 40 - (9 \exp(-183/200) \sin(1037/1000)) / 8 + 3/8, (51$   
 $\cos(2091/2000) \exp(-369/400) / 40 - (9 \exp(-369/400) \sin(2091/2000)) / 8 + 3/8, (51$   
 $\cos(527/500) \exp(-93/100) / 40 - (9 \exp(-93/100) \sin(527/500)) / 8 + 3/8, (51$   
 $\cos(17/16) \exp(-15/16) / 40 - (9 \exp(-15/16) \sin(17/16)) / 8 + 3/8, (51$   
 $\cos(1071/1000) \exp(-189/200) / 40 - (9 \exp(-189/200) \sin(1071/1000)) / 8 + 3/8, (51$   
 $\cos(2159/2000) \exp(-381/400) / 40 - (9 \exp(-381/400) \sin(2159/2000)) / 8 + 3/8, (51$   
 $\cos(136/125) \exp(-24/25) / 40 - (9 \exp(-24/25) \sin(136/125)) / 8 + 3/8, (51$   
 $\cos(2193/2000) \exp(-387/400) / 40 - (9 \exp(-387/400) \sin(2193/2000)) / 8 + 3/8, (51$   
 $\cos(221/200) \exp(-39/40) / 40 - (9 \exp(-39/40) \sin(221/200)) / 8 + 3/8, (51$   
 $\cos(2227/2000) \exp(-393/400) / 40 - (9 \exp(-393/400) \sin(2227/2000)) / 8 + 3/8, (51$   
 $\cos(561/500) \exp(-99/100) / 40 - (9 \exp(-99/100) \sin(561/500)) / 8 + 3/8, (51$   
 $\cos(2261/2000) \exp(-399/400) / 40 - (9 \exp(-399/400) \sin(2261/2000)) / 8 + 3/8, (51$   
 $\cos(1139/1000) \exp(-201/200) / 40 - (9 \exp(-201/200) \sin(1139/1000)) / 8 + 3/8, (51$   
 $\cos(459/400) \exp(-81/80) / 40 - (9 \exp(-81/80) \sin(459/400)) / 8 + 3/8, (51$   
 $\cos(289/250) \exp(-51/50) / 40 - (9 \exp(-51/50) \sin(289/250)) / 8 + 3/8, (51$   
 $\cos(2329/2000) \exp(-411/400) / 40 - (9 \exp(-411/400) \sin(2329/2000)) / 8 + 3/8, (51$   
 $\cos(1173/1000) \exp(-207/200) / 40 - (9 \exp(-207/200) \sin(1173/1000)) / 8 + 3/8, (51$   
 $\cos(2363/2000) \exp(-417/400) / 40 - (9 \exp(-417/400) \sin(2363/2000)) / 8 + 3/8, (51$   
 $\cos(119/100) \exp(-21/20) / 40 - (9 \exp(-21/20) \sin(119/100)) / 8 + 3/8, (51$   
 $\cos(2397/2000) \exp(-423/400) / 40 - (9 \exp(-423/400) \sin(2397/2000)) / 8 + 3/8, (51$   
 $\cos(1207/1000) \exp(-213/200) / 40 - (9 \exp(-213/200) \sin(1207/1000)) / 8 + 3/8, (51$   
 $\cos(2431/2000) \exp(-429/400) / 40 - (9 \exp(-429/400) \sin(2431/2000)) / 8 + 3/8, (51$   
 $\cos(153/125) \exp(-27/25) / 40 - (9 \exp(-27/25) \sin(153/125)) / 8 + 3/8, (51$   
 $\cos(493/400) \exp(-87/80) / 40 - (9 \exp(-87/80) \sin(493/400)) / 8 + 3/8, (51$   
 $\cos(1241/1000) \exp(-219/200) / 40 - (9 \exp(-219/200) \sin(1241/1000)) / 8 + 3/8, (51$   
 $\cos(2499/2000) \exp(-441/400) / 40 - (9 \exp(-441/400) \sin(2499/2000)) / 8 + 3/8, (51$   
 $\cos(629/500) \exp(-111/100) / 40 - (9 \exp(-111/100) \sin(629/500)) / 8 + 3/8, (51$   
 $\cos(2533/2000) \exp(-447/400) / 40 - (9 \exp(-447/400) \sin(2533/2000)) / 8 + 3/8, (51$   
 $\cos(51/40) \exp(-9/8) / 40 - (9 \exp(-9/8) \sin(51/40)) / 8 + 3/8, (51$   
 $\cos(2567/2000) \exp(-453/400) / 40 - (9 \exp(-453/400) \sin(2567/2000)) / 8 + 3/8, (51$   
 $\cos(323/250) \exp(-57/50) / 40 - (9 \exp(-57/50) \sin(323/250)) / 8 + 3/8, (51$   
 $\cos(2601/2000) \exp(-459/400) / 40 - (9 \exp(-459/400) \sin(2601/2000)) / 8 + 3/8, (51$   
 $\cos(1309/1000) \exp(-231/200) / 40 - (9 \exp(-231/200) \sin(1309/1000)) / 8 + 3/8, (51$   
 $\cos(527/400) \exp(-93/80) / 40 - (9 \exp(-93/80) \sin(527/400)) / 8 + 3/8, (51$   
 $\cos(663/500) \exp(-117/100) / 40 - (9 \exp(-117/100) \sin(663/500)) / 8 + 3/8, (51$

$\cos(2669/2000) \exp(-471/400) / 40 - (9 \exp(-471/400) \sin(2669/2000)) / 8 + 3/8, (51$   
 $\cos(1343/1000) \exp(-237/200) / 40 - (9 \exp(-237/200) \sin(1343/1000)) / 8 + 3/8, (51$   
 $\cos(2703/2000) \exp(-477/400) / 40 - (9 \exp(-477/400) \sin(2703/2000)) / 8 + 3/8, (51$   
 $\cos(34/25) \exp(-6/5) / 40 - (9 \exp(-6/5) \sin(34/25)) / 8 + 3/8, (51$   
 $\cos(2737/2000) \exp(-483/400) / 40 - (9 \exp(-483/400) \sin(2737/2000)) / 8 + 3/8, (51$   
 $\cos(1377/1000) \exp(-243/200) / 40 - (9 \exp(-243/200) \sin(1377/1000)) / 8 + 3/8, (51$   
 $\cos(2771/2000) \exp(-489/400) / 40 - (9 \exp(-489/400) \sin(2771/2000)) / 8 + 3/8, (51$   
 $\cos(697/500) \exp(-123/100) / 40 - (9 \exp(-123/100) \sin(697/500)) / 8 + 3/8, (51$   
 $\cos(561/400) \exp(-99/80) / 40 - (9 \exp(-99/80) \sin(561/400)) / 8 + 3/8, (51$   
 $\cos(1411/1000) \exp(-249/200) / 40 - (9 \exp(-249/200) \sin(1411/1000)) / 8 + 3/8, (51$   
 $\cos(2839/2000) \exp(-501/400) / 40 - (9 \exp(-501/400) \sin(2839/2000)) / 8 + 3/8, (51$   
 $\cos(357/250) \exp(-63/50) / 40 - (9 \exp(-63/50) \sin(357/250)) / 8 + 3/8, (51$   
 $\cos(2873/2000) \exp(-507/400) / 40 - (9 \exp(-507/400) \sin(2873/2000)) / 8 + 3/8, (51$   
 $\cos(289/200) \exp(-51/40) / 40 - (9 \exp(-51/40) \sin(289/200)) / 8 + 3/8, (51$   
 $\cos(2907/2000) \exp(-513/400) / 40 - (9 \exp(-513/400) \sin(2907/2000)) / 8 + 3/8, (51$   
 $\cos(731/500) \exp(-129/100) / 40 - (9 \exp(-129/100) \sin(731/500)) / 8 + 3/8, (51$   
 $\cos(2941/2000) \exp(-519/400) / 40 - (9 \exp(-519/400) \sin(2941/2000)) / 8 + 3/8, (51$   
 $\cos(1479/1000) \exp(-261/200) / 40 - (9 \exp(-261/200) \sin(1479/1000)) / 8 + 3/8, (51$   
 $\cos(119/80) \exp(-21/16) / 40 - (9 \exp(-21/16) \sin(119/80)) / 8 + 3/8, (51$   
 $\cos(187/125) \exp(-33/25) / 40 - (9 \exp(-33/25) \sin(187/125)) / 8 + 3/8, (51$   
 $\cos(3009/2000) \exp(-531/400) / 40 - (9 \exp(-531/400) \sin(3009/2000)) / 8 + 3/8, (51$   
 $\cos(1513/1000) \exp(-267/200) / 40 - (9 \exp(-267/200) \sin(1513/1000)) / 8 + 3/8, (51$   
 $\cos(3043/2000) \exp(-537/400) / 40 - (9 \exp(-537/400) \sin(3043/2000)) / 8 + 3/8, (51$   
 $\cos(153/100) \exp(-27/20) / 40 - (9 \exp(-27/20) \sin(153/100)) / 8 + 3/8, (51$   
 $\cos(3077/2000) \exp(-543/400) / 40 - (9 \exp(-543/400) \sin(3077/2000)) / 8 + 3/8, (51$   
 $\cos(1547/1000) \exp(-273/200) / 40 - (9 \exp(-273/200) \sin(1547/1000)) / 8 + 3/8, (51$   
 $\cos(3111/2000) \exp(-549/400) / 40 - (9 \exp(-549/400) \sin(3111/2000)) / 8 + 3/8, (51$   
 $\cos(391/250) \exp(-69/50) / 40 - (9 \exp(-69/50) \sin(391/250)) / 8 + 3/8, (51$   
 $\cos(629/400) \exp(-111/80) / 40 - (9 \exp(-111/80) \sin(629/400)) / 8 + 3/8, (51$   
 $\cos(1581/1000) \exp(-279/200) / 40 - (9 \exp(-279/200) \sin(1581/1000)) / 8 + 3/8, (51$   
 $\cos(3179/2000) \exp(-561/400) / 40 - (9 \exp(-561/400) \sin(3179/2000)) / 8 + 3/8, (51$   
 $\cos(799/500) \exp(-141/100) / 40 - (9 \exp(-141/100) \sin(799/500)) / 8 + 3/8, (51$   
 $\cos(3213/2000) \exp(-567/400) / 40 - (9 \exp(-567/400) \sin(3213/2000)) / 8 + 3/8, (51$   
 $\cos(323/200) \exp(-57/40) / 40 - (9 \exp(-57/40) \sin(323/200)) / 8 + 3/8, (51$   
 $\cos(3247/2000) \exp(-573/400) / 40 - (9 \exp(-573/400) \sin(3247/2000)) / 8 + 3/8, (51$   
 $\cos(204/125) \exp(-36/25) / 40 - (9 \exp(-36/25) \sin(204/125)) / 8 + 3/8, (51$   
 $\cos(3281/2000) \exp(-579/400) / 40 - (9 \exp(-579/400) \sin(3281/2000)) / 8 + 3/8, (51$   
 $\cos(1649/1000) \exp(-291/200) / 40 - (9 \exp(-291/200) \sin(1649/1000)) / 8 + 3/8, (51$   
 $\cos(663/400) \exp(-117/80) / 40 - (9 \exp(-117/80) \sin(663/400)) / 8 + 3/8, (51$   
 $\cos(833/500) \exp(-147/100) / 40 - (9 \exp(-147/100) \sin(833/500)) / 8 + 3/8, (51$   
 $\cos(3349/2000) \exp(-591/400) / 40 - (9 \exp(-591/400) \sin(3349/2000)) / 8 + 3/8, (51$   
 $\cos(1683/1000) \exp(-297/200) / 40 - (9 \exp(-297/200) \sin(1683/1000)) / 8 + 3/8, (51$   
 $\cos(3383/2000) \exp(-597/400) / 40 - (9 \exp(-597/400) \sin(3383/2000)) / 8 + 3/8, (51$   
 $\cos(17/10) \exp(-3/2) / 40 - (9 \exp(-3/2) \sin(17/10)) / 8 + 3/8, (51$   
 $\cos(3417/2000) \exp(-603/400) / 40 - (9 \exp(-603/400) \sin(3417/2000)) / 8 + 3/8, (51$   
 $\cos(1717/1000) \exp(-303/200) / 40 - (9 \exp(-303/200) \sin(1717/1000)) / 8 + 3/8, (51$   
 $\cos(3451/2000) \exp(-609/400) / 40 - (9 \exp(-609/400) \sin(3451/2000)) / 8 + 3/8, (51$   
 $\cos(867/500) \exp(-153/100) / 40 - (9 \exp(-153/100) \sin(867/500)) / 8 + 3/8, (51$   
 $\cos(697/400) \exp(-123/80) / 40 - (9 \exp(-123/80) \sin(697/400)) / 8 + 3/8, (51$   
 $\cos(1751/1000) \exp(-309/200) / 40 - (9 \exp(-309/200) \sin(1751/1000)) / 8 + 3/8, (51$

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

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

$\cos(51/125) \exp(-9/25)/80 - (6 \exp(-9/25) \sin(51/125))/25, - (153$   
 $\cos(833/2000) \exp(-147/400))/80 - (6 \exp(-147/400) \sin(833/2000))/25, - (153$   
 $\cos(17/40) \exp(-3/8))/80 - (6 \exp(-3/8) \sin(17/40))/25, - (153$   
 $\cos(867/2000) \exp(-153/400))/80 - (6 \exp(-153/400) \sin(867/2000))/25, - (153$   
 $\cos(221/500) \exp(-39/100))/80 - (6 \exp(-39/100) \sin(221/500))/25, - (153$   
 $\cos(901/2000) \exp(-159/400))/80 - (6 \exp(-159/400) \sin(901/2000))/25, - (153$   
 $\cos(459/1000) \exp(-81/200))/80 - (6 \exp(-81/200) \sin(459/1000))/25, - (153$   
 $\cos(187/400) \exp(-33/80))/80 - (6 \exp(-33/80) \sin(187/400))/25, - (153$   
 $\cos(119/250) \exp(-21/50))/80 - (6 \exp(-21/50) \sin(119/250))/25, - (153$   
 $\cos(969/2000) \exp(-171/400))/80 - (6 \exp(-171/400) \sin(969/2000))/25, - (153$   
 $\cos(493/1000) \exp(-87/200))/80 - (6 \exp(-87/200) \sin(493/1000))/25, - (153$   
 $\cos(1003/2000) \exp(-177/400))/80 - (6 \exp(-177/400) \sin(1003/2000))/25, - (153$   
 $\cos(51/100) \exp(-9/20))/80 - (6 \exp(-9/20) \sin(51/100))/25, - (153$   
 $\cos(1037/2000) \exp(-183/400))/80 - (6 \exp(-183/400) \sin(1037/2000))/25, - (153$   
 $\cos(527/1000) \exp(-93/200))/80 - (6 \exp(-93/200) \sin(527/1000))/25, - (153$   
 $\cos(1071/2000) \exp(-189/400))/80 - (6 \exp(-189/400) \sin(1071/2000))/25, - (153$   
 $\cos(68/125) \exp(-12/25))/80 - (6 \exp(-12/25) \sin(68/125))/25, - (153$   
 $\cos(221/400) \exp(-39/80))/80 - (6 \exp(-39/80) \sin(221/400))/25, - (153$   
 $\cos(561/1000) \exp(-99/200))/80 - (6 \exp(-99/200) \sin(561/1000))/25, - (153$   
 $\cos(1139/2000) \exp(-201/400))/80 - (6 \exp(-201/400) \sin(1139/2000))/25, - (153$   
 $\cos(289/500) \exp(-51/100))/80 - (6 \exp(-51/100) \sin(289/500))/25, - (153$   
 $\cos(1173/2000) \exp(-207/400))/80 - (6 \exp(-207/400) \sin(1173/2000))/25, - (153$   
 $\cos(119/200) \exp(-21/40))/80 - (6 \exp(-21/40) \sin(119/200))/25, - (153$   
 $\cos(1207/2000) \exp(-213/400))/80 - (6 \exp(-213/400) \sin(1207/2000))/25, - (153$   
 $\cos(153/250) \exp(-27/50))/80 - (6 \exp(-27/50) \sin(153/250))/25, - (153$   
 $\cos(1241/2000) \exp(-219/400))/80 - (6 \exp(-219/400) \sin(1241/2000))/25, - (153$   
 $\cos(629/1000) \exp(-111/200))/80 - (6 \exp(-111/200) \sin(629/1000))/25, - (153$   
 $\cos(51/80) \exp(-9/16))/80 - (6 \exp(-9/16) \sin(51/80))/25, - (153$   
 $\cos(323/500) \exp(-57/100))/80 - (6 \exp(-57/100) \sin(323/500))/25, - (153$   
 $\cos(1309/2000) \exp(-231/400))/80 - (6 \exp(-231/400) \sin(1309/2000))/25, - (153$   
 $\cos(663/1000) \exp(-117/200))/80 - (6 \exp(-117/200) \sin(663/1000))/25, - (153$   
 $\cos(1343/2000) \exp(-237/400))/80 - (6 \exp(-237/400) \sin(1343/2000))/25, - (153$   
 $\cos(17/25) \exp(-3/5))/80 - (6 \exp(-3/5) \sin(17/25))/25, - (153$   
 $\cos(1377/2000) \exp(-243/400))/80 - (6 \exp(-243/400) \sin(1377/2000))/25, - (153$   
 $\cos(697/1000) \exp(-123/200))/80 - (6 \exp(-123/200) \sin(697/1000))/25, - (153$   
 $\cos(1411/2000) \exp(-249/400))/80 - (6 \exp(-249/400) \sin(1411/2000))/25, - (153$   
 $\cos(357/500) \exp(-63/100))/80 - (6 \exp(-63/100) \sin(357/500))/25, - (153$   
 $\cos(289/400) \exp(-51/80))/80 - (6 \exp(-51/80) \sin(289/400))/25, - (153$   
 $\cos(731/1000) \exp(-129/200))/80 - (6 \exp(-129/200) \sin(731/1000))/25, - (153$   
 $\cos(1479/2000) \exp(-261/400))/80 - (6 \exp(-261/400) \sin(1479/2000))/25, - (153$   
 $\cos(187/250) \exp(-33/50))/80 - (6 \exp(-33/50) \sin(187/250))/25, - (153$   
 $\cos(1513/2000) \exp(-267/400))/80 - (6 \exp(-267/400) \sin(1513/2000))/25, - (153$   
 $\cos(153/200) \exp(-27/40))/80 - (6 \exp(-27/40) \sin(153/200))/25, - (153$   
 $\cos(1547/2000) \exp(-273/400))/80 - (6 \exp(-273/400) \sin(1547/2000))/25, - (153$   
 $\cos(391/500) \exp(-69/100))/80 - (6 \exp(-69/100) \sin(391/500))/25, - (153$   
 $\cos(1581/2000) \exp(-279/400))/80 - (6 \exp(-279/400) \sin(1581/2000))/25, - (153$   
 $\cos(799/1000) \exp(-141/200))/80 - (6 \exp(-141/200) \sin(799/1000))/25, - (153$   
 $\cos(323/400) \exp(-57/80))/80 - (6 \exp(-57/80) \sin(323/400))/25, - (153$   
 $\cos(102/125) \exp(-18/25))/80 - (6 \exp(-18/25) \sin(102/125))/25, - (153$   
 $\cos(1649/2000) \exp(-291/400))/80 - (6 \exp(-291/400) \sin(1649/2000))/25, - (153$

$\cos(833/1000) \exp(-147/200)/80 - (6 \exp(-147/200) \sin(833/1000))/25, - (153$   
 $\cos(1683/2000) \exp(-297/400))/80 - (6 \exp(-297/400) \sin(1683/2000))/25, - (153$   
 $\cos(17/20) \exp(-3/4))/80 - (6 \exp(-3/4) \sin(17/20))/25, - (153$   
 $\cos(1717/2000) \exp(-303/400))/80 - (6 \exp(-303/400) \sin(1717/2000))/25, - (153$   
 $\cos(867/1000) \exp(-153/200))/80 - (6 \exp(-153/200) \sin(867/1000))/25, - (153$   
 $\cos(1751/2000) \exp(-309/400))/80 - (6 \exp(-309/400) \sin(1751/2000))/25, - (153$   
 $\cos(221/250) \exp(-39/50))/80 - (6 \exp(-39/50) \sin(221/250))/25, - (153$   
 $\cos(357/400) \exp(-63/80))/80 - (6 \exp(-63/80) \sin(357/400))/25, - (153$   
 $\cos(901/1000) \exp(-159/200))/80 - (6 \exp(-159/200) \sin(901/1000))/25, - (153$   
 $\cos(1819/2000) \exp(-321/400))/80 - (6 \exp(-321/400) \sin(1819/2000))/25, - (153$   
 $\cos(459/500) \exp(-81/100))/80 - (6 \exp(-81/100) \sin(459/500))/25, - (153$   
 $\cos(1853/2000) \exp(-327/400))/80 - (6 \exp(-327/400) \sin(1853/2000))/25, - (153$   
 $\cos(187/200) \exp(-33/40))/80 - (6 \exp(-33/40) \sin(187/200))/25, - (153$   
 $\cos(1887/2000) \exp(-333/400))/80 - (6 \exp(-333/400) \sin(1887/2000))/25, - (153$   
 $\cos(119/125) \exp(-21/25))/80 - (6 \exp(-21/25) \sin(119/125))/25, - (153$   
 $\cos(1921/2000) \exp(-339/400))/80 - (6 \exp(-339/400) \sin(1921/2000))/25, - (153$   
 $\cos(969/1000) \exp(-171/200))/80 - (6 \exp(-171/200) \sin(969/1000))/25, - (153$   
 $\cos(391/400) \exp(-69/80))/80 - (6 \exp(-69/80) \sin(391/400))/25, - (153$   
 $\cos(493/500) \exp(-87/100))/80 - (6 \exp(-87/100) \sin(493/500))/25, - (153$   
 $\cos(1989/2000) \exp(-351/400))/80 - (6 \exp(-351/400) \sin(1989/2000))/25, - (153$   
 $\cos(1003/1000) \exp(-177/200))/80 - (6 \exp(-177/200) \sin(1003/1000))/25, - (153$   
 $\cos(2023/2000) \exp(-357/400))/80 - (6 \exp(-357/400) \sin(2023/2000))/25, - (153$   
 $\cos(51/50) \exp(-9/10))/80 - (6 \exp(-9/10) \sin(51/50))/25, - (153$   
 $\cos(2057/2000) \exp(-363/400))/80 - (6 \exp(-363/400) \sin(2057/2000))/25, - (153$   
 $\cos(1037/1000) \exp(-183/200))/80 - (6 \exp(-183/200) \sin(1037/1000))/25, - (153$   
 $\cos(2091/2000) \exp(-369/400))/80 - (6 \exp(-369/400) \sin(2091/2000))/25, - (153$   
 $\cos(527/500) \exp(-93/100))/80 - (6 \exp(-93/100) \sin(527/500))/25, - (153$   
 $\cos(17/16) \exp(-15/16))/80 - (6 \exp(-15/16) \sin(17/16))/25, - (153$   
 $\cos(1071/1000) \exp(-189/200))/80 - (6 \exp(-189/200) \sin(1071/1000))/25, - (153$   
 $\cos(2159/2000) \exp(-381/400))/80 - (6 \exp(-381/400) \sin(2159/2000))/25, - (153$   
 $\cos(136/125) \exp(-24/25))/80 - (6 \exp(-24/25) \sin(136/125))/25, - (153$   
 $\cos(2193/2000) \exp(-387/400))/80 - (6 \exp(-387/400) \sin(2193/2000))/25, - (153$   
 $\cos(221/200) \exp(-39/40))/80 - (6 \exp(-39/40) \sin(221/200))/25, - (153$   
 $\cos(2227/2000) \exp(-393/400))/80 - (6 \exp(-393/400) \sin(2227/2000))/25, - (153$   
 $\cos(561/500) \exp(-99/100))/80 - (6 \exp(-99/100) \sin(561/500))/25, - (153$   
 $\cos(2261/2000) \exp(-399/400))/80 - (6 \exp(-399/400) \sin(2261/2000))/25, - (153$   
 $\cos(1139/1000) \exp(-201/200))/80 - (6 \exp(-201/200) \sin(1139/1000))/25, - (153$   
 $\cos(459/400) \exp(-81/80))/80 - (6 \exp(-81/80) \sin(459/400))/25, - (153$   
 $\cos(289/250) \exp(-51/50))/80 - (6 \exp(-51/50) \sin(289/250))/25, - (153$   
 $\cos(2329/2000) \exp(-411/400))/80 - (6 \exp(-411/400) \sin(2329/2000))/25, - (153$   
 $\cos(1173/1000) \exp(-207/200))/80 - (6 \exp(-207/200) \sin(1173/1000))/25, - (153$   
 $\cos(2363/2000) \exp(-417/400))/80 - (6 \exp(-417/400) \sin(2363/2000))/25, - (153$   
 $\cos(119/100) \exp(-21/20))/80 - (6 \exp(-21/20) \sin(119/100))/25, - (153$   
 $\cos(2397/2000) \exp(-423/400))/80 - (6 \exp(-423/400) \sin(2397/2000))/25, - (153$   
 $\cos(1207/1000) \exp(-213/200))/80 - (6 \exp(-213/200) \sin(1207/1000))/25, - (153$   
 $\cos(2431/2000) \exp(-429/400))/80 - (6 \exp(-429/400) \sin(2431/2000))/25, - (153$   
 $\cos(153/125) \exp(-27/25))/80 - (6 \exp(-27/25) \sin(153/125))/25, - (153$   
 $\cos(493/400) \exp(-87/80))/80 - (6 \exp(-87/80) \sin(493/400))/25, - (153$   
 $\cos(1241/1000) \exp(-219/200))/80 - (6 \exp(-219/200) \sin(1241/1000))/25, - (153$   
 $\cos(2499/2000) \exp(-441/400))/80 - (6 \exp(-441/400) \sin(2499/2000))/25, - (153$

$\cos(629/500) \exp(-111/100) / 80 - (6 \exp(-111/100) \sin(629/500)) / 25, - (153$   
 $\cos(2533/2000) \exp(-447/400) / 80 - (6 \exp(-447/400) \sin(2533/2000)) / 25, - (153$   
 $\cos(51/40) \exp(-9/8) / 80 - (6 \exp(-9/8) \sin(51/40)) / 25, - (153$   
 $\cos(2567/2000) \exp(-453/400) / 80 - (6 \exp(-453/400) \sin(2567/2000)) / 25, - (153$   
 $\cos(323/250) \exp(-57/50) / 80 - (6 \exp(-57/50) \sin(323/250)) / 25, - (153$   
 $\cos(2601/2000) \exp(-459/400) / 80 - (6 \exp(-459/400) \sin(2601/2000)) / 25, - (153$   
 $\cos(1309/1000) \exp(-231/200) / 80 - (6 \exp(-231/200) \sin(1309/1000)) / 25, - (153$   
 $\cos(527/400) \exp(-93/80) / 80 - (6 \exp(-93/80) \sin(527/400)) / 25, - (153$   
 $\cos(663/500) \exp(-117/100) / 80 - (6 \exp(-117/100) \sin(663/500)) / 25, - (153$   
 $\cos(2669/2000) \exp(-471/400) / 80 - (6 \exp(-471/400) \sin(2669/2000)) / 25, - (153$   
 $\cos(1343/1000) \exp(-237/200) / 80 - (6 \exp(-237/200) \sin(1343/1000)) / 25, - (153$   
 $\cos(2703/2000) \exp(-477/400) / 80 - (6 \exp(-477/400) \sin(2703/2000)) / 25, - (153$   
 $\cos(34/25) \exp(-6/5) / 80 - (6 \exp(-6/5) \sin(34/25)) / 25, - (153$   
 $\cos(2737/2000) \exp(-483/400) / 80 - (6 \exp(-483/400) \sin(2737/2000)) / 25, - (153$   
 $\cos(1377/1000) \exp(-243/200) / 80 - (6 \exp(-243/200) \sin(1377/1000)) / 25, - (153$   
 $\cos(2771/2000) \exp(-489/400) / 80 - (6 \exp(-489/400) \sin(2771/2000)) / 25, - (153$   
 $\cos(697/500) \exp(-123/100) / 80 - (6 \exp(-123/100) \sin(697/500)) / 25, - (153$   
 $\cos(561/400) \exp(-99/80) / 80 - (6 \exp(-99/80) \sin(561/400)) / 25, - (153$   
 $\cos(1411/1000) \exp(-249/200) / 80 - (6 \exp(-249/200) \sin(1411/1000)) / 25, - (153$   
 $\cos(2839/2000) \exp(-501/400) / 80 - (6 \exp(-501/400) \sin(2839/2000)) / 25, - (153$   
 $\cos(357/250) \exp(-63/50) / 80 - (6 \exp(-63/50) \sin(357/250)) / 25, - (153$   
 $\cos(2873/2000) \exp(-507/400) / 80 - (6 \exp(-507/400) \sin(2873/2000)) / 25, - (153$   
 $\cos(289/200) \exp(-51/40) / 80 - (6 \exp(-51/40) \sin(289/200)) / 25, - (153$   
 $\cos(2907/2000) \exp(-513/400) / 80 - (6 \exp(-513/400) \sin(2907/2000)) / 25, - (153$   
 $\cos(731/500) \exp(-129/100) / 80 - (6 \exp(-129/100) \sin(731/500)) / 25, - (153$   
 $\cos(2941/2000) \exp(-519/400) / 80 - (6 \exp(-519/400) \sin(2941/2000)) / 25, - (153$   
 $\cos(1479/1000) \exp(-261/200) / 80 - (6 \exp(-261/200) \sin(1479/1000)) / 25, - (153$   
 $\cos(119/80) \exp(-21/16) / 80 - (6 \exp(-21/16) \sin(119/80)) / 25, - (153$   
 $\cos(187/125) \exp(-33/25) / 80 - (6 \exp(-33/25) \sin(187/125)) / 25, - (153$   
 $\cos(3009/2000) \exp(-531/400) / 80 - (6 \exp(-531/400) \sin(3009/2000)) / 25, - (153$   
 $\cos(1513/1000) \exp(-267/200) / 80 - (6 \exp(-267/200) \sin(1513/1000)) / 25, - (153$   
 $\cos(3043/2000) \exp(-537/400) / 80 - (6 \exp(-537/400) \sin(3043/2000)) / 25, - (153$   
 $\cos(153/100) \exp(-27/20) / 80 - (6 \exp(-27/20) \sin(153/100)) / 25, - (153$   
 $\cos(3077/2000) \exp(-543/400) / 80 - (6 \exp(-543/400) \sin(3077/2000)) / 25, - (153$   
 $\cos(1547/1000) \exp(-273/200) / 80 - (6 \exp(-273/200) \sin(1547/1000)) / 25, - (153$   
 $\cos(3111/2000) \exp(-549/400) / 80 - (6 \exp(-549/400) \sin(3111/2000)) / 25, - (153$   
 $\cos(391/250) \exp(-69/50) / 80 - (6 \exp(-69/50) \sin(391/250)) / 25, - (153$   
 $\cos(629/400) \exp(-111/80) / 80 - (6 \exp(-111/80) \sin(629/400)) / 25, - (153$   
 $\cos(1581/1000) \exp(-279/200) / 80 - (6 \exp(-279/200) \sin(1581/1000)) / 25, - (153$   
 $\cos(3179/2000) \exp(-561/400) / 80 - (6 \exp(-561/400) \sin(3179/2000)) / 25, - (153$   
 $\cos(799/500) \exp(-141/100) / 80 - (6 \exp(-141/100) \sin(799/500)) / 25, - (153$   
 $\cos(3213/2000) \exp(-567/400) / 80 - (6 \exp(-567/400) \sin(3213/2000)) / 25, - (153$   
 $\cos(323/200) \exp(-57/40) / 80 - (6 \exp(-57/40) \sin(323/200)) / 25, - (153$   
 $\cos(3247/2000) \exp(-573/400) / 80 - (6 \exp(-573/400) \sin(3247/2000)) / 25, - (153$   
 $\cos(204/125) \exp(-36/25) / 80 - (6 \exp(-36/25) \sin(204/125)) / 25, - (153$   
 $\cos(3281/2000) \exp(-579/400) / 80 - (6 \exp(-579/400) \sin(3281/2000)) / 25, - (153$   
 $\cos(1649/1000) \exp(-291/200) / 80 - (6 \exp(-291/200) \sin(1649/1000)) / 25, - (153$   
 $\cos(663/400) \exp(-117/80) / 80 - (6 \exp(-117/80) \sin(663/400)) / 25, - (153$   
 $\cos(833/500) \exp(-147/100) / 80 - (6 \exp(-147/100) \sin(833/500)) / 25, - (153$   
 $\cos(3349/2000) \exp(-591/400) / 80 - (6 \exp(-591/400) \sin(3349/2000)) / 25, - (153$

$\cos(1683/1000) \cdot \exp(-297/200) / 80 - (6 \cdot \exp(-297/200) \cdot \sin(1683/1000)) / 25, - (153$   
 $\cos(3383/2000) \cdot \exp(-597/400) / 80 - (6 \cdot \exp(-597/400) \cdot \sin(3383/2000)) / 25, - (153$   
 $\cos(17/10) \cdot \exp(-3/2) / 80 - (6 \cdot \exp(-3/2) \cdot \sin(17/10)) / 25, - (153$   
 $\cos(3417/2000) \cdot \exp(-603/400) / 80 - (6 \cdot \exp(-603/400) \cdot \sin(3417/2000)) / 25, - (153$   
 $\cos(1717/1000) \cdot \exp(-303/200) / 80 - (6 \cdot \exp(-303/200) \cdot \sin(1717/1000)) / 25, - (153$   
 $\cos(3451/2000) \cdot \exp(-609/400) / 80 - (6 \cdot \exp(-609/400) \cdot \sin(3451/2000)) / 25, - (153$   
 $\cos(867/500) \cdot \exp(-153/100) / 80 - (6 \cdot \exp(-153/100) \cdot \sin(867/500)) / 25, - (153$   
 $\cos(697/400) \cdot \exp(-123/80) / 80 - (6 \cdot \exp(-123/80) \cdot \sin(697/400)) / 25, - (153$   
 $\cos(1751/1000) \cdot \exp(-309/200) / 80 - (6 \cdot \exp(-309/200) \cdot \sin(1751/1000)) / 25, - (153$   
 $\cos(3519/2000) \cdot \exp(-621/400) / 80 - (6 \cdot \exp(-621/400) \cdot \sin(3519/2000)) / 25, - (153$   
 $\cos(221/125) \cdot \exp(-39/25) / 80 - (6 \cdot \exp(-39/25) \cdot \sin(221/125)) / 25, - (153$   
 $\cos(3553/2000) \cdot \exp(-627/400) / 80 - (6 \cdot \exp(-627/400) \cdot \sin(3553/2000)) / 25, - (153$   
 $\cos(357/200) \cdot \exp(-63/40) / 80 - (6 \cdot \exp(-63/40) \cdot \sin(357/200)) / 25, - (153$   
 $\cos(3587/2000) \cdot \exp(-633/400) / 80 - (6 \cdot \exp(-633/400) \cdot \sin(3587/2000)) / 25, - (153$   
 $\cos(901/500) \cdot \exp(-159/100) / 80 - (6 \cdot \exp(-159/100) \cdot \sin(901/500)) / 25, - (153$   
 $\cos(3621/2000) \cdot \exp(-639/400) / 80 - (6 \cdot \exp(-639/400) \cdot \sin(3621/2000)) / 25, - (153$   
 $\cos(1819/1000) \cdot \exp(-321/200) / 80 - (6 \cdot \exp(-321/200) \cdot \sin(1819/1000)) / 25, - (153$   
 $\cos(731/400) \cdot \exp(-129/80) / 80 - (6 \cdot \exp(-129/80) \cdot \sin(731/400)) / 25, - (153$   
 $\cos(459/250) \cdot \exp(-81/50) / 80 - (6 \cdot \exp(-81/50) \cdot \sin(459/250)) / 25, - (153$   
 $\cos(3689/2000) \cdot \exp(-651/400) / 80 - (6 \cdot \exp(-651/400) \cdot \sin(3689/2000)) / 25, - (153$   
 $\cos(1853/1000) \cdot \exp(-327/200) / 80 - (6 \cdot \exp(-327/200) \cdot \sin(1853/1000)) / 25, - (153$   
 $\cos(3723/2000) \cdot \exp(-657/400) / 80 - (6 \cdot \exp(-657/400) \cdot \sin(3723/2000)) / 25, - (153$   
 $\cos(187/100) \cdot \exp(-33/20) / 80 - (6 \cdot \exp(-33/20) \cdot \sin(187/100)) / 25, - (153$   
 $\cos(3757/2000) \cdot \exp(-663/400) / 80 - (6 \cdot \exp(-663/400) \cdot \sin(3757/2000)) / 25, - (153$   
 $\cos(1887/1000) \cdot \exp(-333/200) / 80 - (6 \cdot \exp(-333/200) \cdot \sin(1887/1000)) / 25, - (153$   
 $\cos(3791/2000) \cdot \exp(-669/400) / 80 - (6 \cdot \exp(-669/400) \cdot \sin(3791/2000)) / 25, - (153$   
 $\cos(238/125) \cdot \exp(-42/25) / 80 - (6 \cdot \exp(-42/25) \cdot \sin(238/125)) / 25, - (153$   
 $\cos(153/80) \cdot \exp(-27/16) / 80 - (6 \cdot \exp(-27/16) \cdot \sin(153/80)) / 25, - (153$   
 $\cos(1921/1000) \cdot \exp(-339/200) / 80 - (6 \cdot \exp(-339/200) \cdot \sin(1921/1000)) / 25, - (153$   
 $\cos(3859/2000) \cdot \exp(-681/400) / 80 - (6 \cdot \exp(-681/400) \cdot \sin(3859/2000)) / 25, - (153$   
 $\cos(969/500) \cdot \exp(-171/100) / 80 - (6 \cdot \exp(-171/100) \cdot \sin(969/500)) / 25, - (153$   
 $\cos(3893/2000) \cdot \exp(-687/400) / 80 - (6 \cdot \exp(-687/400) \cdot \sin(3893/2000)) / 25, - (153$   
 $\cos(391/200) \cdot \exp(-69/40) / 80 - (6 \cdot \exp(-69/40) \cdot \sin(391/200)) / 25, - (153$   
 $\cos(3927/2000) \cdot \exp(-693/400) / 80 - (6 \cdot \exp(-693/400) \cdot \sin(3927/2000)) / 25, - (153$   
 $\cos(493/250) \cdot \exp(-87/50) / 80 - (6 \cdot \exp(-87/50) \cdot \sin(493/250)) / 25, - (153$   
 $\cos(3961/2000) \cdot \exp(-699/400) / 80 - (6 \cdot \exp(-699/400) \cdot \sin(3961/2000)) / 25, - (153$   
 $\cos(1989/1000) \cdot \exp(-351/200) / 80 - (6 \cdot \exp(-351/200) \cdot \sin(1989/1000)) / 25, - (153$   
 $\cos(799/400) \cdot \exp(-141/80) / 80 - (6 \cdot \exp(-141/80) \cdot \sin(799/400)) / 25, - (153$   
 $\cos(1003/500) \cdot \exp(-177/100) / 80 - (6 \cdot \exp(-177/100) \cdot \sin(1003/500)) / 25, - (153$   
 $\cos(4029/2000) \cdot \exp(-711/400) / 80 - (6 \cdot \exp(-711/400) \cdot \sin(4029/2000)) / 25, - (153$   
 $\cos(2023/1000) \cdot \exp(-357/200) / 80 - (6 \cdot \exp(-357/200) \cdot \sin(2023/1000)) / 25, - (153$   
 $\cos(4063/2000) \cdot \exp(-717/400) / 80 - (6 \cdot \exp(-717/400) \cdot \sin(4063/2000)) / 25, - (153$   
 $\cos(51/25) \cdot \exp(-9/5) / 80 - (6 \cdot \exp(-9/5) \cdot \sin(51/25)) / 25, - (153$   
 $\cos(4097/2000) \cdot \exp(-723/400) / 80 - (6 \cdot \exp(-723/400) \cdot \sin(4097/2000)) / 25, - (153$   
 $\cos(2057/1000) \cdot \exp(-363/200) / 80 - (6 \cdot \exp(-363/200) \cdot \sin(2057/1000)) / 25, - (153$   
 $\cos(4131/2000) \cdot \exp(-729/400) / 80 - (6 \cdot \exp(-729/400) \cdot \sin(4131/2000)) / 25, - (153$   
 $\cos(1037/500) \cdot \exp(-183/100) / 80 - (6 \cdot \exp(-183/100) \cdot \sin(1037/500)) / 25, - (153$   
 $\cos(833/400) \cdot \exp(-147/80) / 80 - (6 \cdot \exp(-147/80) \cdot \sin(833/400)) / 25, - (153$   
 $\cos(2091/1000) \cdot \exp(-369/200) / 80 - (6 \cdot \exp(-369/200) \cdot \sin(2091/1000)) / 25, - (153$   
 $\cos(4199/2000) \cdot \exp(-741/400) / 80 - (6 \cdot \exp(-741/400) \cdot \sin(4199/2000)) / 25, - (153$



\*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]

d =

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

tn =

Columns 1 through 5

0 0.01 0.02 0.03 0.04

Columns 6 through 10

0.05 0.06 0.07 0.08 0.09

Columns 11 through 15

0.1 0.11 0.12 0.13 0.14

Columns 16 through 20

0.15 0.16 0.17 0.18 0.19

Columns 21 through 25

0.2 0.21 0.22 0.23 0.24

Columns 26 through 30

0.25 0.26 0.27 0.28 0.29

Columns 31 through 35

0.3 0.31 0.32 0.33 0.34

Columns 36 through 40

0.35 0.36 0.37 0.38 0.39

Columns 41 through 45

0.4 0.41 0.42 0.43 0.44

Columns 46 through 50

0.45	0.46	0.47	0.48	0.49
Columns 51 through 55				
0.5	0.51	0.52	0.53	0.54
Columns 56 through 60				
0.55	0.56	0.57	0.58	0.59
Columns 61 through 65				
0.6	0.61	0.62	0.63	0.64
Columns 66 through 70				
0.65	0.66	0.67	0.68	0.69
Columns 71 through 75				
0.7	0.71	0.72	0.73	0.74
Columns 76 through 80				
0.75	0.76	0.77	0.78	0.79
Columns 81 through 85				
0.8	0.81	0.82	0.83	0.84
Columns 86 through 90				
0.85	0.86	0.87	0.88	0.89
Columns 91 through 95				
0.9	0.91	0.92	0.93	0.94
Columns 96 through 100				
0.95	0.96	0.97	0.98	0.99
Columns 101 through 105				
1	1.01	1.02	1.03	1.04
Columns 106 through 110				
1.05	1.06	1.07	1.08	1.09

Columns 111 through 115

1.1	1.11	1.12	1.13	1.14
-----	------	------	------	------

Columns 116 through 120

1.15	1.16	1.17	1.18	1.19
------	------	------	------	------

Columns 121 through 125

1.2	1.21	1.22	1.23	1.24
-----	------	------	------	------

Columns 126 through 130

1.25	1.26	1.27	1.28	1.29
------	------	------	------	------

Columns 131 through 135

1.3	1.31	1.32	1.33	1.34
-----	------	------	------	------

Columns 136 through 140

1.35	1.36	1.37	1.38	1.39
------	------	------	------	------

Columns 141 through 145

1.4	1.41	1.42	1.43	1.44
-----	------	------	------	------

Columns 146 through 150

1.45	1.46	1.47	1.48	1.49
------	------	------	------	------

Columns 151 through 155

1.5	1.51	1.52	1.53	1.54
-----	------	------	------	------

Columns 156 through 160

1.55	1.56	1.57	1.58	1.59
------	------	------	------	------

Columns 161 through 165

1.6	1.61	1.62	1.63	1.64
-----	------	------	------	------

Columns 166 through 170

1.65	1.66	1.67	1.68	1.69
------	------	------	------	------

Columns 171 through 175

1.7	1.71	1.72	1.73	1.74
Columns 176 through 180				
1.75	1.76	1.77	1.78	1.79
Columns 181 through 185				
1.8	1.81	1.82	1.83	1.84
Columns 186 through 190				
1.85	1.86	1.87	1.88	1.89
Columns 191 through 195				
1.9	1.91	1.92	1.93	1.94
Columns 196 through 200				
1.95	1.96	1.97	1.98	1.99
Columns 201 through 205				
2	2.01	2.02	2.03	2.04
Columns 206 through 210				
2.05	2.06	2.07	2.08	2.09
Columns 211 through 215				
2.1	2.11	2.12	2.13	2.14
Columns 216 through 220				
2.15	2.16	2.17	2.18	2.19
Columns 221 through 225				
2.2	2.21	2.22	2.23	2.24
Columns 226 through 230				
2.25	2.26	2.27	2.28	2.29
Columns 231 through 235				
2.3	2.31	2.32	2.33	2.34

Columns 236 through 240

2.35                      2.36                      2.37                      2.38                      2.39

Columns 241 through 245

2.4                        2.41                      2.42                      2.43                      2.44

Columns 246 through 250

2.45                      2.46                      2.47                      2.48                      2.49

Column 251

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*\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 + 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$$

$\cos(459/2000) \exp(-81/400) / 40 - (9 \exp(-81/400) \sin(459/2000)) / 8 + 3/8, (51$   
 $\cos(119/500) \exp(-21/100) / 40 - (9 \exp(-21/100) \sin(119/500)) / 8 + 3/8, (51$   
 $\cos(493/2000) \exp(-87/400) / 40 - (9 \exp(-87/400) \sin(493/2000)) / 8 + 3/8, (51$   
 $\cos(51/200) \exp(-9/40) / 40 - (9 \exp(-9/40) \sin(51/200)) / 8 + 3/8, (51$   
 $\cos(527/2000) \exp(-93/400) / 40 - (9 \exp(-93/400) \sin(527/2000)) / 8 + 3/8, (51$   
 $\cos(34/125) \exp(-6/25) / 40 - (9 \exp(-6/25) \sin(34/125)) / 8 + 3/8, (51$   
 $\cos(561/2000) \exp(-99/400) / 40 - (9 \exp(-99/400) \sin(561/2000)) / 8 + 3/8, (51$   
 $\cos(289/1000) \exp(-51/200) / 40 - (9 \exp(-51/200) \sin(289/1000)) / 8 + 3/8, (51$   
 $\cos(119/400) \exp(-21/80) / 40 - (9 \exp(-21/80) \sin(119/400)) / 8 + 3/8, (51$   
 $\cos(153/500) \exp(-27/100) / 40 - (9 \exp(-27/100) \sin(153/500)) / 8 + 3/8, (51$   
 $\cos(629/2000) \exp(-111/400) / 40 - (9 \exp(-111/400) \sin(629/2000)) / 8 + 3/8, (51$   
 $\cos(323/1000) \exp(-57/200) / 40 - (9 \exp(-57/200) \sin(323/1000)) / 8 + 3/8, (51$   
 $\cos(663/2000) \exp(-117/400) / 40 - (9 \exp(-117/400) \sin(663/2000)) / 8 + 3/8, (51$   
 $\cos(17/50) \exp(-3/10) / 40 - (9 \exp(-3/10) \sin(17/50)) / 8 + 3/8, (51$   
 $\cos(697/2000) \exp(-123/400) / 40 - (9 \exp(-123/400) \sin(697/2000)) / 8 + 3/8, (51$   
 $\cos(357/1000) \exp(-63/200) / 40 - (9 \exp(-63/200) \sin(357/1000)) / 8 + 3/8, (51$   
 $\cos(731/2000) \exp(-129/400) / 40 - (9 \exp(-129/400) \sin(731/2000)) / 8 + 3/8, (51$   
 $\cos(187/500) \exp(-33/100) / 40 - (9 \exp(-33/100) \sin(187/500)) / 8 + 3/8, (51$   
 $\cos(153/400) \exp(-27/80) / 40 - (9 \exp(-27/80) \sin(153/400)) / 8 + 3/8, (51$   
 $\cos(391/1000) \exp(-69/200) / 40 - (9 \exp(-69/200) \sin(391/1000)) / 8 + 3/8, (51$   
 $\cos(799/2000) \exp(-141/400) / 40 - (9 \exp(-141/400) \sin(799/2000)) / 8 + 3/8, (51$   
 $\cos(51/125) \exp(-9/25) / 40 - (9 \exp(-9/25) \sin(51/125)) / 8 + 3/8, (51$   
 $\cos(833/2000) \exp(-147/400) / 40 - (9 \exp(-147/400) \sin(833/2000)) / 8 + 3/8, (51$   
 $\cos(17/40) \exp(-3/8) / 40 - (9 \exp(-3/8) \sin(17/40)) / 8 + 3/8, (51$   
 $\cos(867/2000) \exp(-153/400) / 40 - (9 \exp(-153/400) \sin(867/2000)) / 8 + 3/8, (51$   
 $\cos(221/500) \exp(-39/100) / 40 - (9 \exp(-39/100) \sin(221/500)) / 8 + 3/8, (51$   
 $\cos(901/2000) \exp(-159/400) / 40 - (9 \exp(-159/400) \sin(901/2000)) / 8 + 3/8, (51$   
 $\cos(459/1000) \exp(-81/200) / 40 - (9 \exp(-81/200) \sin(459/1000)) / 8 + 3/8, (51$   
 $\cos(187/400) \exp(-33/80) / 40 - (9 \exp(-33/80) \sin(187/400)) / 8 + 3/8, (51$   
 $\cos(119/250) \exp(-21/50) / 40 - (9 \exp(-21/50) \sin(119/250)) / 8 + 3/8, (51$   
 $\cos(969/2000) \exp(-171/400) / 40 - (9 \exp(-171/400) \sin(969/2000)) / 8 + 3/8, (51$   
 $\cos(493/1000) \exp(-87/200) / 40 - (9 \exp(-87/200) \sin(493/1000)) / 8 + 3/8, (51$   
 $\cos(1003/2000) \exp(-177/400) / 40 - (9 \exp(-177/400) \sin(1003/2000)) / 8 + 3/8, (51$   
 $\cos(51/100) \exp(-9/20) / 40 - (9 \exp(-9/20) \sin(51/100)) / 8 + 3/8, (51$   
 $\cos(1037/2000) \exp(-183/400) / 40 - (9 \exp(-183/400) \sin(1037/2000)) / 8 + 3/8, (51$   
 $\cos(527/1000) \exp(-93/200) / 40 - (9 \exp(-93/200) \sin(527/1000)) / 8 + 3/8, (51$   
 $\cos(1071/2000) \exp(-189/400) / 40 - (9 \exp(-189/400) \sin(1071/2000)) / 8 + 3/8, (51$   
 $\cos(68/125) \exp(-12/25) / 40 - (9 \exp(-12/25) \sin(68/125)) / 8 + 3/8, (51$   
 $\cos(221/400) \exp(-39/80) / 40 - (9 \exp(-39/80) \sin(221/400)) / 8 + 3/8, (51$   
 $\cos(561/1000) \exp(-99/200) / 40 - (9 \exp(-99/200) \sin(561/1000)) / 8 + 3/8, (51$   
 $\cos(1139/2000) \exp(-201/400) / 40 - (9 \exp(-201/400) \sin(1139/2000)) / 8 + 3/8, (51$   
 $\cos(289/500) \exp(-51/100) / 40 - (9 \exp(-51/100) \sin(289/500)) / 8 + 3/8, (51$   
 $\cos(1173/2000) \exp(-207/400) / 40 - (9 \exp(-207/400) \sin(1173/2000)) / 8 + 3/8, (51$   
 $\cos(119/200) \exp(-21/40) / 40 - (9 \exp(-21/40) \sin(119/200)) / 8 + 3/8, (51$   
 $\cos(1207/2000) \exp(-213/400) / 40 - (9 \exp(-213/400) \sin(1207/2000)) / 8 + 3/8, (51$   
 $\cos(153/250) \exp(-27/50) / 40 - (9 \exp(-27/50) \sin(153/250)) / 8 + 3/8, (51$   
 $\cos(1241/2000) \exp(-219/400) / 40 - (9 \exp(-219/400) \sin(1241/2000)) / 8 + 3/8, (51$   
 $\cos(629/1000) \exp(-111/200) / 40 - (9 \exp(-111/200) \sin(629/1000)) / 8 + 3/8, (51$   
 $\cos(51/80) \exp(-9/16) / 40 - (9 \exp(-9/16) \sin(51/80)) / 8 + 3/8, (51$   
 $\cos(323/500) \exp(-57/100) / 40 - (9 \exp(-57/100) \sin(323/500)) / 8 + 3/8, (51$

$\cos(1309/2000) \exp(-231/400)/40 - (9 \exp(-231/400) \sin(1309/2000))/8 + 3/8, (51$   
 $\cos(663/1000) \exp(-117/200)/40 - (9 \exp(-117/200) \sin(663/1000))/8 + 3/8, (51$   
 $\cos(1343/2000) \exp(-237/400)/40 - (9 \exp(-237/400) \sin(1343/2000))/8 + 3/8, (51$   
 $\cos(17/25) \exp(-3/5)/40 - (9 \exp(-3/5) \sin(17/25))/8 + 3/8, (51$   
 $\cos(1377/2000) \exp(-243/400)/40 - (9 \exp(-243/400) \sin(1377/2000))/8 + 3/8, (51$   
 $\cos(697/1000) \exp(-123/200)/40 - (9 \exp(-123/200) \sin(697/1000))/8 + 3/8, (51$   
 $\cos(1411/2000) \exp(-249/400)/40 - (9 \exp(-249/400) \sin(1411/2000))/8 + 3/8, (51$   
 $\cos(357/500) \exp(-63/100)/40 - (9 \exp(-63/100) \sin(357/500))/8 + 3/8, (51$   
 $\cos(289/400) \exp(-51/80)/40 - (9 \exp(-51/80) \sin(289/400))/8 + 3/8, (51$   
 $\cos(731/1000) \exp(-129/200)/40 - (9 \exp(-129/200) \sin(731/1000))/8 + 3/8, (51$   
 $\cos(1479/2000) \exp(-261/400)/40 - (9 \exp(-261/400) \sin(1479/2000))/8 + 3/8, (51$   
 $\cos(187/250) \exp(-33/50)/40 - (9 \exp(-33/50) \sin(187/250))/8 + 3/8, (51$   
 $\cos(1513/2000) \exp(-267/400)/40 - (9 \exp(-267/400) \sin(1513/2000))/8 + 3/8, (51$   
 $\cos(153/200) \exp(-27/40)/40 - (9 \exp(-27/40) \sin(153/200))/8 + 3/8, (51$   
 $\cos(1547/2000) \exp(-273/400)/40 - (9 \exp(-273/400) \sin(1547/2000))/8 + 3/8, (51$   
 $\cos(391/500) \exp(-69/100)/40 - (9 \exp(-69/100) \sin(391/500))/8 + 3/8, (51$   
 $\cos(1581/2000) \exp(-279/400)/40 - (9 \exp(-279/400) \sin(1581/2000))/8 + 3/8, (51$   
 $\cos(799/1000) \exp(-141/200)/40 - (9 \exp(-141/200) \sin(799/1000))/8 + 3/8, (51$   
 $\cos(323/400) \exp(-57/80)/40 - (9 \exp(-57/80) \sin(323/400))/8 + 3/8, (51$   
 $\cos(102/125) \exp(-18/25)/40 - (9 \exp(-18/25) \sin(102/125))/8 + 3/8, (51$   
 $\cos(1649/2000) \exp(-291/400)/40 - (9 \exp(-291/400) \sin(1649/2000))/8 + 3/8, (51$   
 $\cos(833/1000) \exp(-147/200)/40 - (9 \exp(-147/200) \sin(833/1000))/8 + 3/8, (51$   
 $\cos(1683/2000) \exp(-297/400)/40 - (9 \exp(-297/400) \sin(1683/2000))/8 + 3/8, (51$   
 $\cos(17/20) \exp(-3/4)/40 - (9 \exp(-3/4) \sin(17/20))/8 + 3/8, (51$   
 $\cos(1717/2000) \exp(-303/400)/40 - (9 \exp(-303/400) \sin(1717/2000))/8 + 3/8, (51$   
 $\cos(867/1000) \exp(-153/200)/40 - (9 \exp(-153/200) \sin(867/1000))/8 + 3/8, (51$   
 $\cos(1751/2000) \exp(-309/400)/40 - (9 \exp(-309/400) \sin(1751/2000))/8 + 3/8, (51$   
 $\cos(221/250) \exp(-39/50)/40 - (9 \exp(-39/50) \sin(221/250))/8 + 3/8, (51$   
 $\cos(357/400) \exp(-63/80)/40 - (9 \exp(-63/80) \sin(357/400))/8 + 3/8, (51$   
 $\cos(901/1000) \exp(-159/200)/40 - (9 \exp(-159/200) \sin(901/1000))/8 + 3/8, (51$   
 $\cos(1819/2000) \exp(-321/400)/40 - (9 \exp(-321/400) \sin(1819/2000))/8 + 3/8, (51$   
 $\cos(459/500) \exp(-81/100)/40 - (9 \exp(-81/100) \sin(459/500))/8 + 3/8, (51$   
 $\cos(1853/2000) \exp(-327/400)/40 - (9 \exp(-327/400) \sin(1853/2000))/8 + 3/8, (51$   
 $\cos(187/200) \exp(-33/40)/40 - (9 \exp(-33/40) \sin(187/200))/8 + 3/8, (51$   
 $\cos(1887/2000) \exp(-333/400)/40 - (9 \exp(-333/400) \sin(1887/2000))/8 + 3/8, (51$   
 $\cos(119/125) \exp(-21/25)/40 - (9 \exp(-21/25) \sin(119/125))/8 + 3/8, (51$   
 $\cos(1921/2000) \exp(-339/400)/40 - (9 \exp(-339/400) \sin(1921/2000))/8 + 3/8, (51$   
 $\cos(969/1000) \exp(-171/200)/40 - (9 \exp(-171/200) \sin(969/1000))/8 + 3/8, (51$   
 $\cos(391/400) \exp(-69/80)/40 - (9 \exp(-69/80) \sin(391/400))/8 + 3/8, (51$   
 $\cos(493/500) \exp(-87/100)/40 - (9 \exp(-87/100) \sin(493/500))/8 + 3/8, (51$   
 $\cos(1989/2000) \exp(-351/400)/40 - (9 \exp(-351/400) \sin(1989/2000))/8 + 3/8, (51$   
 $\cos(1003/1000) \exp(-177/200)/40 - (9 \exp(-177/200) \sin(1003/1000))/8 + 3/8, (51$   
 $\cos(2023/2000) \exp(-357/400)/40 - (9 \exp(-357/400) \sin(2023/2000))/8 + 3/8, (51$   
 $\cos(51/50) \exp(-9/10)/40 - (9 \exp(-9/10) \sin(51/50))/8 + 3/8, (51$   
 $\cos(2057/2000) \exp(-363/400)/40 - (9 \exp(-363/400) \sin(2057/2000))/8 + 3/8, (51$   
 $\cos(1037/1000) \exp(-183/200)/40 - (9 \exp(-183/200) \sin(1037/1000))/8 + 3/8, (51$   
 $\cos(2091/2000) \exp(-369/400)/40 - (9 \exp(-369/400) \sin(2091/2000))/8 + 3/8, (51$   
 $\cos(527/500) \exp(-93/100)/40 - (9 \exp(-93/100) \sin(527/500))/8 + 3/8, (51$   
 $\cos(17/16) \exp(-15/16)/40 - (9 \exp(-15/16) \sin(17/16))/8 + 3/8, (51$   
 $\cos(1071/1000) \exp(-189/200)/40 - (9 \exp(-189/200) \sin(1071/1000))/8 + 3/8, (51$

$\cos(2159/2000) \exp(-381/400)/40 - (9 \exp(-381/400) \sin(2159/2000))/8 + 3/8, (51$   
 $\cos(136/125) \exp(-24/25))/40 - (9 \exp(-24/25) \sin(136/125))/8 + 3/8, (51$   
 $\cos(2193/2000) \exp(-387/400))/40 - (9 \exp(-387/400) \sin(2193/2000))/8 + 3/8, (51$   
 $\cos(221/200) \exp(-39/40))/40 - (9 \exp(-39/40) \sin(221/200))/8 + 3/8, (51$   
 $\cos(2227/2000) \exp(-393/400))/40 - (9 \exp(-393/400) \sin(2227/2000))/8 + 3/8, (51$   
 $\cos(561/500) \exp(-99/100))/40 - (9 \exp(-99/100) \sin(561/500))/8 + 3/8, (51$   
 $\cos(2261/2000) \exp(-399/400))/40 - (9 \exp(-399/400) \sin(2261/2000))/8 + 3/8, (51$   
 $\cos(1139/1000) \exp(-201/200))/40 - (9 \exp(-201/200) \sin(1139/1000))/8 + 3/8, (51$   
 $\cos(459/400) \exp(-81/80))/40 - (9 \exp(-81/80) \sin(459/400))/8 + 3/8, (51$   
 $\cos(289/250) \exp(-51/50))/40 - (9 \exp(-51/50) \sin(289/250))/8 + 3/8, (51$   
 $\cos(2329/2000) \exp(-411/400))/40 - (9 \exp(-411/400) \sin(2329/2000))/8 + 3/8, (51$   
 $\cos(1173/1000) \exp(-207/200))/40 - (9 \exp(-207/200) \sin(1173/1000))/8 + 3/8, (51$   
 $\cos(2363/2000) \exp(-417/400))/40 - (9 \exp(-417/400) \sin(2363/2000))/8 + 3/8, (51$   
 $\cos(119/100) \exp(-21/20))/40 - (9 \exp(-21/20) \sin(119/100))/8 + 3/8, (51$   
 $\cos(2397/2000) \exp(-423/400))/40 - (9 \exp(-423/400) \sin(2397/2000))/8 + 3/8, (51$   
 $\cos(1207/1000) \exp(-213/200))/40 - (9 \exp(-213/200) \sin(1207/1000))/8 + 3/8, (51$   
 $\cos(2431/2000) \exp(-429/400))/40 - (9 \exp(-429/400) \sin(2431/2000))/8 + 3/8, (51$   
 $\cos(153/125) \exp(-27/25))/40 - (9 \exp(-27/25) \sin(153/125))/8 + 3/8, (51$   
 $\cos(493/400) \exp(-87/80))/40 - (9 \exp(-87/80) \sin(493/400))/8 + 3/8, (51$   
 $\cos(1241/1000) \exp(-219/200))/40 - (9 \exp(-219/200) \sin(1241/1000))/8 + 3/8, (51$   
 $\cos(2499/2000) \exp(-441/400))/40 - (9 \exp(-441/400) \sin(2499/2000))/8 + 3/8, (51$   
 $\cos(629/500) \exp(-111/100))/40 - (9 \exp(-111/100) \sin(629/500))/8 + 3/8, (51$   
 $\cos(2533/2000) \exp(-447/400))/40 - (9 \exp(-447/400) \sin(2533/2000))/8 + 3/8, (51$   
 $\cos(51/40) \exp(-9/8))/40 - (9 \exp(-9/8) \sin(51/40))/8 + 3/8, (51$   
 $\cos(2567/2000) \exp(-453/400))/40 - (9 \exp(-453/400) \sin(2567/2000))/8 + 3/8, (51$   
 $\cos(323/250) \exp(-57/50))/40 - (9 \exp(-57/50) \sin(323/250))/8 + 3/8, (51$   
 $\cos(2601/2000) \exp(-459/400))/40 - (9 \exp(-459/400) \sin(2601/2000))/8 + 3/8, (51$   
 $\cos(1309/1000) \exp(-231/200))/40 - (9 \exp(-231/200) \sin(1309/1000))/8 + 3/8, (51$   
 $\cos(527/400) \exp(-93/80))/40 - (9 \exp(-93/80) \sin(527/400))/8 + 3/8, (51$   
 $\cos(663/500) \exp(-117/100))/40 - (9 \exp(-117/100) \sin(663/500))/8 + 3/8, (51$   
 $\cos(2669/2000) \exp(-471/400))/40 - (9 \exp(-471/400) \sin(2669/2000))/8 + 3/8, (51$   
 $\cos(1343/1000) \exp(-237/200))/40 - (9 \exp(-237/200) \sin(1343/1000))/8 + 3/8, (51$   
 $\cos(2703/2000) \exp(-477/400))/40 - (9 \exp(-477/400) \sin(2703/2000))/8 + 3/8, (51$   
 $\cos(34/25) \exp(-6/5))/40 - (9 \exp(-6/5) \sin(34/25))/8 + 3/8, (51$   
 $\cos(2737/2000) \exp(-483/400))/40 - (9 \exp(-483/400) \sin(2737/2000))/8 + 3/8, (51$   
 $\cos(1377/1000) \exp(-243/200))/40 - (9 \exp(-243/200) \sin(1377/1000))/8 + 3/8, (51$   
 $\cos(2771/2000) \exp(-489/400))/40 - (9 \exp(-489/400) \sin(2771/2000))/8 + 3/8, (51$   
 $\cos(697/500) \exp(-123/100))/40 - (9 \exp(-123/100) \sin(697/500))/8 + 3/8, (51$   
 $\cos(561/400) \exp(-99/80))/40 - (9 \exp(-99/80) \sin(561/400))/8 + 3/8, (51$   
 $\cos(1411/1000) \exp(-249/200))/40 - (9 \exp(-249/200) \sin(1411/1000))/8 + 3/8, (51$   
 $\cos(2839/2000) \exp(-501/400))/40 - (9 \exp(-501/400) \sin(2839/2000))/8 + 3/8, (51$   
 $\cos(357/250) \exp(-63/50))/40 - (9 \exp(-63/50) \sin(357/250))/8 + 3/8, (51$   
 $\cos(2873/2000) \exp(-507/400))/40 - (9 \exp(-507/400) \sin(2873/2000))/8 + 3/8, (51$   
 $\cos(289/200) \exp(-51/40))/40 - (9 \exp(-51/40) \sin(289/200))/8 + 3/8, (51$   
 $\cos(2907/2000) \exp(-513/400))/40 - (9 \exp(-513/400) \sin(2907/2000))/8 + 3/8, (51$   
 $\cos(731/500) \exp(-129/100))/40 - (9 \exp(-129/100) \sin(731/500))/8 + 3/8, (51$   
 $\cos(2941/2000) \exp(-519/400))/40 - (9 \exp(-519/400) \sin(2941/2000))/8 + 3/8, (51$   
 $\cos(1479/1000) \exp(-261/200))/40 - (9 \exp(-261/200) \sin(1479/1000))/8 + 3/8, (51$   
 $\cos(119/80) \exp(-21/16))/40 - (9 \exp(-21/16) \sin(119/80))/8 + 3/8, (51$   
 $\cos(187/125) \exp(-33/25))/40 - (9 \exp(-33/25) \sin(187/125))/8 + 3/8, (51$



$\cos(3009/2000) \exp(-531/400)/40 - (9 \exp(-531/400) \sin(3009/2000))/8 + 3/8$ , (51)  
 $\cos(1513/1000) \exp(-267/200)/40 - (9 \exp(-267/200) \sin(1513/1000))/8 + 3/8$ , (51)  
 $\cos(3043/2000) \exp(-537/400)/40 - (9 \exp(-537/400) \sin(3043/2000))/8 + 3/8$ , (51)  
 $\cos(153/100) \exp(-27/20)/40 - (9 \exp(-27/20) \sin(153/100))/8 + 3/8$ , (51)  
 $\cos(3077/2000) \exp(-543/400)/40 - (9 \exp(-543/400) \sin(3077/2000))/8 + 3/8$ , (51)  
 $\cos(1547/1000) \exp(-273/200)/40 - (9 \exp(-273/200) \sin(1547/1000))/8 + 3/8$ , (51)  
 $\cos(3111/2000) \exp(-549/400)/40 - (9 \exp(-549/400) \sin(3111/2000))/8 + 3/8$ , (51)  
 $\cos(391/250) \exp(-69/50)/40 - (9 \exp(-69/50) \sin(391/250))/8 + 3/8$ , (51)  
 $\cos(629/400) \exp(-111/80)/40 - (9 \exp(-111/80) \sin(629/400))/8 + 3/8$ , (51)  
 $\cos(1581/1000) \exp(-279/200)/40 - (9 \exp(-279/200) \sin(1581/1000))/8 + 3/8$ , (51)  
 $\cos(3179/2000) \exp(-561/400)/40 - (9 \exp(-561/400) \sin(3179/2000))/8 + 3/8$ , (51)  
 $\cos(799/500) \exp(-141/100)/40 - (9 \exp(-141/100) \sin(799/500))/8 + 3/8$ , (51)  
 $\cos(3213/2000) \exp(-567/400)/40 - (9 \exp(-567/400) \sin(3213/2000))/8 + 3/8$ , (51)  
 $\cos(323/200) \exp(-57/40)/40 - (9 \exp(-57/40) \sin(323/200))/8 + 3/8$ , (51)  
 $\cos(3247/2000) \exp(-573/400)/40 - (9 \exp(-573/400) \sin(3247/2000))/8 + 3/8$ , (51)  
 $\cos(204/125) \exp(-36/25)/40 - (9 \exp(-36/25) \sin(204/125))/8 + 3/8$ , (51)  
 $\cos(3281/2000) \exp(-579/400)/40 - (9 \exp(-579/400) \sin(3281/2000))/8 + 3/8$ , (51)  
 $\cos(1649/1000) \exp(-291/200)/40 - (9 \exp(-291/200) \sin(1649/1000))/8 + 3/8$ , (51)  
 $\cos(663/400) \exp(-117/80)/40 - (9 \exp(-117/80) \sin(663/400))/8 + 3/8$ , (51)  
 $\cos(833/500) \exp(-147/100)/40 - (9 \exp(-147/100) \sin(833/500))/8 + 3/8$ , (51)  
 $\cos(3349/2000) \exp(-591/400)/40 - (9 \exp(-591/400) \sin(3349/2000))/8 + 3/8$ , (51)  
 $\cos(1683/1000) \exp(-297/200)/40 - (9 \exp(-297/200) \sin(1683/1000))/8 + 3/8$ , (51)  
 $\cos(3383/2000) \exp(-597/400)/40 - (9 \exp(-597/400) \sin(3383/2000))/8 + 3/8$ , (51)  
 $\cos(17/10) \exp(-3/2)/40 - (9 \exp(-3/2) \sin(17/10))/8 + 3/8$ , (51)  
 $\cos(3417/2000) \exp(-603/400)/40 - (9 \exp(-603/400) \sin(3417/2000))/8 + 3/8$ , (51)  
 $\cos(1717/1000) \exp(-303/200)/40 - (9 \exp(-303/200) \sin(1717/1000))/8 + 3/8$ , (51)  
 $\cos(3451/2000) \exp(-609/400)/40 - (9 \exp(-609/400) \sin(3451/2000))/8 + 3/8$ , (51)  
 $\cos(867/500) \exp(-153/100)/40 - (9 \exp(-153/100) \sin(867/500))/8 + 3/8$ , (51)  
 $\cos(697/400) \exp(-123/80)/40 - (9 \exp(-123/80) \sin(697/400))/8 + 3/8$ , (51)  
 $\cos(1751/1000) \exp(-309/200)/40 - (9 \exp(-309/200) \sin(1751/1000))/8 + 3/8$ , (51)  
 $\cos(3519/2000) \exp(-621/400)/40 - (9 \exp(-621/400) \sin(3519/2000))/8 + 3/8$ , (51)  
 $\cos(221/125) \exp(-39/25)/40 - (9 \exp(-39/25) \sin(221/125))/8 + 3/8$ , (51)  
 $\cos(3553/2000) \exp(-627/400)/40 - (9 \exp(-627/400) \sin(3553/2000))/8 + 3/8$ , (51)  
 $\cos(357/200) \exp(-63/40)/40 - (9 \exp(-63/40) \sin(357/200))/8 + 3/8$ , (51)  
 $\cos(3587/2000) \exp(-633/400)/40 - (9 \exp(-633/400) \sin(3587/2000))/8 + 3/8$ , (51)  
 $\cos(901/500) \exp(-159/100)/40 - (9 \exp(-159/100) \sin(901/500))/8 + 3/8$ , (51)  
 $\cos(3621/2000) \exp(-639/400)/40 - (9 \exp(-639/400) \sin(3621/2000))/8 + 3/8$ , (51)  
 $\cos(1819/1000) \exp(-321/200)/40 - (9 \exp(-321/200) \sin(1819/1000))/8 + 3/8$ , (51)  
 $\cos(731/400) \exp(-129/80)/40 - (9 \exp(-129/80) \sin(731/400))/8 + 3/8$ , (51)  
 $\cos(459/250) \exp(-81/50)/40 - (9 \exp(-81/50) \sin(459/250))/8 + 3/8$ , (51)  
 $\cos(3689/2000) \exp(-651/400)/40 - (9 \exp(-651/400) \sin(3689/2000))/8 + 3/8$ , (51)  
 $\cos(1853/1000) \exp(-327/200)/40 - (9 \exp(-327/200) \sin(1853/1000))/8 + 3/8$ , (51)  
 $\cos(3723/2000) \exp(-657/400)/40 - (9 \exp(-657/400) \sin(3723/2000))/8 + 3/8$ , (51)  
 $\cos(187/100) \exp(-33/20)/40 - (9 \exp(-33/20) \sin(187/100))/8 + 3/8$ , (51)  
 $\cos(3757/2000) \exp(-663/400)/40 - (9 \exp(-663/400) \sin(3757/2000))/8 + 3/8$ , (51)  
 $\cos(1887/1000) \exp(-333/200)/40 - (9 \exp(-333/200) \sin(1887/1000))/8 + 3/8$ , (51)  
 $\cos(3791/2000) \exp(-669/400)/40 - (9 \exp(-669/400) \sin(3791/2000))/8 + 3/8$ , (51)  
 $\cos(238/125) \exp(-42/25)/40 - (9 \exp(-42/25) \sin(238/125))/8 + 3/8$ , (51)  
 $\cos(153/80) \exp(-27/16)/40 - (9 \exp(-27/16) \sin(153/80))/8 + 3/8$ , (51)  
 $\cos(1921/1000) \exp(-339/200)/40 - (9 \exp(-339/200) \sin(1921/1000))/8 + 3/8$ , (51)

$\frac{\cos(3859/2000) \exp(-681/400)}{40} - \frac{9 \exp(-681/400) \sin(3859/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(969/500) \exp(-171/100)}{40} - \frac{9 \exp(-171/100) \sin(969/500)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(3893/2000) \exp(-687/400)}{40} - \frac{9 \exp(-687/400) \sin(3893/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(391/200) \exp(-69/40)}{40} - \frac{9 \exp(-69/40) \sin(391/200)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(3927/2000) \exp(-693/400)}{40} - \frac{9 \exp(-693/400) \sin(3927/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(493/250) \exp(-87/50)}{40} - \frac{9 \exp(-87/50) \sin(493/250)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(3961/2000) \exp(-699/400)}{40} - \frac{9 \exp(-699/400) \sin(3961/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(1989/1000) \exp(-351/200)}{40} - \frac{9 \exp(-351/200) \sin(1989/1000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(799/400) \exp(-141/80)}{40} - \frac{9 \exp(-141/80) \sin(799/400)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(1003/500) \exp(-177/100)}{40} - \frac{9 \exp(-177/100) \sin(1003/500)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4029/2000) \exp(-711/400)}{40} - \frac{9 \exp(-711/400) \sin(4029/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(2023/1000) \exp(-357/200)}{40} - \frac{9 \exp(-357/200) \sin(2023/1000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4063/2000) \exp(-717/400)}{40} - \frac{9 \exp(-717/400) \sin(4063/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(51/25) \exp(-9/5)}{40} - \frac{9 \exp(-9/5) \sin(51/25)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4097/2000) \exp(-723/400)}{40} - \frac{9 \exp(-723/400) \sin(4097/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(2057/1000) \exp(-363/200)}{40} - \frac{9 \exp(-363/200) \sin(2057/1000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4131/2000) \exp(-729/400)}{40} - \frac{9 \exp(-729/400) \sin(4131/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(1037/500) \exp(-183/100)}{40} - \frac{9 \exp(-183/100) \sin(1037/500)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(833/400) \exp(-147/80)}{40} - \frac{9 \exp(-147/80) \sin(833/400)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(2091/1000) \exp(-369/200)}{40} - \frac{9 \exp(-369/200) \sin(2091/1000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4199/2000) \exp(-741/400)}{40} - \frac{9 \exp(-741/400) \sin(4199/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(527/250) \exp(-93/50)}{40} - \frac{9 \exp(-93/50) \sin(527/250)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(4233/2000) \exp(-747/400)}{40} - \frac{9 \exp(-747/400) \sin(4233/2000)}{8} + \frac{3}{8}$ , (51  
 $\frac{\cos(17/8) \exp(-15/8)}{40} - \frac{9 \exp(-15/8) \sin(17/8)}{8} + \frac{3}{8}$ ]

a =

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

an =

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

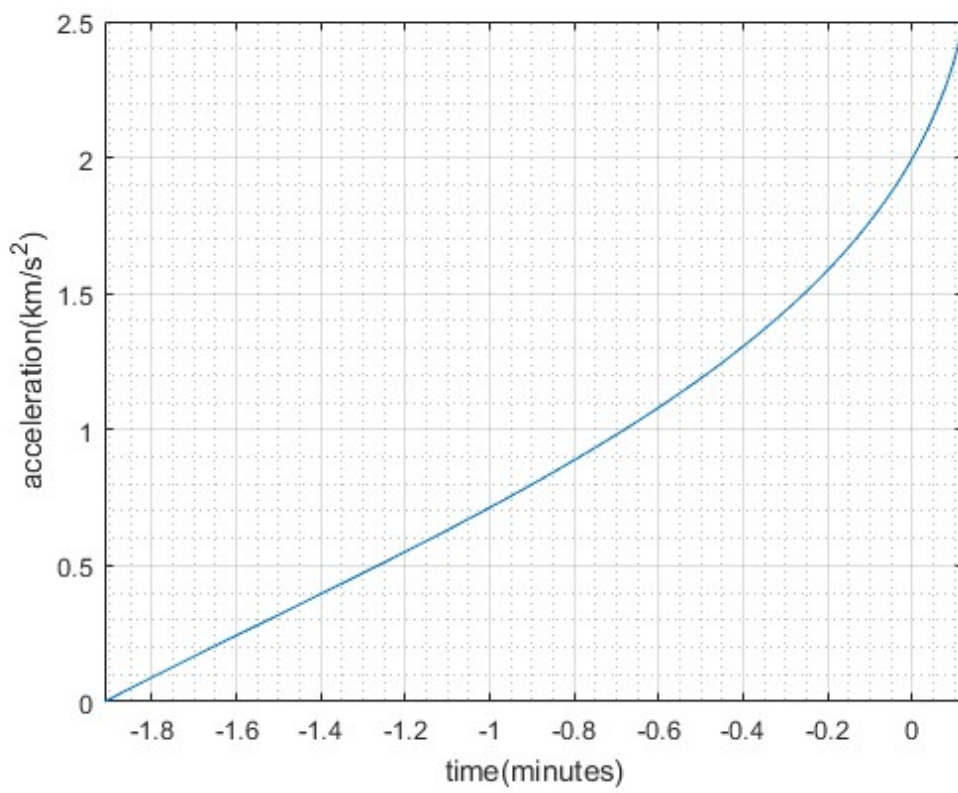
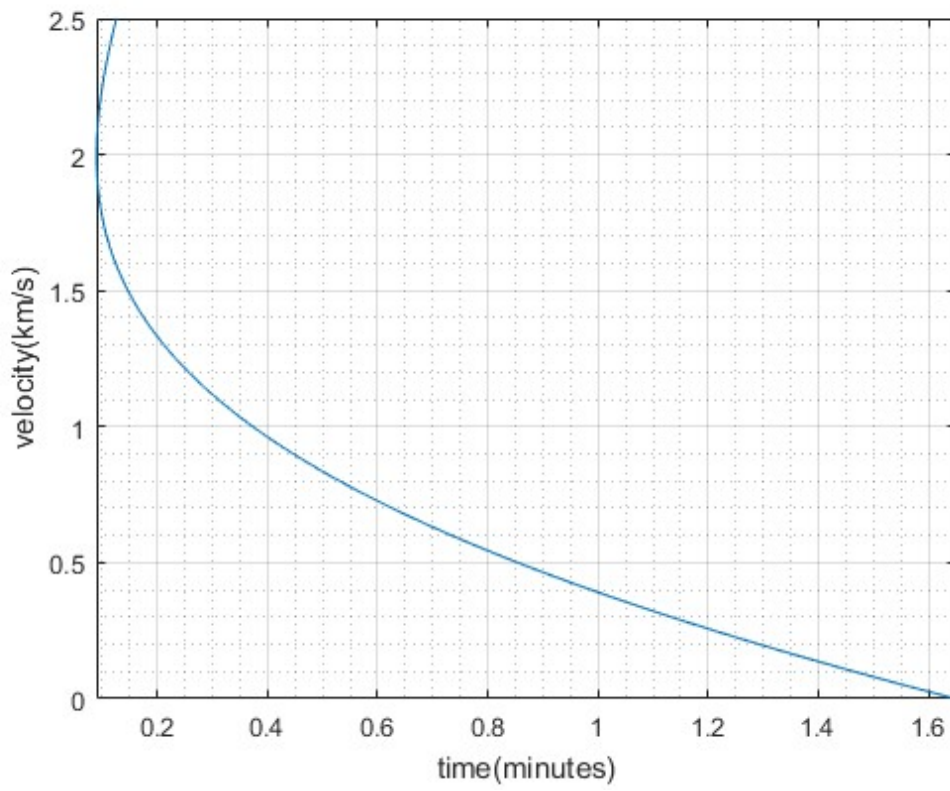
$\cos(153/1000) \cdot \exp(-27/200) / 80 - (6 \cdot \exp(-27/200) \cdot \sin(153/1000)) / 25, - (153$   
 $\cos(323/2000) \cdot \exp(-57/400) / 80 - (6 \cdot \exp(-57/400) \cdot \sin(323/2000)) / 25, - (153$   
 $\cos(17/100) \cdot \exp(-3/20) / 80 - (6 \cdot \exp(-3/20) \cdot \sin(17/100)) / 25, - (153$   
 $\cos(357/2000) \cdot \exp(-63/400) / 80 - (6 \cdot \exp(-63/400) \cdot \sin(357/2000)) / 25, - (153$   
 $\cos(187/1000) \cdot \exp(-33/200) / 80 - (6 \cdot \exp(-33/200) \cdot \sin(187/1000)) / 25, - (153$   
 $\cos(391/2000) \cdot \exp(-69/400) / 80 - (6 \cdot \exp(-69/400) \cdot \sin(391/2000)) / 25, - (153$   
 $\cos(51/250) \cdot \exp(-9/50) / 80 - (6 \cdot \exp(-9/50) \cdot \sin(51/250)) / 25, - (153$   
 $\cos(17/80) \cdot \exp(-3/16) / 80 - (6 \cdot \exp(-3/16) \cdot \sin(17/80)) / 25, - (153$   
 $\cos(221/1000) \cdot \exp(-39/200) / 80 - (6 \cdot \exp(-39/200) \cdot \sin(221/1000)) / 25, - (153$   
 $\cos(459/2000) \cdot \exp(-81/400) / 80 - (6 \cdot \exp(-81/400) \cdot \sin(459/2000)) / 25, - (153$   
 $\cos(119/500) \cdot \exp(-21/100) / 80 - (6 \cdot \exp(-21/100) \cdot \sin(119/500)) / 25, - (153$   
 $\cos(493/2000) \cdot \exp(-87/400) / 80 - (6 \cdot \exp(-87/400) \cdot \sin(493/2000)) / 25, - (153$   
 $\cos(51/200) \cdot \exp(-9/40) / 80 - (6 \cdot \exp(-9/40) \cdot \sin(51/200)) / 25, - (153$   
 $\cos(527/2000) \cdot \exp(-93/400) / 80 - (6 \cdot \exp(-93/400) \cdot \sin(527/2000)) / 25, - (153$   
 $\cos(34/125) \cdot \exp(-6/25) / 80 - (6 \cdot \exp(-6/25) \cdot \sin(34/125)) / 25, - (153$   
 $\cos(561/2000) \cdot \exp(-99/400) / 80 - (6 \cdot \exp(-99/400) \cdot \sin(561/2000)) / 25, - (153$   
 $\cos(289/1000) \cdot \exp(-51/200) / 80 - (6 \cdot \exp(-51/200) \cdot \sin(289/1000)) / 25, - (153$   
 $\cos(119/400) \cdot \exp(-21/80) / 80 - (6 \cdot \exp(-21/80) \cdot \sin(119/400)) / 25, - (153$   
 $\cos(153/500) \cdot \exp(-27/100) / 80 - (6 \cdot \exp(-27/100) \cdot \sin(153/500)) / 25, - (153$   
 $\cos(629/2000) \cdot \exp(-111/400) / 80 - (6 \cdot \exp(-111/400) \cdot \sin(629/2000)) / 25, - (153$   
 $\cos(323/1000) \cdot \exp(-57/200) / 80 - (6 \cdot \exp(-57/200) \cdot \sin(323/1000)) / 25, - (153$   
 $\cos(663/2000) \cdot \exp(-117/400) / 80 - (6 \cdot \exp(-117/400) \cdot \sin(663/2000)) / 25, - (153$   
 $\cos(17/50) \cdot \exp(-3/10) / 80 - (6 \cdot \exp(-3/10) \cdot \sin(17/50)) / 25, - (153$   
 $\cos(697/2000) \cdot \exp(-123/400) / 80 - (6 \cdot \exp(-123/400) \cdot \sin(697/2000)) / 25, - (153$   
 $\cos(357/1000) \cdot \exp(-63/200) / 80 - (6 \cdot \exp(-63/200) \cdot \sin(357/1000)) / 25, - (153$   
 $\cos(731/2000) \cdot \exp(-129/400) / 80 - (6 \cdot \exp(-129/400) \cdot \sin(731/2000)) / 25, - (153$   
 $\cos(187/500) \cdot \exp(-33/100) / 80 - (6 \cdot \exp(-33/100) \cdot \sin(187/500)) / 25, - (153$   
 $\cos(153/400) \cdot \exp(-27/80) / 80 - (6 \cdot \exp(-27/80) \cdot \sin(153/400)) / 25, - (153$   
 $\cos(391/1000) \cdot \exp(-69/200) / 80 - (6 \cdot \exp(-69/200) \cdot \sin(391/1000)) / 25, - (153$   
 $\cos(799/2000) \cdot \exp(-141/400) / 80 - (6 \cdot \exp(-141/400) \cdot \sin(799/2000)) / 25, - (153$   
 $\cos(51/125) \cdot \exp(-9/25) / 80 - (6 \cdot \exp(-9/25) \cdot \sin(51/125)) / 25, - (153$   
 $\cos(833/2000) \cdot \exp(-147/400) / 80 - (6 \cdot \exp(-147/400) \cdot \sin(833/2000)) / 25, - (153$   
 $\cos(17/40) \cdot \exp(-3/8) / 80 - (6 \cdot \exp(-3/8) \cdot \sin(17/40)) / 25, - (153$   
 $\cos(867/2000) \cdot \exp(-153/400) / 80 - (6 \cdot \exp(-153/400) \cdot \sin(867/2000)) / 25, - (153$   
 $\cos(221/500) \cdot \exp(-39/100) / 80 - (6 \cdot \exp(-39/100) \cdot \sin(221/500)) / 25, - (153$   
 $\cos(901/2000) \cdot \exp(-159/400) / 80 - (6 \cdot \exp(-159/400) \cdot \sin(901/2000)) / 25, - (153$   
 $\cos(459/1000) \cdot \exp(-81/200) / 80 - (6 \cdot \exp(-81/200) \cdot \sin(459/1000)) / 25, - (153$   
 $\cos(187/400) \cdot \exp(-33/80) / 80 - (6 \cdot \exp(-33/80) \cdot \sin(187/400)) / 25, - (153$   
 $\cos(119/250) \cdot \exp(-21/50) / 80 - (6 \cdot \exp(-21/50) \cdot \sin(119/250)) / 25, - (153$   
 $\cos(969/2000) \cdot \exp(-171/400) / 80 - (6 \cdot \exp(-171/400) \cdot \sin(969/2000)) / 25, - (153$   
 $\cos(493/1000) \cdot \exp(-87/200) / 80 - (6 \cdot \exp(-87/200) \cdot \sin(493/1000)) / 25, - (153$   
 $\cos(1003/2000) \cdot \exp(-177/400) / 80 - (6 \cdot \exp(-177/400) \cdot \sin(1003/2000)) / 25, - (153$   
 $\cos(51/100) \cdot \exp(-9/20) / 80 - (6 \cdot \exp(-9/20) \cdot \sin(51/100)) / 25, - (153$   
 $\cos(1037/2000) \cdot \exp(-183/400) / 80 - (6 \cdot \exp(-183/400) \cdot \sin(1037/2000)) / 25, - (153$   
 $\cos(527/1000) \cdot \exp(-93/200) / 80 - (6 \cdot \exp(-93/200) \cdot \sin(527/1000)) / 25, - (153$   
 $\cos(1071/2000) \cdot \exp(-189/400) / 80 - (6 \cdot \exp(-189/400) \cdot \sin(1071/2000)) / 25, - (153$   
 $\cos(68/125) \cdot \exp(-12/25) / 80 - (6 \cdot \exp(-12/25) \cdot \sin(68/125)) / 25, - (153$   
 $\cos(221/400) \cdot \exp(-39/80) / 80 - (6 \cdot \exp(-39/80) \cdot \sin(221/400)) / 25, - (153$   
 $\cos(561/1000) \cdot \exp(-99/200) / 80 - (6 \cdot \exp(-99/200) \cdot \sin(561/1000)) / 25, - (153$   
 $\cos(1139/2000) \cdot \exp(-201/400) / 80 - (6 \cdot \exp(-201/400) \cdot \sin(1139/2000)) / 25, - (153$

$\cos(289/500) \exp(-51/100) / 80 - (6 \exp(-51/100) \sin(289/500)) / 25, - (153$   
 $\cos(1173/2000) \exp(-207/400) / 80 - (6 \exp(-207/400) \sin(1173/2000)) / 25, - (153$   
 $\cos(119/200) \exp(-21/40) / 80 - (6 \exp(-21/40) \sin(119/200)) / 25, - (153$   
 $\cos(1207/2000) \exp(-213/400) / 80 - (6 \exp(-213/400) \sin(1207/2000)) / 25, - (153$   
 $\cos(153/250) \exp(-27/50) / 80 - (6 \exp(-27/50) \sin(153/250)) / 25, - (153$   
 $\cos(1241/2000) \exp(-219/400) / 80 - (6 \exp(-219/400) \sin(1241/2000)) / 25, - (153$   
 $\cos(629/1000) \exp(-111/200) / 80 - (6 \exp(-111/200) \sin(629/1000)) / 25, - (153$   
 $\cos(51/80) \exp(-9/16) / 80 - (6 \exp(-9/16) \sin(51/80)) / 25, - (153$   
 $\cos(323/500) \exp(-57/100) / 80 - (6 \exp(-57/100) \sin(323/500)) / 25, - (153$   
 $\cos(1309/2000) \exp(-231/400) / 80 - (6 \exp(-231/400) \sin(1309/2000)) / 25, - (153$   
 $\cos(663/1000) \exp(-117/200) / 80 - (6 \exp(-117/200) \sin(663/1000)) / 25, - (153$   
 $\cos(1343/2000) \exp(-237/400) / 80 - (6 \exp(-237/400) \sin(1343/2000)) / 25, - (153$   
 $\cos(17/25) \exp(-3/5) / 80 - (6 \exp(-3/5) \sin(17/25)) / 25, - (153$   
 $\cos(1377/2000) \exp(-243/400) / 80 - (6 \exp(-243/400) \sin(1377/2000)) / 25, - (153$   
 $\cos(697/1000) \exp(-123/200) / 80 - (6 \exp(-123/200) \sin(697/1000)) / 25, - (153$   
 $\cos(1411/2000) \exp(-249/400) / 80 - (6 \exp(-249/400) \sin(1411/2000)) / 25, - (153$   
 $\cos(357/500) \exp(-63/100) / 80 - (6 \exp(-63/100) \sin(357/500)) / 25, - (153$   
 $\cos(289/400) \exp(-51/80) / 80 - (6 \exp(-51/80) \sin(289/400)) / 25, - (153$   
 $\cos(731/1000) \exp(-129/200) / 80 - (6 \exp(-129/200) \sin(731/1000)) / 25, - (153$   
 $\cos(1479/2000) \exp(-261/400) / 80 - (6 \exp(-261/400) \sin(1479/2000)) / 25, - (153$   
 $\cos(187/250) \exp(-33/50) / 80 - (6 \exp(-33/50) \sin(187/250)) / 25, - (153$   
 $\cos(1513/2000) \exp(-267/400) / 80 - (6 \exp(-267/400) \sin(1513/2000)) / 25, - (153$   
 $\cos(153/200) \exp(-27/40) / 80 - (6 \exp(-27/40) \sin(153/200)) / 25, - (153$   
 $\cos(1547/2000) \exp(-273/400) / 80 - (6 \exp(-273/400) \sin(1547/2000)) / 25, - (153$   
 $\cos(391/500) \exp(-69/100) / 80 - (6 \exp(-69/100) \sin(391/500)) / 25, - (153$   
 $\cos(1581/2000) \exp(-279/400) / 80 - (6 \exp(-279/400) \sin(1581/2000)) / 25, - (153$   
 $\cos(799/1000) \exp(-141/200) / 80 - (6 \exp(-141/200) \sin(799/1000)) / 25, - (153$   
 $\cos(323/400) \exp(-57/80) / 80 - (6 \exp(-57/80) \sin(323/400)) / 25, - (153$   
 $\cos(102/125) \exp(-18/25) / 80 - (6 \exp(-18/25) \sin(102/125)) / 25, - (153$   
 $\cos(1649/2000) \exp(-291/400) / 80 - (6 \exp(-291/400) \sin(1649/2000)) / 25, - (153$   
 $\cos(833/1000) \exp(-147/200) / 80 - (6 \exp(-147/200) \sin(833/1000)) / 25, - (153$   
 $\cos(1683/2000) \exp(-297/400) / 80 - (6 \exp(-297/400) \sin(1683/2000)) / 25, - (153$   
 $\cos(17/20) \exp(-3/4) / 80 - (6 \exp(-3/4) \sin(17/20)) / 25, - (153$   
 $\cos(1717/2000) \exp(-303/400) / 80 - (6 \exp(-303/400) \sin(1717/2000)) / 25, - (153$   
 $\cos(867/1000) \exp(-153/200) / 80 - (6 \exp(-153/200) \sin(867/1000)) / 25, - (153$   
 $\cos(1751/2000) \exp(-309/400) / 80 - (6 \exp(-309/400) \sin(1751/2000)) / 25, - (153$   
 $\cos(221/250) \exp(-39/50) / 80 - (6 \exp(-39/50) \sin(221/250)) / 25, - (153$   
 $\cos(357/400) \exp(-63/80) / 80 - (6 \exp(-63/80) \sin(357/400)) / 25, - (153$   
 $\cos(901/1000) \exp(-159/200) / 80 - (6 \exp(-159/200) \sin(901/1000)) / 25, - (153$   
 $\cos(1819/2000) \exp(-321/400) / 80 - (6 \exp(-321/400) \sin(1819/2000)) / 25, - (153$   
 $\cos(459/500) \exp(-81/100) / 80 - (6 \exp(-81/100) \sin(459/500)) / 25, - (153$   
 $\cos(1853/2000) \exp(-327/400) / 80 - (6 \exp(-327/400) \sin(1853/2000)) / 25, - (153$   
 $\cos(187/200) \exp(-33/40) / 80 - (6 \exp(-33/40) \sin(187/200)) / 25, - (153$   
 $\cos(1887/2000) \exp(-333/400) / 80 - (6 \exp(-333/400) \sin(1887/2000)) / 25, - (153$   
 $\cos(119/125) \exp(-21/25) / 80 - (6 \exp(-21/25) \sin(119/125)) / 25, - (153$   
 $\cos(1921/2000) \exp(-339/400) / 80 - (6 \exp(-339/400) \sin(1921/2000)) / 25, - (153$   
 $\cos(969/1000) \exp(-171/200) / 80 - (6 \exp(-171/200) \sin(969/1000)) / 25, - (153$   
 $\cos(391/400) \exp(-69/80) / 80 - (6 \exp(-69/80) \sin(391/400)) / 25, - (153$   
 $\cos(493/500) \exp(-87/100) / 80 - (6 \exp(-87/100) \sin(493/500)) / 25, - (153$   
 $\cos(1989/2000) \exp(-351/400) / 80 - (6 \exp(-351/400) \sin(1989/2000)) / 25, - (153$

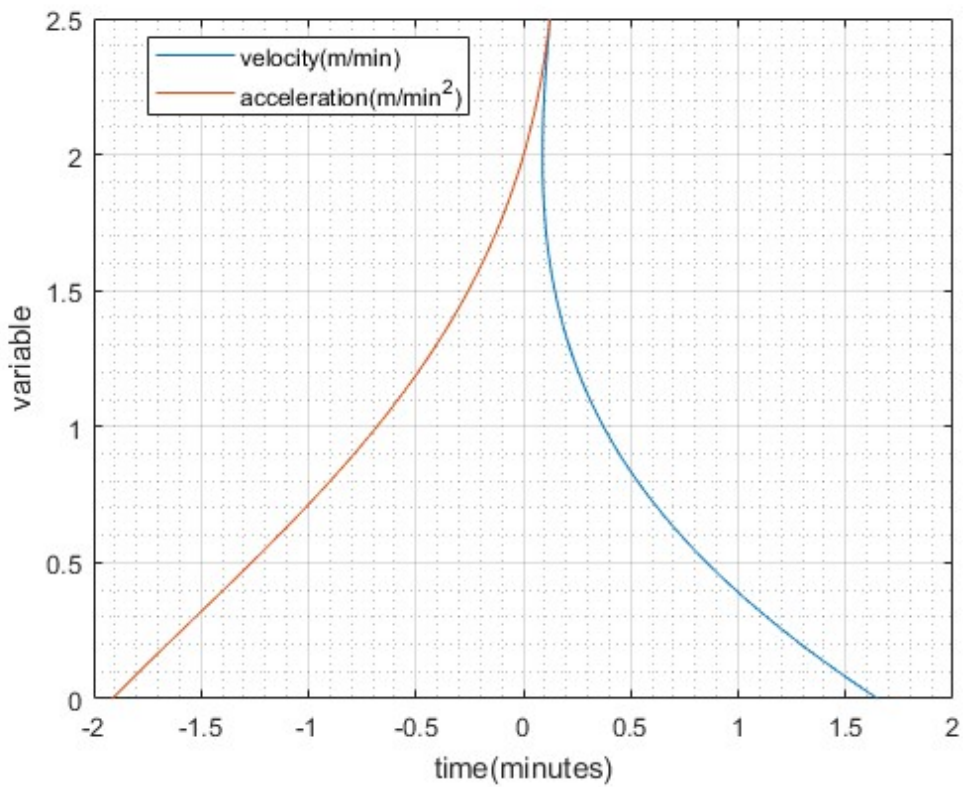
$\cos(1003/1000) \exp(-177/200)/80 - (6 \exp(-177/200) \sin(1003/1000))/25, - (153$   
 $\cos(2023/2000) \exp(-357/400))/80 - (6 \exp(-357/400) \sin(2023/2000))/25, - (153$   
 $\cos(51/50) \exp(-9/10))/80 - (6 \exp(-9/10) \sin(51/50))/25, - (153$   
 $\cos(2057/2000) \exp(-363/400))/80 - (6 \exp(-363/400) \sin(2057/2000))/25, - (153$   
 $\cos(1037/1000) \exp(-183/200))/80 - (6 \exp(-183/200) \sin(1037/1000))/25, - (153$   
 $\cos(2091/2000) \exp(-369/400))/80 - (6 \exp(-369/400) \sin(2091/2000))/25, - (153$   
 $\cos(527/500) \exp(-93/100))/80 - (6 \exp(-93/100) \sin(527/500))/25, - (153$   
 $\cos(17/16) \exp(-15/16))/80 - (6 \exp(-15/16) \sin(17/16))/25, - (153$   
 $\cos(1071/1000) \exp(-189/200))/80 - (6 \exp(-189/200) \sin(1071/1000))/25, - (153$   
 $\cos(2159/2000) \exp(-381/400))/80 - (6 \exp(-381/400) \sin(2159/2000))/25, - (153$   
 $\cos(136/125) \exp(-24/25))/80 - (6 \exp(-24/25) \sin(136/125))/25, - (153$   
 $\cos(2193/2000) \exp(-387/400))/80 - (6 \exp(-387/400) \sin(2193/2000))/25, - (153$   
 $\cos(221/200) \exp(-39/40))/80 - (6 \exp(-39/40) \sin(221/200))/25, - (153$   
 $\cos(2227/2000) \exp(-393/400))/80 - (6 \exp(-393/400) \sin(2227/2000))/25, - (153$   
 $\cos(561/500) \exp(-99/100))/80 - (6 \exp(-99/100) \sin(561/500))/25, - (153$   
 $\cos(2261/2000) \exp(-399/400))/80 - (6 \exp(-399/400) \sin(2261/2000))/25, - (153$   
 $\cos(1139/1000) \exp(-201/200))/80 - (6 \exp(-201/200) \sin(1139/1000))/25, - (153$   
 $\cos(459/400) \exp(-81/80))/80 - (6 \exp(-81/80) \sin(459/400))/25, - (153$   
 $\cos(289/250) \exp(-51/50))/80 - (6 \exp(-51/50) \sin(289/250))/25, - (153$   
 $\cos(2329/2000) \exp(-411/400))/80 - (6 \exp(-411/400) \sin(2329/2000))/25, - (153$   
 $\cos(1173/1000) \exp(-207/200))/80 - (6 \exp(-207/200) \sin(1173/1000))/25, - (153$   
 $\cos(2363/2000) \exp(-417/400))/80 - (6 \exp(-417/400) \sin(2363/2000))/25, - (153$   
 $\cos(119/100) \exp(-21/20))/80 - (6 \exp(-21/20) \sin(119/100))/25, - (153$   
 $\cos(2397/2000) \exp(-423/400))/80 - (6 \exp(-423/400) \sin(2397/2000))/25, - (153$   
 $\cos(1207/1000) \exp(-213/200))/80 - (6 \exp(-213/200) \sin(1207/1000))/25, - (153$   
 $\cos(2431/2000) \exp(-429/400))/80 - (6 \exp(-429/400) \sin(2431/2000))/25, - (153$   
 $\cos(153/125) \exp(-27/25))/80 - (6 \exp(-27/25) \sin(153/125))/25, - (153$   
 $\cos(493/400) \exp(-87/80))/80 - (6 \exp(-87/80) \sin(493/400))/25, - (153$   
 $\cos(1241/1000) \exp(-219/200))/80 - (6 \exp(-219/200) \sin(1241/1000))/25, - (153$   
 $\cos(2499/2000) \exp(-441/400))/80 - (6 \exp(-441/400) \sin(2499/2000))/25, - (153$   
 $\cos(629/500) \exp(-111/100))/80 - (6 \exp(-111/100) \sin(629/500))/25, - (153$   
 $\cos(2533/2000) \exp(-447/400))/80 - (6 \exp(-447/400) \sin(2533/2000))/25, - (153$   
 $\cos(51/40) \exp(-9/8))/80 - (6 \exp(-9/8) \sin(51/40))/25, - (153$   
 $\cos(2567/2000) \exp(-453/400))/80 - (6 \exp(-453/400) \sin(2567/2000))/25, - (153$   
 $\cos(323/250) \exp(-57/50))/80 - (6 \exp(-57/50) \sin(323/250))/25, - (153$   
 $\cos(2601/2000) \exp(-459/400))/80 - (6 \exp(-459/400) \sin(2601/2000))/25, - (153$   
 $\cos(1309/1000) \exp(-231/200))/80 - (6 \exp(-231/200) \sin(1309/1000))/25, - (153$   
 $\cos(527/400) \exp(-93/80))/80 - (6 \exp(-93/80) \sin(527/400))/25, - (153$   
 $\cos(663/500) \exp(-117/100))/80 - (6 \exp(-117/100) \sin(663/500))/25, - (153$   
 $\cos(2669/2000) \exp(-471/400))/80 - (6 \exp(-471/400) \sin(2669/2000))/25, - (153$   
 $\cos(1343/1000) \exp(-237/200))/80 - (6 \exp(-237/200) \sin(1343/1000))/25, - (153$   
 $\cos(2703/2000) \exp(-477/400))/80 - (6 \exp(-477/400) \sin(2703/2000))/25, - (153$   
 $\cos(34/25) \exp(-6/5))/80 - (6 \exp(-6/5) \sin(34/25))/25, - (153$   
 $\cos(2737/2000) \exp(-483/400))/80 - (6 \exp(-483/400) \sin(2737/2000))/25, - (153$   
 $\cos(1377/1000) \exp(-243/200))/80 - (6 \exp(-243/200) \sin(1377/1000))/25, - (153$   
 $\cos(2771/2000) \exp(-489/400))/80 - (6 \exp(-489/400) \sin(2771/2000))/25, - (153$   
 $\cos(697/500) \exp(-123/100))/80 - (6 \exp(-123/100) \sin(697/500))/25, - (153$   
 $\cos(561/400) \exp(-99/80))/80 - (6 \exp(-99/80) \sin(561/400))/25, - (153$   
 $\cos(1411/1000) \exp(-249/200))/80 - (6 \exp(-249/200) \sin(1411/1000))/25, - (153$   
 $\cos(2839/2000) \exp(-501/400))/80 - (6 \exp(-501/400) \sin(2839/2000))/25, - (153$

$\cos(357/250) \exp(-63/50)/80 - (6 \exp(-63/50) \sin(357/250))/25, - (153$   
 $\cos(2873/2000) \exp(-507/400))/80 - (6 \exp(-507/400) \sin(2873/2000))/25, - (153$   
 $\cos(289/200) \exp(-51/40))/80 - (6 \exp(-51/40) \sin(289/200))/25, - (153$   
 $\cos(2907/2000) \exp(-513/400))/80 - (6 \exp(-513/400) \sin(2907/2000))/25, - (153$   
 $\cos(731/500) \exp(-129/100))/80 - (6 \exp(-129/100) \sin(731/500))/25, - (153$   
 $\cos(2941/2000) \exp(-519/400))/80 - (6 \exp(-519/400) \sin(2941/2000))/25, - (153$   
 $\cos(1479/1000) \exp(-261/200))/80 - (6 \exp(-261/200) \sin(1479/1000))/25, - (153$   
 $\cos(119/80) \exp(-21/16))/80 - (6 \exp(-21/16) \sin(119/80))/25, - (153$   
 $\cos(187/125) \exp(-33/25))/80 - (6 \exp(-33/25) \sin(187/125))/25, - (153$   
 $\cos(3009/2000) \exp(-531/400))/80 - (6 \exp(-531/400) \sin(3009/2000))/25, - (153$   
 $\cos(1513/1000) \exp(-267/200))/80 - (6 \exp(-267/200) \sin(1513/1000))/25, - (153$   
 $\cos(3043/2000) \exp(-537/400))/80 - (6 \exp(-537/400) \sin(3043/2000))/25, - (153$   
 $\cos(153/100) \exp(-27/20))/80 - (6 \exp(-27/20) \sin(153/100))/25, - (153$   
 $\cos(3077/2000) \exp(-543/400))/80 - (6 \exp(-543/400) \sin(3077/2000))/25, - (153$   
 $\cos(1547/1000) \exp(-273/200))/80 - (6 \exp(-273/200) \sin(1547/1000))/25, - (153$   
 $\cos(3111/2000) \exp(-549/400))/80 - (6 \exp(-549/400) \sin(3111/2000))/25, - (153$   
 $\cos(391/250) \exp(-69/50))/80 - (6 \exp(-69/50) \sin(391/250))/25, - (153$   
 $\cos(629/400) \exp(-111/80))/80 - (6 \exp(-111/80) \sin(629/400))/25, - (153$   
 $\cos(1581/1000) \exp(-279/200))/80 - (6 \exp(-279/200) \sin(1581/1000))/25, - (153$   
 $\cos(3179/2000) \exp(-561/400))/80 - (6 \exp(-561/400) \sin(3179/2000))/25, - (153$   
 $\cos(799/500) \exp(-141/100))/80 - (6 \exp(-141/100) \sin(799/500))/25, - (153$   
 $\cos(3213/2000) \exp(-567/400))/80 - (6 \exp(-567/400) \sin(3213/2000))/25, - (153$   
 $\cos(323/200) \exp(-57/40))/80 - (6 \exp(-57/40) \sin(323/200))/25, - (153$   
 $\cos(3247/2000) \exp(-573/400))/80 - (6 \exp(-573/400) \sin(3247/2000))/25, - (153$   
 $\cos(204/125) \exp(-36/25))/80 - (6 \exp(-36/25) \sin(204/125))/25, - (153$   
 $\cos(3281/2000) \exp(-579/400))/80 - (6 \exp(-579/400) \sin(3281/2000))/25, - (153$   
 $\cos(1649/1000) \exp(-291/200))/80 - (6 \exp(-291/200) \sin(1649/1000))/25, - (153$   
 $\cos(663/400) \exp(-117/80))/80 - (6 \exp(-117/80) \sin(663/400))/25, - (153$   
 $\cos(833/500) \exp(-147/100))/80 - (6 \exp(-147/100) \sin(833/500))/25, - (153$   
 $\cos(3349/2000) \exp(-591/400))/80 - (6 \exp(-591/400) \sin(3349/2000))/25, - (153$   
 $\cos(1683/1000) \exp(-297/200))/80 - (6 \exp(-297/200) \sin(1683/1000))/25, - (153$   
 $\cos(3383/2000) \exp(-597/400))/80 - (6 \exp(-597/400) \sin(3383/2000))/25, - (153$   
 $\cos(17/10) \exp(-3/2))/80 - (6 \exp(-3/2) \sin(17/10))/25, - (153$   
 $\cos(3417/2000) \exp(-603/400))/80 - (6 \exp(-603/400) \sin(3417/2000))/25, - (153$   
 $\cos(1717/1000) \exp(-303/200))/80 - (6 \exp(-303/200) \sin(1717/1000))/25, - (153$   
 $\cos(3451/2000) \exp(-609/400))/80 - (6 \exp(-609/400) \sin(3451/2000))/25, - (153$   
 $\cos(867/500) \exp(-153/100))/80 - (6 \exp(-153/100) \sin(867/500))/25, - (153$   
 $\cos(697/400) \exp(-123/80))/80 - (6 \exp(-123/80) \sin(697/400))/25, - (153$   
 $\cos(1751/1000) \exp(-309/200))/80 - (6 \exp(-309/200) \sin(1751/1000))/25, - (153$   
 $\cos(3519/2000) \exp(-621/400))/80 - (6 \exp(-621/400) \sin(3519/2000))/25, - (153$   
 $\cos(221/125) \exp(-39/25))/80 - (6 \exp(-39/25) \sin(221/125))/25, - (153$   
 $\cos(3553/2000) \exp(-627/400))/80 - (6 \exp(-627/400) \sin(3553/2000))/25, - (153$   
 $\cos(357/200) \exp(-63/40))/80 - (6 \exp(-63/40) \sin(357/200))/25, - (153$   
 $\cos(3587/2000) \exp(-633/400))/80 - (6 \exp(-633/400) \sin(3587/2000))/25, - (153$   
 $\cos(901/500) \exp(-159/100))/80 - (6 \exp(-159/100) \sin(901/500))/25, - (153$   
 $\cos(3621/2000) \exp(-639/400))/80 - (6 \exp(-639/400) \sin(3621/2000))/25, - (153$   
 $\cos(1819/1000) \exp(-321/200))/80 - (6 \exp(-321/200) \sin(1819/1000))/25, - (153$   
 $\cos(731/400) \exp(-129/80))/80 - (6 \exp(-129/80) \sin(731/400))/25, - (153$   
 $\cos(459/250) \exp(-81/50))/80 - (6 \exp(-81/50) \sin(459/250))/25, - (153$   
 $\cos(3689/2000) \exp(-651/400))/80 - (6 \exp(-651/400) \sin(3689/2000))/25, - (153$

$\cos(1853/1000) \cdot \exp(-327/200) / 80 - (6 \cdot \exp(-327/200) \cdot \sin(1853/1000)) / 25, - (153$   
 $\cos(3723/2000) \cdot \exp(-657/400) / 80 - (6 \cdot \exp(-657/400) \cdot \sin(3723/2000)) / 25, - (153$   
 $\cos(187/100) \cdot \exp(-33/20) / 80 - (6 \cdot \exp(-33/20) \cdot \sin(187/100)) / 25, - (153$   
 $\cos(3757/2000) \cdot \exp(-663/400) / 80 - (6 \cdot \exp(-663/400) \cdot \sin(3757/2000)) / 25, - (153$   
 $\cos(1887/1000) \cdot \exp(-333/200) / 80 - (6 \cdot \exp(-333/200) \cdot \sin(1887/1000)) / 25, - (153$   
 $\cos(3791/2000) \cdot \exp(-669/400) / 80 - (6 \cdot \exp(-669/400) \cdot \sin(3791/2000)) / 25, - (153$   
 $\cos(238/125) \cdot \exp(-42/25) / 80 - (6 \cdot \exp(-42/25) \cdot \sin(238/125)) / 25, - (153$   
 $\cos(153/80) \cdot \exp(-27/16) / 80 - (6 \cdot \exp(-27/16) \cdot \sin(153/80)) / 25, - (153$   
 $\cos(1921/1000) \cdot \exp(-339/200) / 80 - (6 \cdot \exp(-339/200) \cdot \sin(1921/1000)) / 25, - (153$   
 $\cos(3859/2000) \cdot \exp(-681/400) / 80 - (6 \cdot \exp(-681/400) \cdot \sin(3859/2000)) / 25, - (153$   
 $\cos(969/500) \cdot \exp(-171/100) / 80 - (6 \cdot \exp(-171/100) \cdot \sin(969/500)) / 25, - (153$   
 $\cos(3893/2000) \cdot \exp(-687/400) / 80 - (6 \cdot \exp(-687/400) \cdot \sin(3893/2000)) / 25, - (153$   
 $\cos(391/200) \cdot \exp(-69/40) / 80 - (6 \cdot \exp(-69/40) \cdot \sin(391/200)) / 25, - (153$   
 $\cos(3927/2000) \cdot \exp(-693/400) / 80 - (6 \cdot \exp(-693/400) \cdot \sin(3927/2000)) / 25, - (153$   
 $\cos(493/250) \cdot \exp(-87/50) / 80 - (6 \cdot \exp(-87/50) \cdot \sin(493/250)) / 25, - (153$   
 $\cos(3961/2000) \cdot \exp(-699/400) / 80 - (6 \cdot \exp(-699/400) \cdot \sin(3961/2000)) / 25, - (153$   
 $\cos(1989/1000) \cdot \exp(-351/200) / 80 - (6 \cdot \exp(-351/200) \cdot \sin(1989/1000)) / 25, - (153$   
 $\cos(799/400) \cdot \exp(-141/80) / 80 - (6 \cdot \exp(-141/80) \cdot \sin(799/400)) / 25, - (153$   
 $\cos(1003/500) \cdot \exp(-177/100) / 80 - (6 \cdot \exp(-177/100) \cdot \sin(1003/500)) / 25, - (153$   
 $\cos(4029/2000) \cdot \exp(-711/400) / 80 - (6 \cdot \exp(-711/400) \cdot \sin(4029/2000)) / 25, - (153$   
 $\cos(2023/1000) \cdot \exp(-357/200) / 80 - (6 \cdot \exp(-357/200) \cdot \sin(2023/1000)) / 25, - (153$   
 $\cos(4063/2000) \cdot \exp(-717/400) / 80 - (6 \cdot \exp(-717/400) \cdot \sin(4063/2000)) / 25, - (153$   
 $\cos(51/25) \cdot \exp(-9/5) / 80 - (6 \cdot \exp(-9/5) \cdot \sin(51/25)) / 25, - (153$   
 $\cos(4097/2000) \cdot \exp(-723/400) / 80 - (6 \cdot \exp(-723/400) \cdot \sin(4097/2000)) / 25, - (153$   
 $\cos(2057/1000) \cdot \exp(-363/200) / 80 - (6 \cdot \exp(-363/200) \cdot \sin(2057/1000)) / 25, - (153$   
 $\cos(4131/2000) \cdot \exp(-729/400) / 80 - (6 \cdot \exp(-729/400) \cdot \sin(4131/2000)) / 25, - (153$   
 $\cos(1037/500) \cdot \exp(-183/100) / 80 - (6 \cdot \exp(-183/100) \cdot \sin(1037/500)) / 25, - (153$   
 $\cos(833/400) \cdot \exp(-147/80) / 80 - (6 \cdot \exp(-147/80) \cdot \sin(833/400)) / 25, - (153$   
 $\cos(2091/1000) \cdot \exp(-369/200) / 80 - (6 \cdot \exp(-369/200) \cdot \sin(2091/1000)) / 25, - (153$   
 $\cos(4199/2000) \cdot \exp(-741/400) / 80 - (6 \cdot \exp(-741/400) \cdot \sin(4199/2000)) / 25, - (153$   
 $\cos(527/250) \cdot \exp(-93/50) / 80 - (6 \cdot \exp(-93/50) \cdot \sin(527/250)) / 25, - (153$   
 $\cos(4233/2000) \cdot \exp(-747/400) / 80 - (6 \cdot \exp(-747/400) \cdot \sin(4233/2000)) / 25, - (153$   
 $\cos(17/8) \cdot \exp(-15/8) / 80 - (6 \cdot \exp(-15/8) \cdot \sin(17/8)) / 25]$







```
(C)
commandwindow
clear
clc
syms x
y=5*sin(5*x)^5
p=y^2
z= int(p)*pi
zint= int(z,0,pi)
zintX= double(zint)
format short g
format long g
```

COMMAND WINDOW

y =

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

p =

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

z =

$$\pi \left( \frac{1575x}{256} - \frac{525 \sin(10x)}{512} + \frac{75 \sin(20x)}{256} - \frac{75 \sin(30x)}{1024} + \frac{25 \sin(40x)}{2048} - \frac{\sin(50x)}{1024} \right)$$

zint =

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

zintX =

95.3806362724067

>>