NTTRU Estimation

Estimate the drop of bit security caused by multiple information leaked from power side channel.

```
load("../framework/instance_gen.sage")
```

```
## NTRU instance initilizaiton

n = 768
m = n
q = 7681

#number of one in f and g In NTTRU , the distribution of -1,0,1 is 5/16,
6/16,6/16
D_e = {-1: 5/16, 0:6/16, 1:5/16}
D_s = D_e

bit_security_constant = 0.292
A, b, dbdd = initialize_from_LWE_instance(DBDD_predict, n, q, m, D_e,D_s)
```

```
•[4;37m Build DBDD from LWE •[Om
•[1;33m n=768 m=768 q=7681 •[Om
```

```
s_key = []

for i in range(n):
    v0 = [0 for i in range(m + n)]
    v0[i]=1
    s_key.append(dbdd.leak(v0))
```

```
## NTT initialization
R = IntegerModRing(q)
V = VectorSpace(R,n)

import numpy as np

NTT_matrix = []

def add (x,y) : return x +y

#zetas in the last layer of InvNTT
```

```
zetas=
[-7661,7661,-6212,6212,-6464,6464,7586,-7586,4822,-4822,1618,-1618,3845,-3845,-37
02,3702,4277,-4277,1913,-1913,3326,-3326,-6874,6874,-3446,3446,5741,-5741,-1534,1
534, -2834, 2834, 1081, -1081, -867, 867, 5483, -5483, 626, -626, -1293, 1293, 3730, -3730, -148
5,1485,-7300,7300,1894,-1894,6233,-6233,803,-803,-5156,5156,-7289,7289,-5004,5004
,-726,726,5819,-5819,-245,245,-713,713,-5307,5307,3084,-3084,-1462,1462,7063,-706
3, -6776, 6776, 3104, -3104, 3294, -3294, -6152, 6152, 1502, -1502, -4125, 4125, -32, 32, 722, -722, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732, -732,
22,7270,-7270,-7529,7529,4040,-4040,-2821,2821,42,-42,-3828,3828,6238,-6238,4234,
-4234, -6772, 6772, -2747, 2747, -3999, 3999, -5305, 5305, -4076, 4076, -5968, 5968, 2879, -287
9,-149,149,5053,-5053,-4074,4074,-2977,2977,1400,-1400,6650,-6650,699,-699,1955,-
1955,7257,-7257,5667,-5667,-7366,7366,4348,-4348,7512,-7512,-2723,2723,2390,-2390
,-2458,2458,4572,-4572,6355,-6355,-7527,7527,-758,758,6541,-6541,2266,-2266,7441,
-7441, -7627, 7627, -6019, 6019, -3627, 3627, -4097, 4097, 1507, -1507, 2003, -2003, -87, 87, 24
43,-2443,-3046,3046,4397,-4397,-237,237,2947,-2947,3824,-3824,5893,-5893,-812,812
,-2802,2802,-2826,2826,5194,-5194,-2212,2212,1902,-1902,504,-504,-7531,7531,4553,
-4553,-2394,2394,3227,-3227,-2240,2240,4722,-4722,-5727,5727,-2236,2236,-1397,139
7,6806,-6806,-4741,4741,-4502,4502,6524,-6524,265,-265,2182,-2182,-5019,5019,-341
4,3414,2986,-2986,6558,-6558,2749,-2749,-5857,5857,983,-983,384,-384]
def modular_exponentiation(base, exponent, modulus):
        result = 1
        base = base % modulus
        while exponent > 0:
               if (exponent % 2) == 1:
                        result = (result * base) % modulus
               exponent //= 2
               base = (base * base) % modulus
        return result
for x in range(n/3):
        NTT_matrix.append(V(reduce(add,
[[modular_exponentiation(zetas[i],x,7681),0,0] for i in range(n/3)])))
        NTT_matrix.append(V(reduce(add,
[[0,modular_exponentiation(zetas[i],x,7681),0] for i in range(n/3)])))
        NTT_matrix.append(V(reduce(add,
[[0,0,modular_exponentiation(zetas[i],x,7681)] for i in range(n/3)])))
NTT_matrix = matrix(NTT_matrix)
#Get s_hat
s_hat_list = V(s_key)*NTT_matrix
v_list = []
```

```
# z_i=R(-term2-term3)/R(term1)
z_i = 0 if R(term1) == 0 else R(-term2 - term3) / R(term1)
z_i = R(z_i)
nums_z.append(z_i)
```

```
# Hints are stored in v_list
for i in range(256):

v=nums_z[i]*NTT_matrix.column(3*i)+NTT_matrix.column(3*i+1)+NTT_matrix.column(3*
i+2)
    v=list(v)
    v_prime = [int(i) for i in list(v)] + [0]*768
    v_list.append(vec(v_prime))
```

```
for v_0 in v_list:
    a=dbdd.leak(v_0)%7681
    #If the hint is not valid, skip it
    if(a!=0):
        continue
    dbdd.integrate_modular_hint(v_0,0,7681,True)
```

```
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00327470, \beta=527.88 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00327850, \beta=527.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00328170, \beta=526.38 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00328490, \beta=525.63 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00328809, \beta=524.88 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00329189, \beta=524.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00329509, \beta=523.39 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00329828, \beta=522.65 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00330148, \beta=521.91 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00330528, \beta=521.17 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00330847, \beta=520.43 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00331166, \beta=519.69 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00331485, \beta=518.96 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00331865, \beta=518.23 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00332184, \beta=517.49 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00332502, \beta=516.76 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00332882, \beta=516.04 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00333201, \beta=515.31 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00333520, \beta=514.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
•[Om •[1;33m dim=1537, \delta=1.00333838, \beta=513.86 •[Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00334218, \beta=513.14 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00334536, \beta=512.42 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00334854, \beta=511.70 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00335173, \beta=510.98 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00335552, \beta=510.26 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00335870, \beta=509.55 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00336188, \beta=508.84 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00336568, \beta=508.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00336886, \beta=507.42 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00337204, \beta=506.71 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00337584, \beta=506.00 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00337901, \beta=505.30 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00338218, \beta=504.59 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00338536, \beta=503.89 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00338916, \beta=503.19 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00339233, \beta=502.49 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00339550, \beta=501.79 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00339930, \beta=501.10 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00340247, \beta=500.40 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00340563, \beta=499.71 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00340943, \beta=499.02 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00341260, \beta=498.32 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00341576, \beta=497.64 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00341893, \beta=496.95 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00342273, \beta=496.26 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00342589, \beta=495.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00342905, \beta=494.89 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00343285, \beta=494.21 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00343601, \beta=493.53 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00343917, \beta=492.85 • [Om
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                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00344297, \beta=492.18 • [Om
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                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00344613, \beta=491.50 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00344929, \beta=490.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00345309, \beta=490.15 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00345624, \beta=489.48 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00345939, \beta=488.81 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00346320, \beta=488.14 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00346635, \beta=487.47 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00346950, \beta=486.81 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00347330, \beta=486.14 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00347645, \beta=485.48 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00347960, \beta=484.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00348340, \beta=484.16 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00348655, \beta=483.50 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00348969, \beta=482.84 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00349349, \beta=482.18 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00349664, \beta=481.53 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00349978, \beta=480.87 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00350358, \beta=480.22 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00350672, \beta=479.57 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00350986, \beta=478.92 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00351366, \beta=478.27 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00351680, \beta=477.62 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00351994, \beta=476.98 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00352374, \beta=476.33 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00352688, \beta=475.69 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00353068, \beta=475.05 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00353382, \beta=474.41 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00353695, \beta=473.77 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00354075, \beta=473.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00354388, \beta=472.49 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00354701, \beta=471.86 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00355081, \beta=471.22 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00355395, \beta=470.59 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00355707, \beta=469.96 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00356087, \beta=469.33 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00356400, \beta=468.70 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00356780, \beta=468.07 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00357093, \beta=467.45 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00357405, \beta=466.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00357785, \beta=466.20 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00358098, \beta=465.57 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00358410, \beta=464.95 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00358790, \beta=464.33 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00359102, \beta=463.71 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00359482, \beta=463.10 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00359794, \beta=462.48 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00360106, \beta=461.87 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00360486, \beta=461.25 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00360797, \beta=460.64 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00361177, \beta=460.03 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00361489, \beta=459.42 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00361800, \beta=458.81 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00362180, \beta=458.20 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00362492, \beta=457.60 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00362803, \beta=456.99 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00363183, \beta=456.39 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00363494, \beta=455.78 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00363874, \beta=455.18 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00364184, \beta=454.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00364495, \beta=453.98 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00364875, \beta=453.38 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00365186, \beta=452.79 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00365566, \beta=452.19 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00365876, \beta=451.60 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00366256, \beta=451.00 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00366566, \beta=450.41 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00366876, \beta=449.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00367256, \beta=449.23 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00367566, \beta=448.64 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00367946, \beta=448.06 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00368256, \beta=447.47 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00368565, \beta=446.88 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00368946, \beta=446.30 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00369255, \beta=445.72 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00369635, \beta=445.14 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00369944, \beta=444.56 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00370253, \beta=443.98 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00370634, \beta=443.40 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00370943, \beta=442.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00371323, \beta=442.25 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00371631, \beta=441.67 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00372012, \beta=441.10 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00372320, \beta=440.53 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00372629, \beta=439.95 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00373009, \beta=439.38 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00373317, \beta=438.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00373697, \beta=438.25 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00374005, \beta=437.68 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00374386, \beta=437.11 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00374694, \beta=436.55 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00375001, \beta=435.99 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00375381, \beta=435.42 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00375689, \beta=434.86 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00376069, \beta=434.30 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00376377, \beta=433.74 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00376757, \beta=433.19 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00377064, \beta=432.63 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00377444, \beta=432.07 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00377752, \beta=431.52 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00378059, \beta=430.96 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00378439, \beta=430.41 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00378746, \beta=429.86 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00379126, \beta=429.31 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00379433, \beta=428.76 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00379813, \beta=428.21 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00380119, \beta=427.66 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00380499, \beta=427.12 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00380806, \beta=426.57 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00381186, \beta=426.03 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00381492, \beta=425.49 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00381798, \beta=424.94 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00382178, \beta=424.40 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00382484, \beta=423.86 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00382864, \beta=423.32 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00383170, \beta=422.79 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00383550, \beta=422.25 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00383856, \beta=421.71 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00384236, \beta=421.18 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00384541, \beta=420.64 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00384922, \beta=420.11 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00385227, \beta=419.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00385607, \beta=419.05 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00385912, \beta=418.52 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00386217, \beta=417.99 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00386597, \beta=417.46 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00386902, \beta=416.94 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00387282, \beta=416.41 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00387586, \beta=415.88 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00387967, \beta=415.36 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00388271, \beta=414.84 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00388651, \beta=414.32 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00388955, \beta=413.80 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00389335, \beta=413.28 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00389639, \beta=412.76 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00390020, \beta=412.24 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00390323, \beta=411.72 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00390704, \beta=411.21 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00391007, \beta=410.69 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00391387, \beta=410.18 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00391691, \beta=409.66 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00392071, \beta=409.15 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00392374, \beta=408.64 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00392755, \beta=408.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00393058, \beta=407.62 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00393438, \beta=407.11 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00393741, \beta=406.61 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00394121, \beta=406.10 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00394424, \beta=405.60 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00394804, \beta=405.09 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00395106, \beta=404.59 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00395487, \beta=404.08 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00395789, \beta=403.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00396169, \beta=403.08 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00396471, \beta=402.58 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00396852, \beta=402.08 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00397154, \beta=401.59 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00397534, \beta=401.09 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00397836, \beta=400.59 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00398216, \beta=400.10 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00398517, \beta=399.60 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00398898, \beta=399.11 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00399199, \beta=398.62 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00399579, \beta=398.13 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00399881, \beta=397.64 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
•[Om •[1;33m dim=1537, \delta=1.00400261, \beta=397.15 •[Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00400562, \beta=396.66 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00400942, \beta=396.17 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00401243, \beta=395.68 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00401623, \beta=395.20 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00401924, \beta=394.71 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00402304, \beta=394.23 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00402605, \beta=393.75 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00402985, \beta=393.26 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00403285, \beta=392.78 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00403665, \beta=392.30 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00403965, \beta=391.82 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00404346, \beta=391.34 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00404645, \beta=390.86 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00405026, \beta=390.39 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00405325, \beta=389.91 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00405706, \beta=389.44 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00406005, \beta=388.96 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00406385, \beta=388.49 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00406766, \beta=388.01 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00407065, \beta=387.54 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00407445, \beta=387.07 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00407744, \beta=386.60 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00408125, \beta=386.13 • [Om
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•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00408423, \beta=385.66 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00408804, \beta=385.20 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00409102, \beta=384.73 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00409483, \beta=384.26 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00409781, \beta=383.80 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00410161, \beta=383.33 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00410460, \beta=382.87 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00410840, \beta=382.41 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00411138, \beta=381.95 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00411518, \beta=381.48 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00411898, \beta=381.02 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00412196, \beta=380.57 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00412577, \beta=380.11 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint!
• [Om • [1;33m dim=1537, \delta=1.00412874, \beta=379.65 • [Om
•[1;37m integrate modular hint •[Om •[Om (smooth) •[Om •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00413255, \beta=379.19 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00413552, \beta=378.74 • [Om
•[1;37m integrate modular hint •[0m •[0m (smooth) •[0m •[3;32m
                                                                       Worthy hint !
• [Om • [1;33m dim=1537, \delta=1.00413932, \beta=378.28 • [Om
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378.28*0.292

110.457760000000