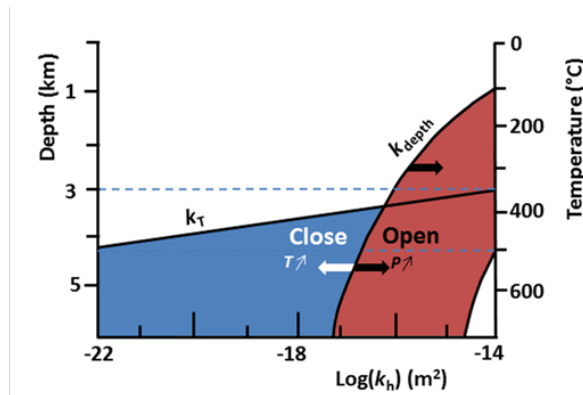


Dynamic-permeability extension to HYDROTHERM (ht_wdh)

For some of the simulations described in Coulon and others (2017), the depth-, temperature- and pressure-dependent permeability (k) functions of Weis and others (2012) were implemented in HYDROTHERM. This version is named ht_wdh in recognition of the three authors:

Weis, P., Driesner, T. and Heinrich, C., 2012, Porphyry-copper ore shells form at stable pressure-temperature fronts within dynamic fluid plumes: *Science*, v. 338, p. 1613-1616.

In the Weis and others (2012) permeability model, permeability follows a power-law depth-dependent relation. From this background value, above the brittle-ductile transition (BDT), k can increase due to pressure increase, and below the BDT, k can both decrease with temperature and increase with pressure (see figure), so that $k = k(z, T, P)$. This function mimics both the effect of the BDT and of fluid overpressure on permeability.



The version of HYDROTHERM that incorporates the Weis-Driesner-Heinrich (wdh) dynamic permeability function (ht_wdh) includes a new subroutine file "perm_wdh.f90" and also minor changes to 15 other subroutine files. All subroutine files (rather than just the modified files) are included in the "src" folder. There is a readme file that identifies the files that have been changed. There is an executable (ht_wdh.exe) in the "bin" folder. Users who want to rebuild the executable (for example, after making some custom modifications to the code) must compile all the source files together.

The included example is a selected file from Coulon and others (2017):

Coulon, C.A., Hsieh, P.A., White, R., Lowenstern, J.B., and Ingebritsen, S.E., 2017, Exploring the causes of distal volcano-tectonic (dVT) seismicity using hydrothermal modeling: *Journal of Volcanology and Geothermal Research*, v. 345, p. 98-108, doi:10.1016/j.jvolgeores.2017.07.011.

As described further below, two input files are necessary: the standard 'ht.in' file and an additional 'perm_wdh.in' file.

Failure equations pertinent to $k(z,T,P)$ calculation

The failure equations used for this k function were derived from the macroscopic brittle failure equations for isotropic, intact rock presented by Cox (2010). Two predominant failure modes were considered: extensional failure (fractures generated perpendicular to the orientation of the minimum principal stress σ_3 , with openings parallel to σ_3) and shear failure (displacement parallel to the shear fracture surface). Weis and others (2012) adopted the Cox (2010) equations for normal-faulting conditions. Such conditions are commonly associated with volcanic areas, as can be seen by comparing the world stress map (Fuchs and Müller, 2001) to the global distribution of volcanoes. Under normal-faulting conditions the maximum principal stress σ_1 is equal to horizontal vertical stress $\sigma_v = P_{\text{lithostatic}}$. Weis and others (2012) also assumed near-critically stressed host rock, a widely appropriate assumption based on the results of deep drilling and induced-seismicity experiments (*e.g.* Townend and Zoback, 2000), and adopted the simplification that cohesive strength $C \sim 2T_s$, where T_s = tensile strength ($T_s = 50$ bars, characteristic of moderately to weakly cohesive rock: Jaeger and Cook, 1979). Failure pressure P_{fail} was defined as a threshold at which fluid pressures induced rock failure.

Assuming optimally oriented brittle shear failure, an internal friction coefficient $\mu = 0.75$ (an average value for many crustal rocks), and a linear Coulomb criterion, the Cox (2010) approach for brittle shear failure (his Eq. 8) yields:

$$P_{\text{fail}} = (1/3)*(4C - \sigma_{\text{diff}}) = (1/3)*(8T_s - \sigma_{\text{diff}}) \text{ if } C \sim 2T_s \quad (3)$$

where $\sigma_{\text{diff}} = \sigma_1 - \sigma_3 =$ differential stress (Pa).

The Cox (2010) approach for extensional failure (his Eq. 12) yields:

$$P_{\text{fail}} = \sigma_v - \sigma_{\text{diff}} + T_s . \quad (4)$$

An equation for hybrid extensional-shear failure was not developed; Cox (2010) approximated hybrid failure by the Griffith failure criterion. The two brittle-failure equations intersect when $\sigma_{\text{diff}} = 5T_s$, so that shear failure occurs where σ_{diff} is greater than $5T_s$ and extension failure where σ_{diff} is less than $5T_s$.

These brittle-failure equations were extended to ductile failure (Weis and others, 2012). At temperatures $<500^\circ\text{C}$, brittle failure applied, whereas at temperatures $>500^\circ\text{C}$, ductile failure took place. At the brittle-ductile transition, differential stress is relaxed due to ductile creep in the rock. Assuming that $T > 500^\circ\text{C}$ led to $\sigma_{\text{diff}} = 0$ and further assuming extensional failure led to:

$$p_{\text{fail}} = \sigma_v + T_s \quad (5)$$

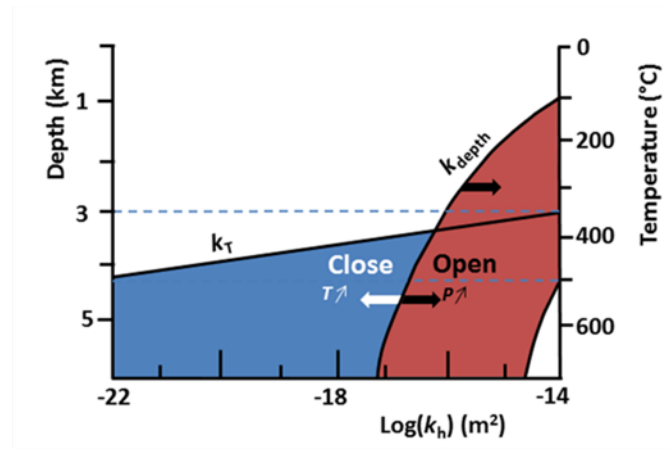
Weis and others (2012) chose the initial value of σ_{diff} to be 50 bars below the initial hydrostatic gradient, that is, $\sigma_{\text{diff}} = P_{\text{hydrostatic}} - 50$, with σ_{diff} and $P_{\text{hydrostatic}}$ in bars. Then, substituting $\sigma_v =$

$P_{\text{lithostatic}}$ into the three previous equations reveals that fluid pressures slightly above lithostatic are sufficient to increase permeability in the ductile crust, whereas pressures slightly above hydrostatic are sufficient in the brittle crust.

$$\begin{aligned} \text{If } T < 500: \text{ If } \sigma_{\text{diff}} > 5T_s, P_{\text{fail}} &= (1/3)*(4C - \sigma_{\text{diff}}) = (1/3)*(8T_s - \sigma_{\text{diff}}); \text{ if } C \sim 2T_s, \\ &= (1/3)*(-p_{\text{hydrostatic}} + 8T_s + 50) \end{aligned} \quad (6)$$

$$\text{If } T < 500: \text{ If } \sigma_{\text{diff}} < 5T_s, P_{\text{fail}} = \sigma_v - \sigma_{\text{diff}} + T_s = P_{\text{lithostatic}} - P_{\text{hydrostatic}} + 50 + T_s \quad (7)$$

$$\text{If } T > 500: \sigma_{\text{diff}} = 0, P_{\text{fail}} = \sigma_v + T_s = P_{\text{lithostatic}} + T_s \quad (8)$$



$k(z, T, P)$ function from Weis and others (2012)

- Permeability (k) follows a depth-dependent but pressure-sensitive relation (k_{depth} in figure) until temperatures reach those of the brittle-ductile transition (BDT, $T = 360^\circ\text{C}$). At depths below the BDT, k decrease due to T increase can be counteracted by k increase due to P_{fluid} increase.
- When $T \geq 360^\circ\text{C}$, if $P_{\text{fluid}} \leq P_{\text{fail}}$ then k is situated in the blue-shaded region in the figure and, depending on T / P_{fluid} ratio:
 - If P_{fluid} is not high enough to oppose the T -dependent k decrease (defined by Weis and others (2012) as $P_{\text{fluid}} \leq 0.3 P_{\text{fail}}$), then $k = k_T$ with, k_T being the T -dependent k function shown in the figure;
 - If P_{fluid} is high enough to oppose the T -dependent k decrease (defined as $P_{\text{fluid}} \geq 0.3 P_{\text{fail}}$), then k is a function of k_{depth} and k_T : $k = k_{\text{depth}} p_{\text{ffN}}^2 + k_T (1 - p_{\text{ffN}}^2)$, and $k_T \leq k \leq k_{\text{depth}}$, where $p_{\text{ffN}} = (\max(\lambda, 0.3) - 0.3) / 0.7$ and λ is defined as $\lambda = P_{\text{fluid}} / P_{\text{fail}}$;
 - If $P_{\text{fluid}} = P_{\text{fail}}$, $k = k_{\text{depth}}$.
- When $T \geq 360^\circ\text{C}$, if $P_{\text{fluid}} \geq P_{\text{fail}}$ then k is situated in the red-shaded region of the figure and depends on permeability at the previous time-step; k is increased to $k = \lambda^2 k_{t-1}$
 - If k is located in the blue-shaded region it is increased to k_{depth} ;

- If k is located on the curve that bounds the right side of the red-shaded region, it stays there;
 - If k is to the right (that is, outside of) the red-shaded region, it is decreased such that it falls on the curve that bounds the right side of the red-shaded region; k enhancement is limited to a transient, 2-3 order-of-magnitude enhancement or to a reference permeability defined by the user (here 10^{-14} m²).
4. If $T \geq T_{\text{solidus}}$ (here defined as 950°C) the element is considered molten and permeability is decreased to 10^{-22} m² (effectively impermeable).

References

- Coulon, C.A., Hsieh, P.A., White, R., Lowenstern, J.B., and Ingebritsen, S.E., 2017, Exploring the causes of distal volcano-tectonic (dVT) seismicity using hydrothermal modeling: *Journal of Volcanology and Geothermal Research*, v. 345, p. 98-108, doi.org/10.1016/j.jvolgeores.2017.07.011.
- Cox, S., 2010, The application of failure mode diagrams for exploring the roles of fluid pressure and stress states in controlling styles of fracture-controlled permeability enhancement in faults and shear zones: *Geofluids*, v. 10, p. 217-233.
- Fuchs, K., and Müller, B., 2001, World stress map of the Earth: A key to tectonic processes and technological applications: *Naturwissenschaften*, v. 88, p. 357-371.
- Jaeger, J. and Cook, N., 1979, *Fundamentals of Rock Mechanics*: New York, Chapman and Hall.
- Townend, J., and Zoback, M.D., 2000, How faulting keeps the crust strong: *Geology*, v. 28, p. 399-402.
- Weis, P., Driesner, T. and Heinrich, C., 2012, Porphyry-copper ore shells form at stable pressure-temperature fronts within dynamic fluid plumes: *Science*, v. 338, p.1613-1616.

SAMPLE INPUT FILES

When the Weis and others (2012) function $k(z,T,P)$ is used, two input files are necessary: the HT input file described by Kipp and others (2008) and an additional 'perm_wdh.in' file. The perm_wdh.in file describes k and k anisotropy. When the perm_wdh.in file is used, the permeability values in the standard HYDROTHERM files (*e.g.* everything under XPERMEABILITY and ZPERMEABILITY) are overridden by the information in the perm_wdh.in files.

Kipp, K.L., Hsieh, P.A. and Charlton, S.R., 2008, Guide to the revised ground-water flow and heat transport simulator: HYDROTHERM–Version 3: U.S. Geological Survey Techniques and Methods, Chapter 6-A25, variously paginated.

Simulations\Intrusion depth 5 km\Heat and fluid sourcing\Varying flow rate\k(z,T,P)\flowrat5\C- Manual from Coulon and others (2017)

perm_wdh.in file

```
# WDH mode (T = use WDH, F = run as standard HT), time stepping (T = explicit, F = implicit),
maximum time step size
T F 0.01
# first parameter in perm-depth relation of Weis et al
-13
# second parameter in perm-depth relation of Weis et al
-3.2
# reference permeability in m2
1.0e-13
# ductile permeability in m2
1.0e-17
# minimum permeability in m2
1.0e-22
# ratio of vertical to horizontal permeability (kz/kh)
0.1
# cohesive strength in MPa (don't change)
10.0
# solidus temperature in C
950.0
# upper limit of temperature of ductile relaxation
500.0
# temperature at which ductile permeability is defined
400.0
# lower limit of temperature of ductile relaxation
360.0
```

Standard HYDROTHERM input file (ht.in)

```
# Hydrotherm Data (Generated by Hydrotherm Interactive 3.2.0)
# Input Format Version 3.2
# Notes:
# Syntax of input line is denoted by # ..
# A suffix letter indicates an exclusive record choice must be made.
# i.e. A or B or C
```

```

# (O) - Optional data with conditions for requirement
# [a]b] - Indicates that either A or B must be entered
# {nnn} - Indicates that the default number, nnn, is used if a zero
#         is entered for that variable
# [T/F] - Indicates a logical variable
# [I] - Indicates an integer variable
#-----
#-----
# Start of the data file
# TITLE
#.. TITLE title line 1
#.. VER3.2 title line 2
TITLE Simulation of fluid-pressure change caused by small magmatic intrusion
VER3.2 incorporating dynamic permeability function of Weis et al (2012)
# DIMENSIONS
#.. nx[I],ny[I],nz[I],tmstr,ityear[I]
   70 1 37 0 2
# TIME STEP
#..A tstepmx[I],tmincr{1.3},[%PchgTS{10.}|PchgTS],%HchgTS{5.},Wsatn{0.03},relax{1.},
#.. deltmn,n_tmcut{10}; confined flow
   10000 1.4 10.0 7.0 0.1 1.0 1.0E-5 6
# N-R ITERATION
#..A itermx{10},resmas{1.e-12},reseng{1.e-2},nphasechg{10},%PchgNR{0.1},
#.. %HchgNR{0.1}; confined flow
   100 1.0E-8 1.0E2 2 0.1 0.1
# LINEAR EQUATION SOLVER
#.. slmeth[I]
   1
# SSOR SOLVER CONTROL
#..A ssormx[I]{10},tol{0.05},ssorw0{1.0}; (O) - slmeth = 1
   10 5e-2 1.0
# WEIGHTING AND AVERAGING
#.. ioptupst[T/F],potdif{0.0002},theta{1.0}
   T 2.0E-5 1.0
# RELATIVE PERMEABILITY
#.. kodrp[I],wsatn{0.3},ssatn{0.0}
   0 0.3 0.0
# ROCK PROPERTIES
#.. heatcpty{1.e7},rxden,rxcmprss{0.},grav{981.},initphi[T/F]
#.. initphi_filename{IC_pressporo.xxx}; (O) - initphi = T
   -1 -1 -1 981.0 F
# RADIAL COORDINATES
#.. irad[T/F],wellrad(cm),radiusmax(cm)
   T 0.0 9999961.266406167
# PRINT/PLOT CONTROL
#.. wide[I],long[I],v-avg[I]
   1 1 0 1
# PRINT 1
#.. pres_pr_intrv,enth_pr_intrv,temp_pr_intrv,satn_pr_intrv,iprsat[I]
   0 0 0 0 3
# PRINT 2
#.. dens_pr_intrv,iprden[I],vis_pr_intrv,iprvis[I],potential_pr_intrv,iprpot[I]
   0 11 0 11 0 33
# PRINT 3
#.. velocity_pr_intrv,iprvel[I],bcflow_pr_intrv,iprbcfw[I],source_pr_intrv,iprsorce[I]
   0 33 0 0 0 0
# PRINT 4
#.. pm_properties_pr_intrv,iprmprop[I],poros_pr_intrv,permeability_pr_intrv
   0 11 0 0
# PRINT 5
#.. balance_pr_intrv,dimno_pr_intrv,iprdimno[I],residuals_pr_intrv,dump_pr_intrv
   0 0 11 0 0
# PRINT 6
#.. plotscalar_pr_intrv,plotvector_pr_intrv,plotfile_type[I],time_series_pr_intrv
   0 0 1 0
# SLICE number

```


0.1963259 0.16823128 0.14415705 0.12352789 0.10585081 0.090703346 0.07772352 0.07803268 0.078 0.078
0.077812284 0.08987319 0.10380354 0.11989308 0.1384765 0.15994036 0.18473113 0.21336445 0.24643594 0.28463352
0.3287517 0.37970823 0.438563 0.5000667 0.49993983 0.4999512 0.5000553

XPERMEABILITY (m^2)

RTFDEPTH

3 0
1 4
1.0 1.0E-12 10.0 6.3096E-16
2 1
1.0E-22

ZPERMEABILITY (m^2)

CALCULATE

1.0E-1

COMPRESSIBILITY (Pa^-1)

RTFTEMP

1 1 1
0.0
2 1 1
0.0

POROSITY (-)

RTFTEMP

1 1 1
0.1
2 1 1
0.05

RDENSITY (kg/m^3)

RTFTEMP

1 1 1
2500.0
2 1 1
2500.0

SPECIFIC_HEAT (J/kg-K)

RTFTEMP

1 2 2
1000.0 750.0
1000.0 950.0
2 2 2
1000.0 750.0
2000.0 950.0

THERMAL_COND (W/m-K)

RTFTEMP

1 1 1
2.000000
2 1 1
2.000000

Pressure (bar)

FREE

TOP

1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00 1.013000000000000E+00
4.986494353581760E+01 4.986494353603242E+01 4.986494353646400E+01 4.986494353710926E+01 4.986494353804378E+01
4.986494353943296E+01 4.986494354145088E+01 4.986494354433327E+01 4.986494354839880E+01 4.986494355407752E+01
4.986494356194917E+01 4.986494357279459E+01 4.986494358766502E+01 4.986494360797552E+01 4.986494363563158E+01
4.986494367320111E+01 4.986494372379283E+01 4.986494378654772E+01 4.986494385855759E+01 4.986494393992020E+01

4.986494403074425E+01 4.986494413122316E+01 4.986494424146526E+01 4.986494436169011E+01 4.986494449206238E+01
4.986494463278308E+01 4.986494478407015E+01 4.986494494615481E+01 4.986494511928574E+01 4.986494530372490E+01
4.986494551615981E+01 4.986494576778920E+01 4.986494605375892E+01 4.986494637925162E+01 4.986494675034518E+01
4.986494717419164E+01 4.986494765923677E+01 4.986494821548950E+01 4.986494885485345E+01 4.986494959153504E+01
4.986495004254553E+01 4.986495142831749E+01 4.986495257345850E+01 4.986495390766568E+01 4.986495546682098E+01
4.986495729427694E+01 4.986495944231270E+01 4.986496197368218E+01 4.986496496305635E+01 4.986496849793063E+01
4.986497267812940E+01 4.986497761221070E+01 4.986498340751356E+01 4.986499014764473E+01 4.986499784562526E+01
4.986500635024738E+01 4.986501516260158E+01 4.986502307951407E+01 4.986502750094026E+01 4.986502307807712E+01
4.986499905159606E+01 4.986493395305357E+01 4.986478494921138E+01 4.986446635304998E+01 4.986380679069212E+01
4.986246096168519E+01 4.985961863252851E+01 4.985202716162209E+01 4.982611139424085E+01 4.983194412800787E+01
9.828581153448710E+01 9.828581153484033E+01 9.828581153554998E+01 9.828581153661096E+01 9.828581153814758E+01
9.828581154043181E+01 9.828581154374987E+01 9.828581154848941E+01 9.828581155517439E+01 9.828581156451204E+01
9.828581157745569E+01 9.828581159528943E+01 9.828581161974208E+01 9.828581165314108E+01 9.828581169862068E+01
9.828581176040529E+01 9.828581184361018E+01 9.828581194682685E+01 9.828581206527615E+01 9.828581219912314E+01
9.828581234855154E+01 9.828581251388503E+01 9.828581269530792E+01 9.828581289318836E+01 9.828581310780484E+01
9.828581333949636E+01 9.828581358863070E+01 9.828581385559833E+01 9.828581414081931E+01 9.828581444473663E+01
9.828581479486644E+01 9.828581520971407E+01 9.828581568132817E+01 9.828581621831678E+01 9.828581683078585E+01
9.828581753064211E+01 9.828581833196530E+01 9.828581925146671E+01 9.828582030905538E+01 9.828582152853814E+01
9.828582293848547E+01 9.828582457330143E+01 9.828582647454226E+01 9.828582869253295E+01 9.828583128833000E+01
9.828583433606987E+01 9.828583792570562E+01 9.828584216605918E+01 9.828584718794981E+01 9.828585314683056E+01
9.828586022372536E+01 9.828586862203252E+01 9.828587855542608E+01 9.828589021763554E+01 9.828590371640108E+01
9.828591893756285E+01 9.828593527355667E+01 9.828595108842768E+01 9.828596266785451E+01 9.828596215329057E+01
9.828593344869896E+01 9.828584403137604E+01 9.828562841948452E+01 9.828515475477845E+01 9.828415829292823E+01
9.828210604981354E+01 9.827775461682619E+01 9.826602508625190E+01 9.822441767163767E+01 9.823026292009409E+01
1.461409531800985E+02 1.461409531805525E+02 1.461409531814646E+02 1.461409531828283E+02 1.461409531848034E+02
1.461409531877394E+02 1.461409531920042E+02 1.461409531980961E+02 1.461409532066886E+02 1.461409532186907E+02
1.461409532353280E+02 1.461409532582510E+02 1.461409532898825E+02 1.461409533326147E+02 1.461409533910777E+02
1.461409534705039E+02 1.461409535774733E+02 1.461409537101810E+02 1.461409538624879E+02 1.461409540346124E+02
1.461409542267974E+02 1.461409544394669E+02 1.461409546728663E+02 1.461409549274787E+02 1.461409552036728E+02
1.461409555018961E+02 1.461409558226345E+02 1.461409561664040E+02 1.461409565337602E+02 1.461409569252895E+02
1.461409573764660E+02 1.461409579112021E+02 1.461409585193200E+02 1.461409592120037E+02 1.461409600223987E+02
1.461409609060132E+02 1.461409619412121E+02 1.461409631298283E+02 1.461409644979192E+02 1.461409660767078E+02
1.461409679037515E+02 1.461409700243960E+02 1.461409724935812E+02 1.461409753780767E+02 1.461409787592313E+02
1.461409827363193E+02 1.461409874305388E+02 1.461409929896448E+02 1.46140995930333E+02 1.461410074567366E+02
1.461410168370905E+02 1.461410280304446E+02 1.461410413636161E+02 1.461410571646234E+02 1.461410756932953E+02
1.461410969920664E+02 1.461411205796031E+02 1.461411448356336E+02 1.461411657769494E+02 1.461411746239772E+02
1.461411529397969E+02 1.461410628414574E+02 1.461408271350792E+02 1.461402890156673E+02 1.461391319055100E+02
1.461367189194148E+02 1.461315795124304E+02 1.461175827248821E+02 1.460654277841713E+02 1.460679124067578E+02
1.930900030505996E+02 1.930900030511320E+02 1.930900030522018E+02 1.930900030538010E+02 1.930900030561172E+02
1.930900030595604E+02 1.930900030645619E+02 1.930900030717061E+02 1.930900030817829E+02 1.930900030958585E+02
1.930900031153702E+02 1.930900031422540E+02 1.930900031791170E+02 1.930900032294693E+02 1.930900032980387E+02
1.930900033911997E+02 1.930900035166742E+02 1.930900036723522E+02 1.930900038510386E+02 1.930900040529965E+02
1.930900042785185E+02 1.930900045281111E+02 1.930900048020722E+02 1.930900051009795E+02 1.930900054252779E+02
1.930900057755060E+02 1.930900061522487E+02 1.930900065561276E+02 1.930900069878124E+02 1.930900074480104E+02
1.930900079784472E+02 1.930900086073127E+02 1.930900093227199E+02 1.930900101379236E+02 1.930900110685209E+02
1.930900121329349E+02 1.930900133530133E+02 1.930900147547694E+02 1.930900163693038E+02 1.930900182339551E+02
1.930900203937356E+02 1.930900229031278E+02 1.930900258283309E+02 1.930900292500655E+02 1.93090032670607E+02
1.930900380003597E+02 1.930900435985654E+02 1.930900502440992E+02 1.930900581603962E+02 1.930900676196311E+02
1.930900789498773E+02 1.930900925392043E+02 1.930901088314605E+02 1.930901283030790E+02 1.930901513997181E+02
1.930901783909091E+02 1.930902090602900E+02 1.930902420684306E+02 1.930902736633999E+02 1.930902950849255E+02
1.930902873286865E+02 1.930902105217675E+02 1.930899822261882E+02 1.930894332120265E+02 1.930882194532137E+02
1.930856493763161E+02 1.930801525393568E+02 1.930650499659797E+02 1.930051811537722E+02 1.930047836338233E+02
2.357444625500737E+02 2.357444625506656E+02 2.357444625518549E+02 2.357444625536330E+02 2.357444625562081E+02
2.357444625600361E+02 2.357444625655968E+02 2.357444625735397E+02 2.357444625847431E+02 2.357444626003925E+02
2.357444626220859E+02 2.357444626519761E+02 2.357444626929622E+02 2.357444627489475E+02 2.357444628251903E+02
2.357444629287808E+02 2.357444630683102E+02 2.357444632414390E+02 2.357444634401725E+02 2.357444636648101E+02
2.357444639156853E+02 2.357444641933704E+02 2.357444644982068E+02 2.357444648308486E+02 2.357444651918027E+02
2.357444655816823E+02 2.357444660011526E+02 2.357444664509219E+02 2.357444669317530E+02 2.357444674444522E+02
2.357444680355357E+02 2.357444687364942E+02 2.357444695341620E+02 2.357444704434166E+02 2.357444714817829E+02
2.357444726699841E+02 2.357444740326260E+02 2.357444755990463E+02 2.357444774043743E+02 2.357444794908577E+02
2.357444819095252E+02 2.357444847222772E+02 2.357444880045138E+02 2.357444918484396E+02 2.357444963672082E+02
2.357445017000960E+02 2.357445080189021E+02 2.357445155357455E+02 2.357445245123197E+02 2.357445352703814E+02
2.357445482026188E+02 2.357445637817209E+02 2.357445825627854E+02 2.357446051688514E+02 2.357446322387788E+02
2.357446642957759E+02 2.357447014533629E+02 2.35744727926251E+02 2.357447850770276E+02 2.357448201284757E+02
2.357448294785348E+02 2.357447734236042E+02 2.357445685211216E+02 2.357440414616512E+02 2.357428371456096E+02
2.357402421364741E+02 2.357346726629718E+02 2.357192910718084E+02 2.356538236672903E+02 2.356788944369452E+02

2.716645497884587E+02 2.716645497890945E+02 2.716645497903717E+02 2.716645497922813E+02 2.716645497950470E+02
2.716645497991584E+02 2.716645498051305E+02 2.716645498136613E+02 2.716645498256939E+02 2.716645498425016E+02
2.716645498658008E+02 2.716645498979042E+02 2.716645499419253E+02 2.716645500020575E+02 2.716645500839500E+02
2.716645501952206E+02 2.716645503451014E+02 2.716645505310862E+02 2.716645507445926E+02 2.716645509859487E+02
2.716645512555202E+02 2.716645515539302E+02 2.716645518815547E+02 2.716645522391068E+02 2.716645526271427E+02
2.716645530463335E+02 2.716645534974081E+02 2.716645539811425E+02 2.716645544983727E+02 2.716645550499832E+02
2.716645556860483E+02 2.716645564405264E+02 2.716645572993233E+02 2.716645582785472E+02 2.716645593971888E+02
2.716645606777259E+02 2.716645621468750E+02 2.716645638365272E+02 2.716645657849181E+02 2.716645680380965E+02
2.716645706517712E+02 2.716645736936413E+02 2.716645772463392E+02 2.716645814111506E+02 2.716645863127110E+02
2.716645921049175E+02 2.716645989783230E+02 2.716646071692788E+02 2.716646169710255E+02 2.716646287466980E+02
2.716646429436646E+02 2.716646601074029E+02 2.716646808905888E+02 2.716647060479272E+02 2.716647363969566E+02
2.716647727044337E+02 2.716648154166430E+02 2.716648640689604E+02 2.716649160413327E+02 2.716649639798616E+02
2.716649904838426E+02 2.716649571430519E+02 2.716647818422135E+02 2.716642919685707E+02 2.716631309163485E+02
2.716605820000926E+02 2.716550931055090E+02 2.716399122152980E+02 2.715704270721461E+02 2.716169343587690E+02
3.019440680339375E+02 3.019440680346068E+02 3.019440680359514E+02 3.019440680379617E+02 3.019440680408732E+02
3.019440680452013E+02 3.019440680514883E+02 3.019440680604689E+02 3.019440680731360E+02 3.019440680908299E+02
3.019440681153579E+02 3.019440681491545E+02 3.019440681954982E+02 3.019440682588041E+02 3.019440683450205E+02
3.019440684621695E+02 3.019440686199750E+02 3.019440688158041E+02 3.019440690406254E+02 3.019440692947902E+02
3.019440695786902E+02 3.019440698929889E+02 3.019440702380904E+02 3.019440706147552E+02 3.019440710253789E+02
3.019440714652798E+02 3.019440719406375E+02 3.019440724504830E+02 3.019440729957113E+02 3.019440735772702E+02
3.019440742479771E+02 3.019440750437038E+02 3.019440759496540E+02 3.019440769829012E+02 3.019440781635883E+02
3.019440795155759E+02 3.019440810672483E+02 3.019440828525200E+02 3.019440849120954E+02 3.019440872950546E+02
3.019440900608520E+02 3.019440932818451E+02 3.019440970465010E+02 3.019441014634646E+02 3.019441066667219E+02
3.019441128221422E+02 3.019441201357259E+02 3.019441288639179E+02 3.019441393263111E+02 3.019441519208935E+02
3.019441671415265E+02 3.019441855962485E+02 3.019442080226549E+02 3.019442352917220E+02 3.019442683815396E+02
3.019443082823530E+02 3.019443557538347E+02 3.019444107735337E+02 3.019444713479631E+02 3.019445310121886E+02
3.019445736218228E+02 3.019445625182784E+02 3.019444179469702E+02 3.019439702236079E+02 3.019428658125498E+02
3.019403932715248E+02 3.019350500983698E+02 3.019203024633447E+02 3.018478221941730E+02 3.019115896422438E+02
3.275003137919277E+02 3.275003137926233E+02 3.275003137940207E+02 3.275003137961099E+02 3.275003137991358E+02
3.275003138036338E+02 3.275003138101678E+02 3.275003138195012E+02 3.275003138326659E+02 3.275003138510550E+02
3.275003138765468E+02 3.275003139116716E+02 3.275003139598372E+02 3.275003140256326E+02 3.275003141152411E+02
3.275003142370025E+02 3.275003144010267E+02 3.275003146045821E+02 3.275003148382858E+02 3.275003151025082E+02
3.275003153976622E+02 3.275003157244441E+02 3.275003160832813E+02 3.275003164749722E+02 3.275003169001455E+02
3.275003173595574E+02 3.275003178540296E+02 3.2750031838444375E+02 3.275003189517251E+02 3.275003195568914E+02
3.275003202549200E+02 3.275003210832002E+02 3.275003220263901E+02 3.275003231023365E+02 3.275003243321066E+02
3.275003257406726E+02 3.275003273577623E+02 3.275003292189237E+02 3.275003313668598E+02 3.275003338531104E+02
3.275003367401777E+02 3.275003401042220E+02 3.275003440384880E+02 3.275003486576678E+02 3.275003541034609E+02
3.275003605516521E+02 3.275003682210939E+02 3.275003773850309E+02 3.275003883852082E+02 3.275004016490884E+02
3.275004177101158E+02 3.275004372299948E+02 3.275004610197933E+02 3.275004900520762E+02 3.275005254468110E+02
3.275005683943808E+02 3.275006199395774E+02 3.275006804700126E+02 3.275007485871857E+02 3.275008186960832E+02
3.275008759312623E+02 3.275008855169833E+02 3.275007704480616E+02 3.275003649314688E+02 3.274993206091356E+02
3.274969349235913E+02 3.274917598024570E+02 3.27475484962953E+02 3.274028524919465E+02 3.274800997592475E+02
3.490985905101247E+02 3.490985905108413E+02 3.490985905122809E+02 3.490985905144332E+02 3.490985905175503E+02
3.490985905221840E+02 3.490985905289151E+02 3.490985905385299E+02 3.490985905520918E+02 3.490985905710358E+02
3.490985905972969E+02 3.490985906334819E+02 3.490985906831016E+02 3.490985907508843E+02 3.490985908432008E+02
3.490985909686445E+02 3.490985911376342E+02 3.490985913473597E+02 3.490985915881583E+02 3.490985918604159E+02
3.490985921645628E+02 3.490985925013225E+02 3.490985928711415E+02 3.490985932748498E+02 3.490985937131030E+02
3.490985941866889E+02 3.490985946964637E+02 3.490985952433402E+02 3.490985958283021E+02 3.490985964523915E+02
3.490985971723300E+02 3.490985980267295E+02 3.49098598998172E+02 3.490986001100675E+02 3.490986013792997E+02
3.490986028333913E+02 3.490986045031669E+02 3.490986064255102E+02 3.490986086447616E+02 3.490986112144806E+02
3.490986141996776E+02 3.490986176796497E+02 3.490986217515930E+02 3.490986265352148E+02 3.490986321786301E+02
3.490986388658979E+02 3.490986468266325E+02 3.490986563481987E+02 3.490986677910373E+02 3.490986816075992E+02
3.490986983650547E+02 3.490987187710876E+02 3.490987437001050E+02 3.490987742128640E+02 3.490988115534812E+02
3.490988570890713E+02 3.490989121188755E+02 3.490989774010338E+02 3.490990520827016E+02 3.490991313811820E+02
3.490992016523862E+02 3.490992299710695E+02 3.490991421397992E+02 3.490987765591815E+02 3.490977908723581E+02
3.490954926339483E+02 3.490904865977078E+02 3.490768423651657E+02 3.490005567688074E+02 3.490880819527220E+02
3.673761402651769E+02 3.673761402623104E+02 3.673761402637841E+02 3.673761402659873E+02 3.673761402691782E+02
3.673761402739217E+02 3.673761402808121E+02 3.673761402906546E+02 3.673761403045376E+02 3.673761403239303E+02
3.673761403508134E+02 3.673761403878557E+02 3.673761404386514E+02 3.673761405080412E+02 3.673761406025478E+02
3.673761407309697E+02 3.673761409039757E+02 3.673761411186929E+02 3.673761413652321E+02 3.673761416439922E+02
3.673761419554183E+02 3.673761423002559E+02 3.673761426789681E+02 3.673761430924106E+02 3.673761435412615E+02
3.673761440263350E+02 3.673761445485162E+02 3.673761451087485E+02 3.673761457080490E+02 3.673761463474958E+02
3.673761470852226E+02 3.673761479608380E+02 3.673761489582230E+02 3.673761500963674E+02 3.673761513977082E+02
3.673761528888680E+02 3.673761546015751E+02 3.673761565738158E+02 3.673761588512836E+02 3.673761614892106E+02
3.673761645546879E+02 3.673761681296199E+02 3.673761723144937E+02 3.673761772332033E+02 3.673761830392321E+02
3.673761899235801E+02 3.673761981249143E+02 3.673762079425122E+02 3.673762197526386E+02 3.673762340289685E+02

3.673762513674267E+02 3.673762725150646E+02 3.673762984007735E+02 3.673763301615672E+02 3.673763691495366E+02
3.673764168865164E+02 3.673764748961843E+02 3.673765442663432E+02 3.673766246345494E+02 3.673767119569333E+02
3.673767937163456E+02 3.673768387254489E+02 3.673767754834413E+02 3.673764465378238E+02 3.673755156723202E+02
3.673733005701531E+02 3.673684542649101E+02 3.673553668126166E+02 3.672779949559821E+02 3.673731935039286E+02
3.828634559796174E+02 3.828634559803647E+02 3.828634559818662E+02 3.828634559841110E+02 3.828634559873622E+02
3.828634559921953E+02 3.82863455992159E+02 3.828634560092444E+02 3.828634560233897E+02 3.828634560431487E+02
3.828634560705399E+02 3.828634561082824E+02 3.828634561600387E+02 3.828634562307412E+02 3.828634563270368E+02
3.828634564578918E+02 3.828634566341792E+02 3.828634568529750E+02 3.828634571042054E+02 3.828634573882803E+02
3.828634577056570E+02 3.828634580570994E+02 3.828634584430843E+02 3.828634588644891E+02 3.828634593220108E+02
3.828634598164856E+02 3.828634603488226E+02 3.828634609199910E+02 3.828634615310362E+02 3.828634621830658E+02
3.828634629353722E+02 3.828634638283831E+02 3.828634648456992E+02 3.828634660067361E+02 3.828634673344425E+02
3.828634688560589E+02 3.828634706040632E+02 3.828634726173579E+02 3.828634749427629E+02 3.828634776369036E+02
3.828634807686081E+02 3.828634844219599E+02 3.828634887002020E+02 3.828634937307406E+02 3.828634996715707E+02
3.828635067195385E+02 3.828635151209517E+02 3.828635251851668E+02 3.828635373018710E+02 3.828635519627913E+02
3.828635697883840E+02 3.828635915593957E+02 3.828636182515203E+02 3.828636510675376E+02 3.828636914530698E+02
3.828637410646400E+02 3.828638016223930E+02 3.828638745045424E+02 3.828639597837992E+02 3.828640540774344E+02
3.828641458867965E+02 3.828642056140250E+02 3.828641642609475E+02 3.828638682945128E+02 3.828629874157971E+02
3.828608488655020E+02 3.828561483195098E+02 3.828435848060441E+02 3.827655231320372E+02 3.828663354921887E+02
3.960025032585936E+02 3.960025032593524E+02 3.960025032608768E+02 3.960025032631559E+02 3.960025032664567E+02
3.960025032713635E+02 3.960025032784913E+02 3.960025032886728E+02 3.960025033030341E+02 3.960025033230948E+02
3.960025033509042E+02 3.960025033892232E+02 3.960025034417703E+02 3.960025035135535E+02 3.960025036113220E+02
3.960025037441803E+02 3.960025039231697E+02 3.960025041453244E+02 3.960025044004185E+02 3.960025046888714E+02
3.960025050111503E+02 3.960025053680351E+02 3.960025057600137E+02 3.960025061879818E+02 3.960025066526521E+02
3.960025071548796E+02 3.960025076955934E+02 3.960025082757846E+02 3.960025088965219E+02 3.960025095589384E+02
3.960025103232829E+02 3.960025112306624E+02 3.960025122644474E+02 3.960025134444083E+02 3.960025147939200E+02
3.960025163407376E+02 3.960025181179651E+02 3.960025201652703E+02 3.960025225304149E+02 3.960025252711916E+02
3.960025284578842E+02 3.960025321764062E+02 3.960025365323175E+02 3.960025416559811E+02 3.960025477091972E+02
3.960025548937501E+02 3.960025634624137E+02 3.960025737330904E+02 3.960025861068709E+02 3.960026010908543E+02
3.960026193264353E+02 3.960026416231967E+02 3.960026689969988E+02 3.960027027072385E+02 3.960027442803361E+02
3.960027954896093E+02 3.960028582262951E+02 3.960029341227209E+02 3.960030236344348E+02 3.960031239639837E+02
3.960032245208623E+02 3.960032971365587E+02 3.960032750865595E+02 3.960030084433081E+02 3.960021724187059E+02
3.960001029812825E+02 3.959955326918850E+02 3.959834490233942E+02 3.959050008064405E+02 3.960098349197903E+02
4.071620022252467E+02 4.071620022260149E+02 4.071620022275583E+02 4.071620022298657E+02 4.071620022332077E+02
4.071620022381755E+02 4.071620022453921E+02 4.071620022557004E+02 4.071620022702405E+02 4.071620022905511E+02
4.071620023187070E+02 4.071620023575036E+02 4.071620024107057E+02 4.071620024833843E+02 4.071620025823731E+02
4.071620027168911E+02 4.071620028981193E+02 4.071620031230574E+02 4.071620033813535E+02 4.071620036734349E+02
4.071620039997776E+02 4.071620043611743E+02 4.071620047581227E+02 4.071620051915338E+02 4.071620056621337E+02
4.071620061707929E+02 4.071620067184577E+02 4.071620073061375E+02 4.071620079349208E+02 4.071620086059617E+02
4.071620093803047E+02 4.071620102996213E+02 4.071620113470930E+02 4.071620125427865E+02 4.071620139104333E+02
4.071620154782198E+02 4.071620172797743E+02 4.071620193554068E+02 4.071620217536700E+02 4.071620245333373E+02
4.071620277659177E+02 4.071620315388659E+02 4.071620359596957E+02 4.071620411612670E+02 4.071620473085972E+02
4.071620546076513E+02 4.071620633166860E+02 4.071620737608610E+02 4.071620863509681E+02 4.071621016072058E+02
4.071621201888482E+02 4.071621429301514E+02 4.071621708814231E+02 4.071622053507369E+02 4.071622479341679E+02
4.071623005060241E+02 4.071623651059758E+02 4.071624435876287E+02 4.071625367412919E+02 4.071626422837152E+02
4.071627504265950E+02 4.071628342720184E+02 4.071628291318556E+02 4.071625883370116E+02 4.071617921220232E+02
4.071597842696830E+02 4.071553288277460E+02 4.07143676709418E+02 4.070650659339152E+02 4.071727099936350E+02
4.166500797012440E+02 4.166500797020200E+02 4.166500797035793E+02 4.166500797059103E+02 4.166500797092865E+02
4.166500797143053E+02 4.166500797215957E+02 4.166500797320096E+02 4.166500797466986E+02 4.166500797672173E+02
4.166500797956617E+02 4.166500798348558E+02 4.166500798886034E+02 4.166500799620275E+02 4.166500800620324E+02
4.166500801979325E+02 4.166500803810251E+02 4.166500806082811E+02 4.166500808692442E+02 4.166500811643481E+02
4.166500814940761E+02 4.166500818592320E+02 4.166500822603217E+02 4.166500826982689E+02 4.166500831738113E+02
4.166500836878325E+02 4.166500842412931E+02 4.166500848352180E+02 4.166500854707127E+02 4.166500861489491E+02
4.166500869316353E+02 4.166500878609157E+02 4.166500889198147E+02 4.166500901286477E+02 4.166500915114459E+02
4.166500930967578E+02 4.166500949186531E+02 4.166500970179819E+02 4.166500994439633E+02 4.166501022561976E+02
4.166501055272727E+02 4.166501093458095E+02 4.166501138211094E+02 4.166501190881000E+02 4.166501253145244E+02
4.166501327098942E+02 4.166501415371222E+02 4.166501521275398E+02 4.166501649001998E+02 4.166501803864729E+02
4.166501992609055E+02 4.166502223788666E+02 4.166502508201950E+02 4.166502859347781E+02 4.166503293786582E+02
4.166503831132972E+02 4.166504493068041E+02 4.166505300048213E+02 4.166506262891386E+02 4.166507363258901E+02
4.166508510308088E+02 4.166509446265360E+02 4.166509542311895E+02 4.166507360857004E+02 4.166499749380506E+02
4.166480214829414E+02 4.166436664279961E+02 4.166323970386506E+02 4.165537837213323E+02 4.166633333564138E+02
4.247247138212683E+02 4.247247138220509E+02 4.247247138236233E+02 4.247247138259741E+02 4.247247138293789E+02
4.247247138344403E+02 4.247247138417924E+02 4.247247138522945E+02 4.247247138671081E+02 4.247247138878008E+02
4.247247139164863E+02 4.247247139560129E+02 4.247247140120165E+02 4.247247140842638E+02 4.247247141851183E+02
4.247247143221741E+02 4.247247145068257E+02 4.247247147360201E+02 4.247247149992137E+02 4.247247152968455E+02
4.247247156294052E+02 4.247247159977060E+02 4.247247164022605E+02 4.247247168440035E+02 4.247247173236821E+02
4.247247178421912E+02 4.247247184005037E+02 4.247247189996575E+02 4.247247196407722E+02 4.247247203250351E+02

4.247247211147105E+02 4.247247220523393E+02 4.247247231208154E+02 4.247247243406637E+02 4.247247257361673E+02
4.247247273361802E+02 4.247247291751444E+02 4.247247312943658E+02 4.247247337436260E+02 4.247247365832244E+02
4.247247398865779E+02 4.247247437435448E+02 4.247247482646901E+02 4.247247535867784E+02 4.247247598798660E+02
4.247247673564768E+02 4.247247762834834E+02 4.247247869974709E+02 4.247247999245326E+02 4.247248156055732E+02
4.247248347281885E+02 4.247248581658138E+02 4.247248870235961E+02 4.247249226873175E+02 4.247249668645905E+02
4.247250215919760E+02 4.247250891484944E+02 4.247251717460147E+02 4.247252707192986E+02 4.247253846256478E+02
4.247255049956736E+02 4.247256070344179E+02 4.247256294506863E+02 4.247254310618424E+02 4.247247006309135E+02
4.247227949166366E+02 4.247185270871079E+02 4.247075942894563E+02 4.246290866978320E+02 4.247398796525669E+02
4.316023278000247E+02 4.316023278008128E+02 4.316023278023963E+02 4.316023278047637E+02 4.316023278081925E+02
4.316023278132895E+02 4.316023278206936E+02 4.316023278312697E+02 4.316023278461877E+02 4.316023278670262E+02
4.316023278959142E+02 4.316023279357196E+02 4.316023279903059E+02 4.316023280648762E+02 4.316023281664435E+02
4.316023283044689E+02 4.316023284904286E+02 4.316023287212496E+02 4.316023289863149E+02 4.316023292860683E+02
4.316023296210048E+02 4.316023299919453E+02 4.316023303994084E+02 4.316023308443382E+02 4.316023313274899E+02
4.316023318497678E+02 4.316023324121552E+02 4.316023330157012E+02 4.316023336615374E+02 4.316023343508642E+02
4.316023351464132E+02 4.316023360910593E+02 4.316023371675871E+02 4.316023383966982E+02 4.316023398028888E+02
4.316023414152709E+02 4.316023432686007E+02 4.316023454045701E+02 4.316023478734368E+02 4.316023507360918E+02
4.316023540666927E+02 4.316023579560321E+02 4.316023625158624E+02 4.316023678844694E+02 4.316023742338749E+02
4.316023817791652E+02 4.316023907905830E+02 4.316024016091899E+02 4.316024146670837E+02 4.316024305133079E+02
4.316024498466119E+02 4.316024735558897E+02 4.316025027679721E+02 4.316025388994369E+02 4.316025837022083E+02
4.316026392774795E+02 4.316027079998943E+02 4.316027922249140E+02 4.316028935062961E+02 4.3160301074071823E+02
4.316031359939859E+02 4.316032453283526E+02 4.316032788459710E+02 4.316030976305107E+02 4.316023939900408E+02
4.316005299735004E+02 4.315963376187112E+02 4.315856986713630E+02 4.315073656795499E+02 4.316189252220771E+02
4.379279670312996E+02 4.379279670320927E+02 4.379279670336863E+02 4.379279670360688E+02 4.379279670395194E+02
4.379279670446488E+02 4.379279670520999E+02 4.379279670627434E+02 4.37927967077564E+02 4.379279670987275E+02
4.379279671277993E+02 4.379279671678582E+02 4.379279672227921E+02 4.379279672978377E+02 4.379279674000528E+02
4.379279675389593E+02 4.379279677261079E+02 4.379279679584073E+02 4.379279682251739E+02 4.379279685268557E+02
4.379279688639529E+02 4.379279692372931E+02 4.379279696474009E+02 4.379279700952284E+02 4.379279705815384E+02
4.379279711072440E+02 4.379279716733379E+02 4.379279722808794E+02 4.379279729310112E+02 4.379279736249455E+02
4.379279744258396E+02 4.379279753768727E+02 4.379279764607301E+02 4.379279776982751E+02 4.379279791141985E+02
4.379279807378480E+02 4.379279826042674E+02 4.379279847555014E+02 4.379279872422434E+02 4.379279901259264E+02
4.379279934813868E+02 4.379279974002735E+02 4.379280019954282E+02 4.379280074065329E+02 4.379280138074149E+02
4.379280214155149E+02 4.379280305041761E+02 4.379280414185797E+02 4.379280545963549E+02 4.379280705940488E+02
4.379280901207030E+02 4.379281140794903E+02 4.379281436172909E+02 4.379281801791889E+02 4.379282255581748E+02
4.379282819154188E+02 4.379283517144266E+02 4.379284374443048E+02 4.379285408629848E+02 4.379286611842733E+02
4.379287909745775E+02 4.379289071008585E+02 4.379289509762220E+02 4.379287858239281E+02 4.379281073083866E+02
4.379262824331267E+02 4.379221602996719E+02 4.379117965640097E+02 4.378336972318680E+02 4.379444863685563E+02
4.442311003253224E+02 4.442311003261206E+02 4.442311003277241E+02 4.442311003301214E+02 4.442311003335934E+02
4.442311003387548E+02 4.442311003462523E+02 4.442311003569621E+02 4.442311003720686E+02 4.442311003931704E+02
4.442311004224234E+02 4.442311004627321E+02 4.442311005180086E+02 4.442311005935226E+02 4.442311006963760E+02
4.442311008361510E+02 4.442311010244712E+02 4.442311012582276E+02 4.442311015266711E+02 4.442311018302539E+02
4.442311021694808E+02 4.442311025451870E+02 4.442311029579021E+02 4.442311034085868E+02 4.442311038980112E+02
4.442311044270972E+02 4.442311049968467E+02 4.442311056083295E+02 4.442311062626991E+02 4.442311069611793E+02
4.442311077673478E+02 4.442311087246843E+02 4.442311098157768E+02 4.44231110616485E+02 4.442311124871827E+02
4.442311141219610E+02 4.442311160013121E+02 4.442311181676307E+02 4.442311206720425E+02 4.442311235765185E+02
4.442311269565691E+02 4.442311309046944E+02 4.442311355348186E+02 4.442311409880131E+02 4.442311474399021E+02
4.442311551102717E+02 4.442311642755546E+02 4.442311752850414E+02 4.442311885818819E+02 4.442312047301190E+02
4.44231224490832E+02 4.442312486562355E+02 4.442312785185368E+02 4.442313155096522E+02 4.442313614637910E+02
4.442314186023950E+02 4.442314894783838E+02 4.442315767155303E+02 4.442316822778185E+02 4.442318056995861E+02
4.442319400544769E+02 4.442320630260839E+02 4.442321173616282E+02 4.442319684680718E+02 4.442313154433631E+02
4.442295303045773E+02 4.442254788517001E+02 4.442153943280059E+02 4.441375983285105E+02 4.442475790256117E+02
4.504987428467792E+02 4.504987428475822E+02 4.504987428491954E+02 4.504987428516073E+02 4.504987428551005E+02
4.504987428602933E+02 4.504987428678365E+02 4.504987428786114E+02 4.504987428938098E+02 4.504987429150401E+02
4.504987429444712E+02 4.504987429850254E+02 4.504987430406388E+02 4.504987431166131E+02 4.504987432200941E+02
4.504987433607230E+02 4.504987435501952E+02 4.504987437853842E+02 4.504987440554764E+02 4.504987443609284E+02
4.504987447022499E+02 4.504987450802828E+02 4.504987454955623E+02 4.504987459490574E+02 4.504987464415456E+02
4.504987469739573E+02 4.504987475473039E+02 4.504987481626649E+02 4.504987488212051E+02 4.504987495241600E+02
4.504987503355207E+02 4.504987512990633E+02 4.504987523972804E+02 4.504987536513532E+02 4.504987550863554E+02
4.504987567320995E+02 4.504987586241963E+02 4.504987608053866E+02 4.504987633272241E+02 4.504987662522125E+02
4.504987696565303E+02 4.504987736335211E+02 4.504987782981836E+02 4.504987837929676E+02 4.504987902952818E+02
4.504987980272436E+02 4.504988072683578E+02 4.504988183720042E+02 4.504988317868308E+02 4.504988480843508E+02
4.504988679941583E+02 4.504988924479788E+02 4.504989226328406E+02 4.504989600509995E+02 4.504990065779422E+02
4.504990644955403E+02 4.504991364464749E+02 4.504992251898981E+02 4.504993328972511E+02 4.504994594261291E+02
4.504995983626804E+02 4.504997282173487E+02 4.504997930914778E+02 4.504996606148910E+02 4.504990333889888E+02
4.504972884915814E+02 4.504933079597632E+02 4.504835054223871E+02 4.504060868399453E+02 4.505151784270754E+02
4.567243165097711E+02 4.567243165105789E+02 4.567243165122017E+02 4.567243165146279E+02 4.567243165181418E+02
4.567243165233654E+02 4.567243165309534E+02 4.567243165417923E+02 4.567243165570810E+02 4.567243165784374E+02

4.567243166080434E+02 4.567243166488386E+02 4.567243167047826E+02 4.567243167812089E+02 4.567243168853059E+02
4.567243170267729E+02 4.567243172173759E+02 4.567243174539714E+02 4.567243177256825E+02 4.567243180329699E+02
4.567243183763481E+02 4.567243187566659E+02 4.567243191744640E+02 4.567243196307196E+02 4.567243201262174E+02
4.567243206618962E+02 4.567243212387768E+02 4.567243218579489E+02 4.567243225205878E+02 4.56724322929407E+02
4.567243240444054E+02 4.567243250140497E+02 4.567243261192729E+02 4.567243273814117E+02 4.567243288257280E+02
4.567243304822623E+02 4.567243323869038E+02 4.567243345827354E+02 4.567243371217340E+02 4.567243400669303E+02
4.567243434951636E+02 4.567243475006131E+02 4.567243521993414E+02 4.567243577351651E+02 4.567243642872631E+02
4.567243720800661E+02 4.567243813961302E+02 4.567243925928997E+02 4.567244061244907E+02 4.567244225698524E+02
4.567244426688038E+02 4.567244673672936E+02 4.567244978723787E+02 4.567245357148779E+02 4.567245828115621E+02
4.567246415048107E+02 4.567247145272980E+02 4.567248047740882E+02 4.567249146252090E+02 4.567250442638048E+02
4.567251877930996E+02 4.567253245594758E+02 4.567254000365538E+02 4.567252841132256E+02 4.567246829601098E+02
4.567229787562531E+02 4.567190692384849E+02 4.567095504766257E+02 4.566325869891435E+02 4.567407309570206E+02
4.633852508230021E+02 4.633852508238149E+02 4.633852508254479E+02 4.633852508278892E+02 4.633852508314251E+02
4.633852508366813E+02 4.633852508443167E+02 4.633852508552234E+02 4.633852508706075E+02 4.633852508920974E+02
4.633852509218884E+02 4.633852509629386E+02 4.633852510192325E+02 4.633852510961371E+02 4.633852512008862E+02
4.633852513432402E+02 4.633852515350402E+02 4.633852517731244E+02 4.633852520465488E+02 4.633852523557792E+02
4.633852527013346E+02 4.633852530840716E+02 4.633852535045364E+02 4.633852539637149E+02 4.633852544623999E+02
4.633852550015391E+02 4.633852555821631E+02 4.633852562053723E+02 4.633852568723537E+02 4.633852575843667E+02
4.633852584062403E+02 4.633852593823518E+02 4.633852604950021E+02 4.633852617656933E+02 4.633852632198872E+02
4.633852648878674E+02 4.633852668058191E+02 4.633852690171898E+02 4.633852715744073E+02 4.633852745110640E+02
4.633852779947043E+02 4.633852820303987E+02 4.633852867653464E+02 4.633852923448237E+02 4.63385298499019E+02
4.633853068074862E+02 4.633853162033984E+02 4.633853274994358E+02 4.633853411555755E+02 4.633853577587425E+02
4.633853780597314E+02 4.633854030197720E+02 4.633854338674570E+02 4.633854721643497E+02 4.633855198717008E+02
4.633855793971545E+02 4.633856535705668E+02 4.633857454339595E+02 4.633858575932118E+02 4.633859905845009E+02
4.633861390727241E+02 4.633862833140264E+02 4.633863702788029E+02 4.633862723264973E+02 4.633856995398706E+02
4.633840396282741E+02 4.633802065779486E+02 4.633709944339626E+02 4.632946115516038E+02 4.634001495799379E+02
4.710275695358521E+02 4.710275695366706E+02 4.710275695383150E+02 4.710275695407736E+02 4.710275695443344E+02
4.710275695496276E+02 4.710275695573167E+02 4.710275695683002E+02 4.710275695837927E+02 4.710275696054339E+02
4.710275696354348E+02 4.710275696767742E+02 4.710275697334650E+02 4.710275698109122E+02 4.710275699164008E+02
4.710275700597609E+02 4.710275702529186E+02 4.710275704926915E+02 4.710275707680599E+02 4.71027571079495E+02
4.710275714275203E+02 4.710275718130023E+02 4.710275722364934E+02 4.710275726989894E+02 4.710275732012919E+02
4.710275737443591E+02 4.710275743292331E+02 4.710275749570264E+02 4.710275756289390E+02 4.710275763462449E+02
4.710275771742626E+02 4.710275781577216E+02 4.710275792788113E+02 4.710275805592229E+02 4.710275820246462E+02
4.710275837056413E+02 4.710275856387325E+02 4.710275878677831E+02 4.710275904457361E+02 4.710275934368264E+02
4.710275969194046E+02 4.710276009895620E+02 4.710276057657987E+02 4.710276113950642E+02 4.710276180605996E+02
4.710276259921490E+02 4.710276354792841E+02 4.710276468888039E+02 4.710276606874244E+02 4.710276774712495E+02
4.710276980037148E+02 4.710277232636656E+02 4.710277545045452E+02 4.710277933234270E+02 4.710278417329936E+02
4.710279022164415E+02 4.710279777162663E+02 4.710280714450518E+02 4.710281862711865E+02 4.710283231418338E+02
4.710284773769160E+02 4.710286302956394E+02 4.710287306214040E+02 4.710286536150436E+02 4.710281139637507E+02
4.710265058034580E+02 4.710227610106807E+02 4.710139045211129E+02 4.709383101236535E+02 4.710404087051356E+02
4.797852636231738E+02 4.797852636239988E+02 4.797852636256562E+02 4.797852636281342E+02 4.797852636317231E+02
4.797852636370582E+02 4.797852636448081E+02 4.797852636558785E+02 4.797852636714934E+02 4.797852636933058E+02
4.797852637235439E+02 4.797852637652106E+02 4.797852638223502E+02 4.797852639004108E+02 4.797852640067359E+02
4.797852641512339E+02 4.797852643459273E+02 4.797852645876104E+02 4.797852648651777E+02 4.797852651791060E+02
4.797852655299268E+02 4.797852659185149E+02 4.797852663454305E+02 4.797852668116810E+02 4.797852673180782E+02
4.797852678655922E+02 4.797852684552781E+02 4.797852690882621E+02 4.797852697657597E+02 4.797852704890607E+02
4.797852713240392E+02 4.797852723158238E+02 4.797852734464787E+02 4.797852747379098E+02 4.797852762160666E+02
4.797852779118247E+02 4.797852798620937E+02 4.797852821112117E+02 4.797852847127094E+02 4.797852877315548E+02
4.797852912470198E+02 4.797852953563616E+02 4.797853001795686E+02 4.797853058655050E+02 4.797853125998966E+02
4.797853206157415E+02 4.797853302069124E+02 4.797853417459494E+02 4.797853557073117E+02 4.797853726976577E+02
4.797853934949739E+02 4.797854190984021E+02 4.797854507900493E+02 4.797854902079940E+02 4.797855394243816E+02
4.797856010098702E+02 4.797856780375328E+02 4.797857739179710E+02 4.797858918248338E+02 4.797860331840423E+02
4.797861940800352E+02 4.797863570754766E+02 4.797864729494586E+02 4.797864203756035E+02 4.797859194710787E+02
4.797843718421155E+02 4.797807287351670E+02 4.797722833990140E+02 4.796977678919562E+02 4.797952948873039E+02
4.898064170852978E+02 4.898064170861301E+02 4.898064170878021E+02 4.898064170903020E+02 4.898064170939227E+02
4.898064170993050E+02 4.898064171071234E+02 4.898064171182916E+02 4.898064171304446E+02 4.898064171560499E+02
4.898064171865556E+02 4.898064172285910E+02 4.898064172862365E+02 4.898064173649888E+02 4.898064174722567E+02
4.898064176180376E+02 4.898064178144622E+02 4.898064180582990E+02 4.89806418338458E+02 4.898064186550860E+02
4.898064190090590E+02 4.898064194011505E+02 4.898064198319291E+02 4.898064203024156E+02 4.898064208134331E+02
4.898064213659655E+02 4.898064219610824E+02 4.898064225999264E+02 4.898064232837300E+02 4.898064240138016E+02
4.898064248566423E+02 4.898064258578333E+02 4.898064269992977E+02 4.898064283031853E+02 4.898064297957405E+02
4.898064315081974E+02 4.898064334779041E+02 4.898064357497386E+02 4.898064383779009E+02 4.898064414281941E+02
4.898064449809406E+02 4.898064491347282E+02 4.898064540112441E+02 4.898064597615409E+02 4.898064665741861E+02
4.898064746859021E+02 4.898064843954893E+02 4.898064960820714E+02 4.898065102289949E+02 4.898065274550455E+02
4.898065485549463E+02 4.898065745512112E+02 4.898066067589925E+02 4.898066468637039E+02 4.898066970062234E+02
4.898067598584520E+02 4.898068386448452E+02 4.898069370059533E+02 4.898070584705374E+02 4.898072050225374E+02

4.898073736393625E+02 4.898075483395089E+02 4.898076823155568E+02 4.898076582615753E+02 4.898072027109030E+02
4.898057259545124E+02 4.898021997059611E+02 4.897942271460552E+02 4.897211977462390E+02 4.898126080422433E+02
5.012527938987805E+02 5.012527938996210E+02 5.012527939013095E+02 5.012527939038341E+02 5.012527939074903E+02
5.012527939129255E+02 5.012527939208209E+02 5.012527939320991E+02 5.012527939480073E+02 5.012527939702292E+02
5.012527940010353E+02 5.012527940434849E+02 5.012527941016986E+02 5.012527941812277E+02 5.012527942895546E+02
5.012527944367766E+02 5.012527946351460E+02 5.012527948814023E+02 5.012527951642349E+02 5.012527954841350E+02
5.012527958416504E+02 5.012527962376795E+02 5.012527966728009E+02 5.012527971480496E+02 5.012527976642627E+02
5.012527982224393E+02 5.012527988236658E+02 5.012527994691029E+02 5.012528001600029E+02 5.012528008976954E+02
5.012528017493878E+02 5.012528027611717E+02 5.012528039148127E+02 5.012528052327370E+02 5.012528067415227E+02
5.012528084728106E+02 5.012528104644463E+02 5.012528127619207E+02 5.012528154201943E+02 5.012528185060200E+02
5.012528221009153E+02 5.012528263049833E+02 5.012528312418484E+02 5.012528370650590E+02 5.012528439664281E+02
5.012528521869352E+02 5.012528620310185E+02 5.012528738853420E+02 5.012528882434424E+02 5.012529057380265E+02
5.012529271830512E+02 5.012529536279243E+02 5.012529864258739E+02 5.012530273169285E+02 5.012530785213885E+02
5.012531428283262E+02 5.012532236376920E+02 5.012533248570876E+02 5.012534504284807E+02 5.012536029864722E+02
5.012537805520669E+02 5.012539688495099E+02 5.012541239077057E+02 5.012541331633027E+02 5.0125437307450868E+02
5.012523370400945E+02 5.012489445999512E+02 5.01241511147734E+02 5.011705406174930E+02 5.012537149389404E+02
5.142982671580718E+02 5.142982671589215E+02 5.142982671606284E+02 5.142982671631803E+02 5.142982671668765E+02
5.142982671723711E+02 5.142982671803525E+02 5.142982671917536E+02 5.142982672078352E+02 5.142982672302996E+02
5.142982672614420E+02 5.142982673043549E+02 5.142982673632044E+02 5.142982674436026E+02 5.142982675531144E+02
5.142982677019489E+02 5.142982679024947E+02 5.142982681514588E+02 5.142982684374097E+02 5.142982687608469E+02
5.142982691223285E+02 5.142982695227669E+02 5.142982699627516E+02 5.142982704433351E+02 5.142982709653691E+02
5.142982715298704E+02 5.142982721379447E+02 5.142982727907732E+02 5.142982734896308E+02 5.142982742358710E+02
5.142982750974943E+02 5.142982761211661E+02 5.142982772884770E+02 5.142982786221651E+02 5.142982801491860E+02
5.142982819016402E+02 5.142982839179364E+02 5.142982862442598E+02 5.142982889364329E+02 5.142982920622864E+02
5.142982957046947E+02 5.142982999654838E+02 5.142983049704816E+02 5.142983108760795E+02 5.14298317677902E+02
5.142983262214511E+02 5.142983362179421E+02 5.142983482625518E+02 5.142983628604863E+02 5.142983806604137E+02
5.142984024983738E+02 5.142984294546931E+02 5.142984629264358E+02 5.142985047166056E+02 5.142985571372278E+02
5.142986231129264E+02 5.142987062470414E+02 5.142988107572694E+02 5.142989410663731E+02 5.142991005677206E+02
5.142992885022462E+02 5.142994925935618E+02 5.142996722058148E+02 5.142997203753798E+02 5.142993802364877E+02
5.142980839100815E+02 5.142948439123815E+02 5.142880169949760E+02 5.142199132707772E+02 5.142919278945302E+02
5.291254017349734E+02 5.291254017358332E+02 5.291254017375607E+02 5.291254017401434E+02 5.291254017438839E+02
5.291254017494444E+02 5.291254017575219E+02 5.291254017690600E+02 5.291254017853350E+02 5.291254018080696E+02
5.291254018395864E+02 5.291254018830158E+02 5.291254019425737E+02 5.291254020239405E+02 5.291254021347730E+02
5.291254022854046E+02 5.291254024883762E+02 5.291254027403588E+02 5.291254030297860E+02 5.291254033571674E+02
5.291254037230721E+02 5.291254041284285E+02 5.291254045738392E+02 5.291254050603753E+02 5.291254055889059E+02
5.291254061604678E+02 5.291254067761884E+02 5.291254074372725E+02 5.291254081450203E+02 5.291254089008128E+02
5.291254097735372E+02 5.291254108105023E+02 5.291254119931052E+02 5.291254133444349E+02 5.291254148918729E+02
5.291254166680376E+02 5.291254187119738E+02 5.291254210706512E+02 5.291254238008670E+02 5.291254269716720E+02
5.291254306674787E+02 5.291254349920663E+02 5.291254400737656E+02 5.291254460721989E+02 5.291254531870891E+02
5.291254616698086E+02 5.291254718385842E+02 5.291254840985546E+02 5.291254989682698E+02 5.291255171146746E+02
5.291255393991300E+02 5.291255669374680E+02 5.291256011771698E+02 5.291256439937835E+02 5.291256978051789E+02
5.291257656926779E+02 5.291258514951863E+02 5.291259597902775E+02 5.291260955598948E+02 5.291262630819161E+02
5.291264630229401E+02 5.291266854497004E+02 5.291268936482136E+02 5.291269872687685E+02 5.291267201340302E+02
5.291255379978668E+02 5.291224704658758E+02 5.291163117307739E+02 5.290522169289376E+02 5.291090090511394E+02
5.459191037328392E+02 5.459191037337104E+02 5.459191037354607E+02 5.459191037380774E+02 5.459191037418672E+02
5.459191037475010E+02 5.459191037556850E+02 5.459191037673752E+02 5.459191037838649E+02 5.459191038068992E+02
5.45919103838318E+02 5.459191038828342E+02 5.459191039431786E+02 5.459191040256205E+02 5.459191041379189E+02
5.459191042905456E+02 5.459191044962105E+02 5.459191047515450E+02 5.459191050448328E+02 5.459191053765952E+02
5.459191057474136E+02 5.459191061582349E+02 5.459191066096757E+02 5.459191071028291E+02 5.459191076385833E+02
5.459191082179979E+02 5.459191088422251E+02 5.459191095124961E+02 5.459191102301401E+02 5.459191109965687E+02
5.459191118816582E+02 5.459191129334359E+02 5.459191141330856E+02 5.459191155040908E+02 5.459191170743109E+02
5.459191188769479E+02 5.459191209517622E+02 5.459191233466078E+02 5.459191261193818E+02 5.459191293405128E+02
5.459191330961514E+02 5.459191374922892E+02 5.459191426600913E+02 5.459191487628460E+02 5.459191560050576E+02
5.459191646443926E+02 5.459191750074428E+02 5.459191875105766E+02 5.459192026875779E+02 5.459192212262870E+02
5.459192440170560E+02 5.459192722164310E+02 5.459193073297998E+02 5.459193513161720E+02 5.459194067154042E+02
5.459194767897498E+02 5.459195656506425E+02 5.459196782928616E+02 5.459198203480323E+02 5.459199971241071E+02
5.459202109521913E+02 5.459204546424951E+02 5.459206960889761E+02 5.459208427499257E+02 5.459206611396767E+02
5.459196128523660E+02 5.4591967386400101E+02 5.4591912905888958E+02 5.458528245509499E+02 5.458886973026208E+02
5.648556241759410E+02 5.648556241768247E+02 5.648556241786001E+02 5.648556241812545E+02 5.648556241850989E+02
5.648556241908137E+02 5.648556241991154E+02 5.648556242109739E+02 5.648556242277009E+02 5.648556242510671E+02
5.648556242834596E+02 5.648556243280962E+02 5.648556243893106E+02 5.648556244729423E+02 5.648556245868627E+02
5.648556247416973E+02 5.648556249503428E+02 5.648556252093873E+02 5.648556255069492E+02 5.648556258435623E+02
5.648556262198223E+02 5.648556266366967E+02 5.648556270948187E+02 5.648556275953052E+02 5.648556281390668E+02
5.648556287271884E+02 5.648556293608503E+02 5.648556300413138E+02 5.648556307699405E+02 5.648556315481774E+02
5.648556324469986E+02 5.648556335152335E+02 5.648556347338309E+02 5.648556361267166E+02 5.648556377222860E+02
5.648556395543956E+02 5.648556416636098E+02 5.648556440987770E+02 5.648556469190324E+02 5.648556501963569E+02

5.648556540188629E+02 5.648556584950385E+02 5.648556637592550E+02 5.648556699789498E+02 5.648556773640464E+02
5.648556861793538E+02 5.648556967609683E+02 5.648557095380351E+02 5.648557250616949E+02 5.648557440436281E+02
5.648557674073143E+02 5.648557963558932E+02 5.648558324611270E+02 5.648558777778519E+02 5.648559349862284E+02
5.648560075569893E+02 5.648560999161931E+02 5.648562175412400E+02 5.648563668169072E+02 5.648565542479819E+02
5.648567841042925E+02 5.648570524003464E+02 5.648573324306333E+02 5.648575408504192E+02 5.648574592272058E+02
5.648565675613786E+02 5.648539073446919E+02 5.648491704903942E+02 5.647986305826525E+02 5.648055696919681E+02
5.860843834684954E+02 5.860843834693931E+02 5.860843834711962E+02 5.860843834738922E+02 5.860843834777969E+02
5.860843834836014E+02 5.860843834920332E+02 5.860843835040777E+02 5.860843835210670E+02 5.860843835447996E+02
5.860843835777004E+02 5.860843836230374E+02 5.860843836852133E+02 5.860843837701594E+02 5.860843838858725E+02
5.860843840431470E+02 5.860843842550869E+02 5.860843845182324E+02 5.860843848205193E+02 5.860843851624960E+02
5.86084385447742E+02 5.860843859683446E+02 5.860843864338585E+02 5.860843869424605E+02 5.860843874950859E+02
5.860843880928487E+02 5.860843887369602E+02 5.860843894287160E+02 5.860843901695146E+02 5.860843909608423E+02
5.860843918748923E+02 5.860843929613851E+02 5.860843942010135E+02 5.860843956181970E+02 5.860843972419314E+02
5.860843991068058E+02 5.860844012542871E+02 5.860844037343392E+02 5.860844066074882E+02 5.860844099474610E+02
5.860844138445785E+02 5.860844184101431E+02 5.860844237821427E+02 5.860844301327016E+02 5.86084437677812E+02
5.860844466905459E+02 5.860844575175960E+02 5.860844706026664E+02 5.860844865166210E+02 5.860845059982660E+02
5.860845300088246E+02 5.860845598045978E+02 5.860845970331894E+02 5.860846438590939E+02 5.860847031232809E+02
5.860847785358231E+02 5.860848748845949E+02 5.860849982030041E+02 5.860851557451409E+02 5.860853553999850E+02
5.860856036844393E+02 5.860859003361392E+02 5.86086224944760E+02 5.860865049408794E+02 5.860865396728518E+02
5.860858305185426E+02 5.860834032192272E+02 5.860792994193546E+02 5.860399306724021E+02 5.860065855922758E+02
6.096982671833134E+02 6.096982671842263E+02 6.096982671860603E+02 6.096982671888023E+02 6.096982671927739E+02
6.096982671986775E+02 6.096982672072536E+02 6.096982672195041E+02 6.096982672367840E+02 6.096982672609226E+02
6.096982672943866E+02 6.096982673405001E+02 6.096982674037413E+02 6.096982674901440E+02 6.096982676078435E+02
6.096982677678219E+02 6.096982679834131E+02 6.096982682511042E+02 6.096982685586293E+02 6.096982689065526E+02
6.096982692955045E+02 6.096982697265008E+02 6.096982702002146E+02 6.096982707178204E+02 6.096982712802820E+02
6.096982718887458E+02 6.096982725444584E+02 6.096982732487537E+02 6.096982740030716E+02 6.096982748089433E+02
6.096982757399168E+02 6.096982768467066E+02 6.096982781097221E+02 6.096982795539361E+02 6.096982812090156E+02
6.096982831103717E+02 6.096982853004812E+02 6.096982878305603E+02 6.096982907626966E+02 6.096982941725784E+02
6.096982981530087E+02 6.096983028184574E+02 6.096983083109848E+02 6.096983148079976E+02 6.096983225324593E+02
6.096983317663934E+02 6.096983428688443E+02 6.096983562998566E+02 6.096983726526222E+02 6.096983926966857E+02
6.096984174360823E+02 6.096984481874752E+02 6.096984866846708E+02 6.096985352169404E+02 6.096985968084366E+02
6.096986754421897E+02 6.096987763192089E+02 6.096989061085717E+02 6.096990730595421E+02 6.096992866479090E+02
6.096995559704919E+02 6.096998850472589E+02 6.097002607274648E+02 6.097006229276999E+02 6.097007917932011E+02
6.097002934502816E+02 6.096981139330028E+02 6.096944350518748E+02 6.096707645084557E+02 6.095811455120038E+02
6.356873659334743E+02 6.356873659344045E+02 6.356873659362731E+02 6.356873659390670E+02 6.356873659431135E+02
6.356873659491287E+02 6.356873659578665E+02 6.356873659703483E+02 6.356873659879548E+02 6.356873660125493E+02
6.356873660466456E+02 6.356873660936309E+02 6.356873661580685E+02 6.356873662461069E+02 6.356873663660371E+02
6.356873665290520E+02 6.356873667487436E+02 6.356873670215394E+02 6.356873673349470E+02 6.356873676895488E+02
6.356873680859952E+02 6.356873685253317E+02 6.356873690082544E+02 6.356873695359727E+02 6.356873701094819E+02
6.356873707299646E+02 6.356873713987077E+02 6.356873721170876E+02 6.356873728865913E+02 6.356873737088000E+02
6.356873746587842E+02 6.356873757883744E+02 6.356873770776635E+02 6.356873785522448E+02 6.356873802425407E+02
6.356873821848857E+02 6.356873844228927E+02 6.356873870091857E+02 6.356873900076079E+02 6.356873934960530E+02
6.356873975701164E+02 6.356874023478294E+02 6.356874079758329E+02 6.356874146374753E+02 6.356874225634946E+02
6.356874320461836E+02 6.356874434582817E+02 6.356874572782826E+02 6.356874741244977E+02 6.356874948010537E+02
6.356875203601530E+02 6.356875521863708E+02 6.356875921105024E+02 6.356876425622070E+02 6.356877067717398E+02
6.356877890292377E+02 6.356878950005241E+02 6.356880320698436E+02 6.356882096060599E+02 6.3568843887011226E+02
6.356887318613333E+02 6.356890974185684E+02 6.3568928331127537E+02 6.356895830568605E+02 6.356899853418018E+02 6.356903056100676E+02
6.356900456411762E+02 6.356881206736897E+02 6.356844872155222E+02 6.356825430936353E+02 6.355143909070486E+02
6.636827534975796E+02 6.636827534985297E+02 6.636827535004384E+02 6.636827535032921E+02 6.636827535074251E+02
6.636827535135691E+02 6.636827535224942E+02 6.636827535352433E+02 6.636827535532267E+02 6.636827535783482E+02
6.636827536131751E+02 6.636827536611676E+02 6.636827537269872E+02 6.636827538169154E+02 6.636827539394225E+02
6.636827541059448E+02 6.636827543303716E+02 6.636827546090618E+02 6.636827549292600E+02 6.636827552915693E+02
6.636827556966630E+02 6.636827561456192E+02 6.636827566391604E+02 6.636827571785348E+02 6.636827577647730E+02
6.636827583990986E+02 6.636827590828429E+02 6.636827598174310E+02 6.636827606044017E+02 6.636827614453927E+02
6.636827624172217E+02 6.636827635729964E+02 6.636827648924383E+02 6.636827664018459E+02 6.636827681324975E+02
6.636827701217725E+02 6.636827724145692E+02 6.636827750650998E+02 6.636827781391871E+02 6.636827817172069E+02
6.636827858978926E+02 6.636827908032711E+02 6.636827965851147E+02 6.636828034334161E+02 6.636828115875924E+02
6.636828213513809E+02 6.636828331127537E+02 6.636828473706884E+02 6.6368286471713299E+02 6.636828861570476E+02
6.636829126331963E+02 6.636829456591314E+02 6.636829871721998E+02 6.636830397559287E+02 6.636831068659053E+02
6.636831931271572E+02 6.636833047109965E+02 6.636834497771977E+02 6.636836389050709E+02 6.636838852794806E+02
6.636842040175184E+02 6.636846091174904E+02 6.636851043378109E+02 6.636856587723273E+02 6.636861417554595E+02
6.636861376221655E+02 6.636844578685392E+02 6.636803766195634E+02 6.637070784395423E+02 6.634394703346534E+02
6.912323152520191E+02 6.912323152529913E+02 6.912323152549444E+02 6.912323152578645E+02 6.912323152520936E+02
6.912323152683805E+02 6.912323152775132E+02 6.912323152905589E+02 6.912323153089606E+02 6.912323153346665E+02
6.912323153703040E+02 6.912323154194137E+02 6.912323154867661E+02 6.912323155787898E+02 6.912323157041538E+02
6.912323158745638E+02 6.912323161042382E+02 6.912323163894574E+02 6.912323167171742E+02 6.912323170880126E+02

6.912323175026698E+02 6.912323179622583E+02 6.912323184675276E+02 6.912323190197665E+02 6.912323196200423E+02
6.912323202696210E+02 6.912323209698803E+02 6.912323217222953E+02 6.912323225284588E+02 6.912323233900668E+02
6.912323243858501E+02 6.912323255703009E+02 6.912323269227189E+02 6.912323284701557E+02 6.912323302448007E+02
6.912323322851435E+02 6.912323346374413E+02 6.91232337355841E+02 6.912323405134749E+02 6.912323441880920E+02
6.912323484834458E+02 6.912323535257224E+02 6.912323594720142E+02 6.912323665191780E+02 6.912323749155603E+02
6.912323849766259E+02 6.912323971058914E+02 6.912324118231442E+02 6.912324298026789E+02 6.912324519253575E+02
6.912324793497731E+02 6.912325136097940E+02 6.912325567483655E+02 6.912326115006417E+02 6.912326815429350E+02
6.912327718262529E+02 6.912328890106719E+02 6.912330420005437E+02 6.912332425285942E+02 6.912335055982917E+02
6.912338492487623E+02 6.912342922705483E+02 6.912348464603172E+02 6.912354946816374E+02 6.912361295187698E+02
6.912363624902944E+02 6.912348839066651E+02 6.912299054870344E+02 6.912882884048624E+02 6.909892930037371E+02
7.163341663613501E+02 7.163341663623462E+02 7.163341663643474E+02 7.163341663673397E+02 7.163341663716732E+02
7.163341663781152E+02 7.163341663874735E+02 7.163341664008412E+02 7.163341664196973E+02 7.163341664460381E+02
7.163341664825557E+02 7.163341665328786E+02 7.163341666018953E+02 7.163341666961940E+02 7.163341668246587E+02
7.163341669992867E+02 7.163341672346515E+02 7.163341675269471E+02 7.163341678628070E+02 7.163341682428760E+02
7.163341686678742E+02 7.163341691389487E+02 7.163341696568746E+02 7.163341702229812E+02 7.163341708383716E+02
7.163341715043532E+02 7.163341722223488E+02 7.163341729938820E+02 7.163341738205991E+02 7.163341747042518E+02
7.163341757256077E+02 7.163341769406132E+02 7.163341783280940E+02 7.163341799158723E+02 7.163341817370665E+02
7.163341838312928E+02 7.163341862461810E+02 7.163341890393048E+02 7.163341922806461E+02 7.163341960557676E+02
7.163342004699161E+02 7.163342056533588E+02 7.163342117683766E+02 7.163342190184752E+02 7.163342276605916E+02
7.163342380213917E+02 7.163342505191258E+02 7.163342656931513E+02 7.163342842440154E+02 7.163343070881645E+02
7.163343354329518E+02 7.163343708798238E+02 7.163344155665015E+02 7.163344723627174E+02 7.163345451383719E+02
7.163346391267424E+02 7.163347614053411E+02 7.163349215050238E+02 7.163351321134147E+02 7.163354097131333E+02
7.163357746741143E+02 7.163362495285035E+02 7.163368522040263E+02 7.163375758117830E+02 7.163383298081900E+02
7.163387440885282E+02 7.163373989580332E+02 7.163314584027909E+02 7.164163964209881E+02 7.161008622827051E+02
7.390157481203363E+02 7.390157481213589E+02 7.390157481234136E+02 7.390157481264854E+02 7.390157481309344E+02
7.390157481375479E+02 7.390157481471553E+02 7.390157481608792E+02 7.390157481802376E+02 7.390157482072799E+02
7.390157482447703E+02 7.390157482964338E+02 7.390157483672897E+02 7.390157484641014E+02 7.390157485959910E+02
7.390157487752763E+02 7.390157490169216E+02 7.390157493170227E+02 7.390157496618586E+02 7.390157500520944E+02
7.390157504884734E+02 7.390157509721768E+02 7.390157515040049E+02 7.390157520853279E+02 7.390157527172830E+02
7.390157534012191E+02 7.390157541386034E+02 7.390157549310073E+02 7.390157557801290E+02 7.390157566877758E+02
7.390157577369210E+02 7.390157589850667E+02 7.390157604104955E+02 7.390157620418327E+02 7.390157639131592E+02
7.390157660652503E+02 7.390157685471426E+02 7.390157714181241E+02 7.390157747502810E+02 7.390157786317749E+02
7.390157831710843E+02 7.390157885025235E+02 7.390157947934791E+02 7.390158022539479E+02 7.390158111491832E+02
7.390158218165968E+02 7.390158346884426E+02 7.390158503224879E+02 7.390158694437124E+02 7.390158930012955E+02
7.390159222468876E+02 7.390159588425001E+02 7.390160050095536E+02 7.390160637347346E+02 7.390161390532343E+02
7.390162364346779E+02 7.390163632985877E+02 7.390165296767592E+02 7.390167489995470E+02 7.390170388643101E+02
7.390174213344716E+02 7.390179215462997E+02 7.390185614809305E+02 7.390193406113610E+02 7.390201780145271E+02
7.390207114678352E+02 7.390194393881158E+02 7.390128197664018E+02 7.391154582979342E+02 7.387777216196804E+02
Temperature (Deg.C)

FREE
TOP

1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01 1.999983896082708E+01
4.499882834476952E+01 4.499882834485178E+01 4.499882834501702E+01 4.499882834526404E+01 4.499882834562172E+01
4.499882834615330E+01 4.499882834692517E+01 4.499882834802708E+01 4.499882834958004E+01 4.499882835174679E+01
4.499882835474558E+01 4.499882835886833E+01 4.499882836450433E+01 4.499882837217076E+01 4.49988283825163E+01
4.499882839654617E+01 4.499882841519547E+01 4.499882843800408E+01 4.499882846374648E+01 4.499882849227978E+01
4.499882852344232E+01 4.499882855707313E+01 4.499882859295700E+01 4.499882863088553E+01 4.499882867060299E+01
4.499882871183340E+01 4.499882875427303E+01 4.499882879758628E+01 4.499882884140580E+01 4.499882888532758E+01
4.499882893255892E+01 4.499882898361399E+01 4.499882903538386E+01 4.499882908629625E+01 4.499882913404845E+01
4.499882917532958E+01 4.499882920543718E+01 4.499882921774581E+01 4.499882920296691E+01 4.499882914811144E+01
4.499882903502787E+01 4.499882883832684E+01 4.499882852241477E+01 4.499882803721940E+01 4.499882731198049E+01
4.499882624614881E+01 4.499882469592120E+01 4.499882245412136E+01 4.499881921981938E+01 4.499881455194650E+01

4.499880779763894E+01 4.499879798016786E+01 4.499878362135946E+01 4.499876245631847E+01 4.499873096841272E+01
4.499868361951197E+01 4.499861155481076E+01 4.499850038538370E+01 4.499832632053081E+01 4.499804928541304E+01
4.499760040441035E+01 4.499685868548401E+01 4.49960641059440E+01 4.499344109443381E+01 4.498959406044658E+01
4.498251846135955E+01 4.498685557562670E+01 4.493692925657957E+01 4.487133715095160E+01 4.500017519426988E+01
6.998629709292895E+01 6.998629709292847E+01 6.998629709292750E+01 6.998629709292598E+01 6.998629709292369E+01
6.998629709292011E+01 6.998629709291453E+01 6.998629709290569E+01 6.998629709289153E+01 6.998629709286845E+01
6.998629709283011E+01 6.998629709276516E+01 6.998629709265319E+01 6.998629709245766E+01 6.998629709211218E+01
6.998629709149682E+01 6.998629709040168E+01 6.998629708860220E+01 6.998629708595261E+01 6.998629708220736E+01
6.998629707708960E+01 6.998629707027905E+01 6.998629706142620E+01 6.998629705013231E+01 6.998629703596295E+01
6.998629701843713E+01 6.998629699702680E+01 6.998629697115364E+01 6.998629694018653E+01 6.998629690343749E+01
6.998629685653644E+01 6.998629679431767E+01 6.998629671508479E+01 6.998629661397661E+01 6.998629648466476E+01
6.998629631887967E+01 6.998629610577029E+01 6.998629583103509E+01 6.998629547573299E+01 6.998629501464696E+01
6.998629441401330E+01 6.998629362834821E+01 6.998629259597506E+01 6.998629123266585E+01 6.998628942251995E+01
6.998628700475304E+01 6.998628375437241E+01 6.998627935360753E+01 6.998627334920556E+01 6.998626508785463E+01
6.998625361733383E+01 6.998623753325435E+01 6.998621473822311E+01 6.998618205800652E+01 6.998613462059760E+01
6.998606483584500E+01 6.998596069071316E+01 6.998580285072519E+01 6.998555963881698E+01 6.998517816224692E+01
6.998456829294450E+01 6.998357306613987E+01 6.998191257907223E+01 6.997907461761798E+01 6.997409344025330E+01
6.996506491387964E+01 6.994777834038280E+01 6.990984138897142E+01 6.982269475182170E+01 6.998829798134868E+01
9.498623748073591E+01 9.498623748070085E+01 9.498623748063036E+01 9.498623748052498E+01 9.498623748037225E+01
9.498623748014501E+01 9.498623747981449E+01 9.498623747934147E+01 9.498623747867255E+01 9.498623747773477E+01
9.498623747642806E+01 9.498623747461504E+01 9.498623747210517E+01 9.498623746863235E+01 9.498623746382059E+01
9.498623745713066E+01 9.498623744784241E+01 9.498623743585840E+01 9.498623742149360E+01 9.498623740447471E+01
9.498623738449369E+01 9.498623736118337E+01 9.498623733415953E+01 9.498623730296852E+01 9.498623726712783E+01
9.498623722610022E+01 9.498623717929635E+01 9.498623712607194E+01 9.498623706572445E+01 9.498623699748927E+01
9.498623691409516E+01 9.498623680831822E+01 9.498623667915714E+01 9.498623652067350E+01 9.498623632524357E+01
9.498623608303116E+01 9.498623578127902E+01 9.498623540335164E+01 9.498623492743118E+01 9.498623432473026E+01
9.498623355702152E+01 9.498623257319821E+01 9.498623130444359E+01 9.498622965738710E+01 9.498622750431991E+01
9.49862266906639E+01 9.498622090638047E+01 9.498621587157272E+01 9.498620907523602E+01 9.498619981496614E+01
9.498618707111009E+01 9.498616934553368E+01 9.498614440885953E+01 9.498610889855853E+01 9.498605767024887E+01
9.498598273405739E+01 9.498587148151066E+01 9.498570367745043E+01 9.498544626121222E+01 9.498504418242501E+01
9.498440390217822E+01 9.498336300822928E+01 9.498163287896507E+01 9.497868764752890E+01 9.497354274630267E+01
9.496428701072288E+01 9.494683863938754E+01 9.490934459013968E+01 9.481609530671727E+01 9.498846275349253E+01
1.198915195552997E+02 1.198915195552540E+02 1.198915195551620E+02 1.198915195550244E+02 1.198915195548250E+02
1.198915195545285E+02 1.198915195540973E+02 1.198915195534805E+02 1.198915195526087E+02 1.198915195513877E+02
1.198915195496886E+02 1.198915195473351E+02 1.198915195440846E+02 1.198915195396009E+02 1.198915195334141E+02
1.198915195248591E+02 1.198915195130643E+02 1.198915194979794E+02 1.198915194800672E+02 1.198915194590539E+02
1.198915194346316E+02 1.198915194064293E+02 1.198915193740636E+02 1.198915193370775E+02 1.198915192949883E+02
1.198915192472572E+02 1.198915191932941E+02 1.198915191324537E+02 1.198915190640327E+02 1.198915189872658E+02
1.198915188941292E+02 1.198915187769347E+02 1.198915186349543E+02 1.198915184620798E+02 1.198915182504995E+02
1.198915179901708E+02 1.198915176681124E+02 1.198915172674484E+02 1.198915167661097E+02 1.198915161350549E+02
1.198915153358150E+02 1.198915143170794E+02 1.198915130099052E+02 1.198915113209406E+02 1.198915091227411E+02
1.198915062398088E+02 1.198915024282451E+02 1.198914973457922E+02 1.198914905072127E+02 1.198914812170584E+02
1.198914684671103E+02 1.198914507778946E+02 1.198914259504345E+02 1.198913906718391E+02 1.198913398792098E+02
1.198912657174980E+02 1.198911558036169E+02 1.198909902838992E+02 1.198907367528766E+02 1.198903413044753E+02
1.198897124366713E+02 1.198886914411398E+02 1.198869965988714E+02 1.198841153753079E+02 1.198790914352328E+02
1.198700921379539E+02 1.198533488833987E+02 1.198177863363180E+02 1.197218957474840E+02 1.198937770768385E+02
1.429129023267908E+02 1.429129023267565E+02 1.429129023266875E+02 1.429129023265844E+02 1.429129023264348E+02
1.429129023262124E+02 1.429129023258888E+02 1.429129023254258E+02 1.429129023247711E+02 1.429129023238532E+02
1.429129023225744E+02 1.429129023208002E+02 1.429129023183445E+02 1.429129023149472E+02 1.429129023102408E+02
1.429129023036998E+02 1.429129022946215E+02 1.429129022829140E+02 1.429129022688877E+02 1.42912902252789E+02
1.429129022327900E+02 1.429129022100655E+02 1.429129021837351E+02 1.429129021533596E+02 1.429129021184733E+02
1.429129020785572E+02 1.429129020330420E+02 1.429129019813053E+02 1.429129019226676E+02 1.429129018563910E+02
1.429129017754195E+02 1.429129016727549E+02 1.429129015474412E+02 1.429129013937345E+02 1.429129012042623E+02
1.429129009695133E+02 1.429129006771539E+02 1.429129003111035E+02 1.429128998502739E+02 1.429128992668443E+02
1.429128985238745E+02 1.429128975719832E+02 1.429128963446837E+02 1.429128947517747E+02 1.429128926698909E+02
1.429128899288632E+02 1.429128862918232E+02 1.429128814258796E+02 1.429128748584088E+02 1.429128659111394E+02
1.429128535995183E+02 1.429128364770815E+02 1.429128123915011E+02 1.429127780967225E+02 1.429127286270160E+02
1.429126562708234E+02 1.429125488605097E+02 1.429123868717946E+02 1.429121384127523E+02 1.429117503953897E+02
1.429111326520876E+02 1.429101287078379E+02 1.429084606909618E+02 1.429056230299750E+02 1.429006744481958E+02
1.428918369987899E+02 1.428756443523970E+02 1.428417586028575E+02 1.427376642643478E+02 1.429151319182126E+02
1.626398996595922E+02 1.626398996595630E+02 1.626398996595044E+02 1.626398996594166E+02 1.626398996592895E+02
1.626398996591004E+02 1.626398996588251E+02 1.626398996584311E+02 1.626398996578738E+02 1.626398996570923E+02
1.626398996560025E+02 1.626398996544889E+02 1.626398996523912E+02 1.626398996494841E+02 1.626398996454475E+02
1.626398996398199E+02 1.626398996319789E+02 1.626398996218179E+02 1.626398996095819E+02 1.626398995950154E+02
1.626398995778310E+02 1.626398995576872E+02 1.626398995342241E+02 1.626398995070199E+02 1.626398994756239E+02
1.626398994395346E+02 1.626398993982014E+02 1.626398993510231E+02 1.626398992973443E+02 1.626398992364505E+02

1.626398991618010E+02 1.626398990668025E+02 1.626398989504288E+02 1.626398988071905E+02 1.626398986300288E+02
1.626398984098250E+02 1.626398981347390E+02 1.626398977893118E+02 1.626398973532501E+02 1.626398967997504E+02
1.626398960931889E+02 1.626398951859000E+02 1.626398940136525E+02 1.626398924892342E+02 1.626398904932824E+02
1.626398878610326E+02 1.626398843629934E+02 1.626398796764461E+02 1.626398733429513E+02 1.626398647042467E+02
1.626398528043503E+02 1.626398362381218E+02 1.626398129138175E+02 1.626397796754792E+02 1.626397316933989E+02
1.626396614646793E+02 1.626395571472623E+02 1.626393997341694E+02 1.626391581715860E+02 1.626387807583695E+02
1.626381796750667E+02 1.626372025230183E+02 1.626355787055632E+02 1.626328161436394E+02 1.626280013059402E+02
1.626194365755179E+02 1.626040317603186E+02 1.625725759757274E+02 1.624589648722032E+02 1.626420805448734E+02
1.795439326105608E+02 1.795439326105363E+02 1.795439326104871E+02 1.795439326104135E+02 1.795439326103068E+02
1.795439326101479E+02 1.795439326099169E+02 1.795439326095860E+02 1.795439326091177E+02 1.795439326084603E+02
1.795439326075431E+02 1.795439326062680E+02 1.795439326044976E+02 1.795439326020386E+02 1.795439325986147E+02
1.795439325938237E+02 1.795439325871172E+02 1.795439325783765E+02 1.795439325677873E+02 1.795439325551041E+02
1.795439325400492E+02 1.795439325222953E+02 1.795439325014956E+02 1.795439324772443E+02 1.795439324491061E+02
1.795439324165997E+02 1.795439323791948E+02 1.795439323363119E+02 1.795439322873196E+02 1.795439322315298E+02
1.795439321628940E+02 1.795439320752164E+02 1.795439319674153E+02 1.795439318342584E+02 1.795439316690067E+02
1.795439314629442E+02 1.795439312047350E+02 1.795439308795657E+02 1.795439304679654E+02 1.795439299441908E+02
1.795439292739960E+02 1.795439284115194E+02 1.795439272949091E+02 1.795439258401218E+02 1.795439239320498E+02
1.795439214117014E+02 1.795439180574876E+02 1.795439135576283E+02 1.795439074689869E+02 1.795438991549569E+02
1.795438876905745E+02 1.795438717157008E+02 1.795438492047521E+02 1.795438171004257E+02 1.795437707223385E+02
1.795437027971981E+02 1.795436018419601E+02 1.795434494210927E+02 1.795432154078710E+02 1.795428496363306E+02
1.795422668857680E+02 1.795413192614384E+02 1.795397441707313E+02 1.795370642184054E+02 1.795323951316274E+02
1.795241189880716E+02 1.795095169850720E+02 1.794806145245812E+02 1.793540855912015E+02 1.795460738172505E+02
1.940289689236367E+02 1.940289689236168E+02 1.940289689235766E+02 1.940289689235166E+02 1.940289689234296E+02
1.940289689233001E+02 1.940289689231115E+02 1.940289689228415E+02 1.940289689224591E+02 1.940289689219219E+02
1.940289689211714E+02 1.940289689201259E+02 1.940289689186713E+02 1.940289689166453E+02 1.940289689138124E+02
1.940289689098287E+02 1.940289689042171E+02 1.940289688968475E+02 1.940289688878482E+02 1.940289688769823E+02
1.940289688639846E+02 1.940289688485383E+02 1.940289688303109E+02 1.940289688089112E+02 1.940289687839217E+02
1.940289687548776E+02 1.940289687212689E+02 1.940289686825381E+02 1.940289686380767E+02 1.940289685872216E+02
1.940289685244025E+02 1.940289684438068E+02 1.940289683443009E+02 1.940289682209002E+02 1.940289680671783E+02
1.940289678748076E+02 1.940289676329456E+02 1.940289673274019E+02 1.940289669395058E+02 1.940289664445458E+02
1.940289658096142E+02 1.940289649906012E+02 1.940289639279694E+02 1.940289625407558E+02 1.940289607179913E+02
1.940289583062961E+02 1.940289550917695E+02 1.940289507732705E+02 1.940289449225485E+02 1.940289369240633E+02
1.940289258830296E+02 1.940289104830852E+02 1.940288887630117E+02 1.940288577614775E+02 1.940288129433391E+02
1.940287472585909E+02 1.940286495732111E+02 1.940285020069533E+02 1.940282753333109E+02 1.940279208753585E+02
1.940273559287245E+02 1.940264369479261E+02 1.940249090338065E+02 1.940223087723610E+02 1.940177791194105E+02
1.940097737462672E+02 1.939959160530695E+02 1.939695083176881E+02 1.938278102692335E+02 1.940310602339648E+02
2.064411699737478E+02 2.064411699737320E+02 2.064411699737002E+02 2.064411699736526E+02 2.064411699735836E+02
2.064411699734807E+02 2.064411699733311E+02 2.064411699731165E+02 2.064411699728123E+02 2.064411699723844E+02
2.064411699717857E+02 2.064411699709491E+02 2.064411699697824E+02 2.064411699681499E+02 2.064411699658561E+02
2.064411699626080E+02 2.064411699579938E+02 2.064411699518730E+02 2.064411699443225E+02 2.064411699351132E+02
2.064411699239893E+02 2.064411699106476E+02 2.064411698947645E+02 2.064411698759656E+02 2.064411698538472E+02
2.064411698279619E+02 2.064411697978166E+02 2.064411697628745E+02 2.064411697225485E+02 2.064411696761993E+02
2.064411696186903E+02 2.064411695445625E+02 2.064411694526333E+02 2.064411693381482E+02 2.064411691949643E+02
2.064411690151115E+02 2.064411687881985E+02 2.064411685006089E+02 2.064411681344038E+02 2.064411676658193E+02
2.064411670631769E+02 2.064411662839758E+02 2.064411652708033E+02 2.064411639455253E+02 2.064411622009762E+02
2.064411598889338E+02 2.064411568025623E+02 2.064411526505014E+02 2.064411470181854E+02 2.064411393094451E+02
2.064411286572481E+02 2.064411137854940E+02 2.064410927921657E+02 2.064410628042047E+02 2.064410194200651E+02
2.064409557951161E+02 2.064408611163201E+02 2.064407180139891E+02 2.064404980889836E+02 2.064401540319957E+02
2.064396054473007E+02 2.064387127726666E+02 2.064372281329719E+02 2.064347007932025E+02 2.064302979741724E+02
2.064225354116717E+02 2.064093425118497E+02 2.063853051369224E+02 2.062275049544097E+02 2.064432251289299E+02
2.170771600225490E+02 2.170771600225368E+02 2.170771600225123E+02 2.170771600224756E+02 2.170771600224223E+02
2.170771600223430E+02 2.17077160022273E+02 2.170771600220616E+02 2.170771600218260E+02 2.170771600214945E+02
2.170771600210291E+02 2.170771600203775E+02 2.170771600194636E+02 2.170771600181779E+02 2.170771600163585E+02
2.170771600137580E+02 2.170771600100225E+02 2.170771600050018E+02 2.170771599987275E+02 2.170771599909783E+02
2.170771599815055E+02 2.170771599700186E+02 2.170771599562034E+02 2.170771599396978E+02 2.170771599201122E+02
2.170771598970142E+02 2.170771598699261E+02 2.170771598383294E+02 2.170771598016557E+02 2.170771597592867E+02
2.170771597064718E+02 2.170771596380619E+02 2.170771595528345E+02 2.170771594462373E+02 2.170771593123808E+02
2.170771591436135E+02 2.170771589299454E+02 2.170771586582688E+02 2.170771583113010E+02 2.170771578661197E+02
2.170771572921405E+02 2.170771565482990E+02 2.170771555790774E+02 2.170771543088674E+02 2.170771526338959E+02
2.170771504105447E+02 2.170771474382887E+02 2.170771434345045E+02 2.170771379968536E+02 2.170771305464823E+02
2.170771202411651E+02 2.170771058408066E+02 2.170770854963332E+02 2.170770564136543E+02 2.170770143107463E+02
2.170769525267379E+02 2.170768605358138E+02 2.170767214251222E+02 2.170765075357277E+02 2.170761727814597E+02
2.170756388301055E+02 2.170747696759809E+02 2.170733237030607E+02 2.170708614213289E+02 2.170665712780513E+02
2.170590219923902E+02 2.170464120383115E+02 2.170245887022380E+02 2.168507571618674E+02 2.170791798447133E+02
2.261911169754853E+02 2.261911169754763E+02 2.261911169754580E+02 2.261911169754308E+02 2.261911169753914E+02
2.261911169753326E+02 2.261911169752471E+02 2.261911169751237E+02 2.261911169749486E+02 2.261911169747011E+02

2.261911169743523E+02 2.261911169738613E+02 2.261911169731689E+02 2.261911169721866E+02 2.261911169707808E+02
2.261911169687461E+02 2.261911169657781E+02 2.261911169617177E+02 2.261911169565587E+02 2.261911169500854E+02
2.261911169420567E+02 2.261911169321902E+02 2.261911169201823E+02 2.261911169056827E+02 2.261911168883126E+02
2.261911168676509E+02 2.261911168432382E+02 2.261911168145686E+02 2.261911167810914E+02 2.26191116742052E+02
2.261911166935001E+02 2.261911166300969E+02 2.261911165507385E+02 2.261911164510513E+02 2.261911163253688E+02
2.261911161663178E+02 2.261911159642607E+02 2.261911157065403E+02 2.261911153764466E+02 2.261911149518007E+02
2.261911144029808E+02 2.261911136901858E+02 2.261911127595655E+02 2.261911115377348E+02 2.261911099239085E+02
2.26191107785236E+02 2.261911049066131E+02 2.261911010332499E+02 2.261910957668714E+02 2.261910885438808E+02
2.261910785439199E+02 2.261910645586284E+02 2.261910447856111E+02 2.261910165004022E+02 2.261909755263676E+02
2.261909153646820E+02 2.261908257428096E+02 2.261906901507391E+02 2.261904815821678E+02 2.261901550291106E+02
2.261896339775589E+02 2.261887855533527E+02 2.261873736441146E+02 2.261849686137432E+02 2.261807773040510E+02
2.261734133310709E+02 2.261613092224448E+02 2.261415267254814E+02 2.259524049569227E+02 2.261931118537591E+02
2.340008458991917E+02 2.340008458991854E+02 2.340008458991730E+02 2.340008458991542E+02 2.340008458991269E+02
2.340008458990860E+02 2.340008458990266E+02 2.340008458989410E+02 2.340008458988186E+02 2.340008458986450E+02
2.340008458983991E+02 2.339718517016696E+02 2.339539302503635E+02 2.337506609819984E+02 2.340028707319546E+02
2.340008458942594E+02 2.340008458919667E+02 2.340008458887537E+02 2.340008458845763E+02 2.340008458792261E+02
2.340008458724685E+02 2.340008458640295E+02 2.340008458536127E+02 2.340008458408783E+02 2.340008458254578E+02
2.340008458069416E+02 2.340008457848821E+02 2.340008457587874E+02 2.340008457281220E+02 2.340008456923017E+02
2.340008456472094E+02 2.340008455882096E+02 2.340008455140117E+02 2.340008454203996E+02 2.340008453019018E+02
2.340008451513897E+02 2.340008449595364E+02 2.340008447140773E+02 2.340008443988070E+02 2.340008439921945E+02
2.340008434654667E+02 2.340008427799271E+02 2.340008418831891E+02 2.340008407038137E+02 2.340008391436351E+02
2.340008370666444E+02 2.340008342827427E+02 2.340008305237438E+02 2.340008254075253E+02 2.340008183838495E+02
2.340008086515073E+02 2.340007950299237E+02 2.340007757575687E+02 2.340007481709175E+02 2.340007081855750E+02
2.340006494445151E+02 2.340005618967998E+02 2.340004293847897E+02 2.340002254729137E+02 2.339999060957352E+02
2.339993963280168E+02 2.339985660302056E+02 2.339971838907784E+02 2.339948288461152E+02 2.33990723592825E+02
2.339835196480574E+02 2.339718517016696E+02 2.339539302503635E+02 2.337506609819984E+02 2.340028707319546E+02
2.406929841394020E+02 2.406929841393984E+02 2.406929841393907E+02 2.406929841393795E+02 2.406929841393631E+02
2.406929841393387E+02 2.406929841393024E+02 2.406929841392501E+02 2.406929841391751E+02 2.406929841390680E+02
2.406929841389135E+02 2.406929841386919E+02 2.406929841383682E+02 2.406929841378908E+02 2.406929841371764E+02
2.406929841360855E+02 2.406929841343970E+02 2.406929841319397E+02 2.406929841286392E+02 2.406929841242925E+02
2.406929841186694E+02 2.406929841115041E+02 2.406929841025064E+02 2.406929840913465E+02 2.406929840776634E+02
2.406929840610587E+02 2.406929840410955E+02 2.406929840172936E+02 2.406929839891301E+02 2.406929839560359E+02
2.406929839141563E+02 2.406929838590690E+02 2.406929837894540E+02 2.406929837012342E+02 2.406929835891087E+02
2.406929834461664E+02 2.406929832633514E+02 2.406929830287451E+02 2.406929827265868E+02 2.406929823359150E+02
2.406929818286988E+02 2.406929811672133E+02 2.406929803003543E+02 2.406929791583897E+02 2.406929776454485E+02
2.406929756286319E+02 2.406929729221031E+02 2.406929692635753E+02 2.406929642791759E+02 2.406929574303482E+02
2.406929479326094E+02 2.406929346296506E+02 2.406929157956092E+02 2.406928888201339E+02 2.406928496992747E+02
2.406927921996180E+02 2.406927064633168E+02 2.406925766396400E+02 2.406923767898490E+02 2.406920636685897E+02
2.406915637321025E+02 2.406907492168998E+02 2.4068932929784621E+02 2.406870813763747E+02 2.406830507248495E+02
2.406759844806083E+02 2.406646911544933E+02 2.406484521711554E+02 2.404323817643778E+02 2.406951812264705E+02
2.464274616439503E+02 2.464274616439487E+02 2.464274616439459E+02 2.464274616439414E+02 2.464274616439349E+02
2.464274616439247E+02 2.464274616439100E+02 2.464274616438884E+02 2.464274616438564E+02 2.464274616438090E+02
2.464274616437381E+02 2.464274616436306E+02 2.464274616434651E+02 2.464274616432040E+02 2.464274616427851E+02
2.464274616420974E+02 2.464274616409560E+02 2.464274616391833E+02 2.464274616366766E+02 2.464274616332368E+02
2.464274616286392E+02 2.464274616226245E+02 2.464274616149093E+02 2.464274616051701E+02 2.464274615930542E+02
2.464274615781723E+02 2.464274615600972E+02 2.464274615383590E+02 2.464274615124464E+02 2.464274614818024E+02
2.464274614428093E+02 2.464274613912335E+02 2.464274613257287E+02 2.464274612423391E+02 2.464274611359180E+02
2.464274609997428E+02 2.464274608250004E+02 2.464274606000774E+02 2.464274603096027E+02 2.464274599331203E+02
2.464274594432508E+02 2.464274588031248E+02 2.464274579627630E+02 2.464274568539352E+02 2.464274553827826E+02
2.464274534191343E+02 2.464274507808871E+02 2.464274472109171E+02 2.464274423425699E+02 2.464274356474980E+02
2.464274263558282E+02 2.464274133324309E+02 2.464273948825522E+02 2.464273684421841E+02 2.464273300774406E+02
2.464272736624901E+02 2.464271895074214E+02 2.464270620282276E+02 2.464268657176461E+02 2.464265580419646E+02
2.464260666552538E+02 2.464252658523666E+02 2.464239320944356E+02 2.464216581498481E+02 2.464176920040443E+02
2.464107440005633E+02 2.463997716882863E+02 2.463850433618159E+02 2.461575839734089E+02 2.464297735529781E+02
2.513413220107142E+02 2.513413220107149E+02 2.513413220107161E+02 2.513413220107178E+02 2.513413220107202E+02
2.513413220107236E+02 2.513413220107282E+02 2.513413220107340E+02 2.513413220107416E+02 2.513413220107491E+02
2.513413220107545E+02 2.513413220107518E+02 2.513413220107303E+02 2.513413220106668E+02 2.513413220105173E+02
2.513413220101976E+02 2.513413220095555E+02 2.513413220084072E+02 2.513413220066239E+02 2.513413220040107E+02
2.513413220003471E+02 2.513413219953799E+02 2.513413219888297E+02 2.513413219803827E+02 2.513413219696905E+02
2.513413219563726E+02 2.513413219400094E+02 2.513413219201412E+02 2.513413218962667E+02 2.513413218678400E+02
2.513413218314556E+02 2.513413217830515E+02 2.513413217212549E+02 2.513413216422187E+02 2.513413215409323E+02
2.513413214108427E+02 2.513413212433491E+02 2.513413210271104E+02 2.513413207471002E+02 2.513413203833069E+02
2.513413199089287E+02 2.513413192878494E+02 2.513413184710821E+02 2.513413173917165E+02 2.513413159576619E+02
2.513413140411442E+02 2.513413114633346E+02 2.513413079716330E+02 2.513413032057060E+02 2.513412966461340E+02
2.513412875358107E+02 2.513412747580948E+02 2.513412566453686E+02 2.513412306740050E+02 2.513411929711150E+02
2.513411375044462E+02 2.513410547300222E+02 2.513409292954120E+02 2.513407360676082E+02 2.513404331295746E+02

2.513399491723259E+02 2.513391602706847E+02 2.513378459998437E+02 2.513356046507461E+02 2.513316941968791E+02
2.513248476064745E+02 2.513141500004887E+02 2.513007707952547E+02 2.510633100147731E+02 2.513436572714332E+02
2.555519976082345E+02 2.555519976082370E+02 2.555519976082421E+02 2.555519976082495E+02 2.555519976082602E+02
2.555519976082759E+02 2.555519976082981E+02 2.555519976083296E+02 2.555519976083731E+02 2.555519976084304E+02
2.555519976085052E+02 2.555519976085991E+02 2.555519976087094E+02 2.555519976088261E+02 2.555519976089236E+02
2.555519976089407E+02 2.555519976087548E+02 2.555519976081768E+02 2.555519976070546E+02 2.555519976051962E+02
2.555519976023849E+02 2.555519975983724E+02 2.555519975928856E+02 2.555519975856137E+02 2.555519975762172E+02
2.555519975643215E+02 2.555519975495147E+02 2.555519975313447E+02 2.555519975093197E+02 2.555519974829027E+02
2.555519974488818E+02 2.555519974033480E+02 2.555519973449041E+02 2.555519972697994E+02 2.555519971731443E+02
2.555519970485371E+02 2.555519968875665E+02 2.555519966791304E+02 2.555519964085100E+02 2.555519960560876E+02
2.555519955955691E+02 2.555519949915046E+02 2.555519941957838E+02 2.555519931426566E+02 2.555519917415900E+02
2.555519898669140E+02 2.555519873426762E+02 2.555519839202435E+02 2.555519792448186E+02 2.555519728047956E+02
2.555519638542276E+02 2.555519512926193E+02 2.555519334760217E+02 2.555519079159993E+02 2.555518707927613E+02
2.555518161554301E+02 2.555517345868043E+02 2.555516109354022E+02 2.555514203926343E+02 2.555511215754219E+02
2.555506440716124E+02 2.555498654936507E+02 2.555485681030703E+02 2.555463549438655E+02 2.55542925286611E+02
2.555357328593410E+02 2.555252701457952E+02 2.555130906981198E+02 2.552669356480681E+02 2.555542927223505E+02
2.594459049692124E+02 2.594459049692158E+02 2.594459049692223E+02 2.594459049692321E+02 2.594459049692462E+02
2.594459049692670E+02 2.594459049692970E+02 2.594459049693388E+02 2.594459049693970E+02 2.594459049694754E+02
2.594459049695787E+02 2.594459049697122E+02 2.594459049698773E+02 2.594459049700694E+02 2.594459049702698E+02
2.594459049704284E+02 2.594459049704357E+02 2.594459049701017E+02 2.594459049692654E+02 2.594459049677369E+02
2.594459049653038E+02 2.594459049617206E+02 2.594459049567182E+02 2.594459049499908E+02 2.594459049412037E+02
2.594459049299882E+02 2.594459049159368E+02 2.594459048986059E+02 2.594459048775097E+02 2.594459048521186E+02
2.594459048193248E+02 2.594459047753109E+02 2.594459047186764E+02 2.594459046457401E+02 2.594459045516957E+02
2.594459044302483E+02 2.594459042731245E+02 2.594459040693998E+02 2.594459038045842E+02 2.594459034593628E+02
2.594459030078352E+02 2.594459024150755E+02 2.594459016336746E+02 2.594459005988239E+02 2.594458992212720E+02
2.594458973771024E+02 2.594458948927912E+02 2.594458915230979E+02 2.594458869180161E+02 2.594458805727819E+02
2.594458717513368E+02 2.594458593676462E+02 2.594458417991938E+02 2.594458165897498E+02 2.594457799686157E+02
2.594457260609116E+02 2.594456455689947E+02 2.594455235327100E+02 2.594453354552277E+02 2.594450404712653E+02
2.594445690460884E+02 2.594438003098297E+02 2.594425192006455E+02 2.594403335523315E+02 2.594365185820940E+02
2.594298451266549E+02 2.594196054705212E+02 2.594085326187737E+02 2.591546862966445E+02 2.594481211313940E+02
2.633467231117006E+02 2.633467231117049E+02 2.633467231117137E+02 2.633467231117266E+02 2.633467231117455E+02
2.633467231117732E+02 2.633467231118138E+02 2.633467231118706E+02 2.633467231119488E+02 2.633467231120566E+02
2.633467231122007E+02 2.633467231123894E+02 2.633467231126309E+02 2.633467231129279E+02 2.633467231132720E+02
2.633467231136276E+02 2.633467231139020E+02 2.633467231139046E+02 2.633467231134590E+02 2.633467231123811E+02
2.633467231104589E+02 2.633467231074534E+02 2.633467231030980E+02 2.633467230970932E+02 2.633467230891084E+02
2.633467230787812E+02 2.633467230657109E+02 2.633467230494603E+02 2.633467230295513E+02 2.633467230054627E+02
2.633467229742152E+02 2.633467229320989E+02 2.63346722877069E+02 2.633467228074328E+02 2.633467227165637E+02
2.633467225989255E+02 2.633467224463956E+02 2.633467222482435E+02 2.633467219902315E+02 2.633467216533690E+02
2.633467212121836E+02 2.633467206323096E+02 2.633467198670853E+02 2.633467188527037E+02 2.633467175012664E+02
2.633467156907039E+02 2.633467132500343E+02 2.633467099375591E+02 2.633467054082520E+02 2.633466991644329E+02
2.633466904802427E+02 2.633466782845126E+02 2.633466609766829E+02 2.633466361333995E+02 2.633466000339239E+02
2.633465468804634E+02 2.6334646474962697E+02 2.633464371140731E+02 2.633461615504069E+02 2.633458704589215E+02
2.633454051816825E+02 2.633446463609754E+02 2.633433815931187E+02 2.633412234469570E+02 2.633374556669780E+02
2.633308673072909E+02 2.633208487642066E+02 2.633109250408099E+02 2.630490863823684E+02 2.633488407801705E+02
2.672467230919959E+02 2.672467230920017E+02 2.672467230920128E+02 2.672467230920299E+02 2.672467230920546E+02
2.672467230920917E+02 2.672467230921447E+02 2.672467230922197E+02 2.672467230923241E+02 2.672467230924675E+02
2.672467230926611E+02 2.672467230929194E+02 2.672467230923557E+02 2.672467230936827E+02 2.67246723094046E+02
2.672467230948029E+02 2.672467230954073E+02 2.672467230958242E+02 2.672467230958590E+02 2.672467230953317E+02
2.672467230940341E+02 2.672467230917308E+02 2.672467230881599E+02 2.672467230830269E+02 2.672467230760074E+02
2.672467230667450E+02 2.672467230548454E+02 2.672467230398789E+02 2.672467230213751E+02 2.672467229988222E+02
2.672467229693891E+02 2.672467229294898E+02 2.67246722877047E+02 2.672467228105081E+02 2.672467227232914E+02
2.672467226100082E+02 2.672467224627002E+02 2.672467222708466E+02 2.672467220204768E+02 2.672467216929477E+02
2.672467212632371E+02 2.672467206975757E+02 2.672467199500866E+02 2.672467189580117E+02 2.672467176348661E+02
2.672467158605035E+02 2.672467134665816E+02 2.672467102150630E+02 2.672467057660573E+02 2.672466996291678E+02
2.672466910889897E+02 2.672466790895481E+02 2.672466620526617E+02 2.672466375883955E+02 2.672466020266556E+02
2.672465496475924E+02 2.672464713963847E+02 2.672463526997987E+02 2.672461696888207E+02 2.672458825365625E+02
2.672454234606313E+02 2.672446746095226E+02 2.672434262199346E+02 2.672412955455776E+02 2.672375746981166E+02
2.672310703622459E+02 2.6722112706774522E+02 2.672125355808637E+02 2.669425163511443E+02 2.672487438824435E+02
2.711420290954832E+02 2.711420290954904E+02 2.711420290955051E+02 2.711420290955272E+02 2.711420290955591E+02
2.711420290956067E+02 2.711420290956747E+02 2.711420290957720E+02 2.711420290959073E+02 2.711420290960939E+02
2.711420290963480E+02 2.711420290966890E+02 2.711420290971396E+02 2.711420290977239E+02 2.711420290984591E+02
2.711420290993494E+02 2.711420291003496E+02 2.711420291012615E+02 2.711420291018715E+02 2.711420291020005E+02
2.711420291014466E+02 2.711420290999774E+02 2.71142029093359E+02 2.711420290932317E+02 2.711420290873498E+02
2.711420290793372E+02 2.711420290688076E+02 2.711420290553386E+02 2.711420290384698E+02 2.711420290176963E+02
2.71142028903612E+02 2.711420289530138E+02 2.711420289042183E+02 2.711420288405360E+02 2.711420287574715E+02
2.711420286491167E+02 2.711420285076910E+02 2.711420283228965E+02 2.711420280810479E+02 2.711420277638720E+02

2.711420273468260E+02 2.711420267967665E+02 2.711420260686418E+02 2.711420251007938E+02 2.711420238082145E+02
2.711420220727565E+02 2.711420197288173E+02 2.711420165421447E+02 2.711420121781437E+02 2.711420061539008E+02
2.711419977647228E+02 2.711419859701595E+02 2.711419692148266E+02 2.711419451427400E+02 2.711419101351126E+02
2.71141858508438E+02 2.711417814579680E+02 2.711416644782469E+02 2.711414840578414E+02 2.711412008891599E+02
2.711407480627744E+02 2.711400092249445E+02 2.711387772301693E+02 2.711366739574317E+02 2.711329997055379E+02
2.711265781510517E+02 2.711169946549996E+02 2.711094897129460E+02 2.708311783787578E+02 2.711439821804469E+02
2.753341636797501E+02 2.753341636797584E+02 2.753341636797747E+02 2.753341636797993E+02 2.753341636798347E+02
2.753341636798873E+02 2.753341636799636E+02 2.753341636800720E+02 2.753341636802231E+02 2.753341636804323E+02
2.753341636807178E+02 2.753341636811012E+02 2.753341636816110E+02 2.753341636822758E+02 2.753341636831226E+02
2.753341636841659E+02 2.753341636853748E+02 2.753341636865499E+02 2.753341636874695E+02 2.753341636879554E+02
2.753341636878108E+02 2.75334163688066E+02 2.753341636846915E+02 2.753341636811799E+02 2.753341636759610E+02
2.753341636686882E+02 2.753341636589835E+02 2.753341636464310E+02 2.753341636305777E+02 2.753341636109272E+02
2.753341635849358E+02 2.753341635492559E+02 2.753341635024487E+02 2.753341634411515E+02 2.753341633609610E+02
2.753341632560918E+02 2.753341631189127E+02 2.753341629393273E+02 2.753341627039058E+02 2.753341623947113E+02
2.753341619876427E+02 2.753341614501433E+02 2.753341607379448E+02 2.753341597904464E+02 2.753341585240731E+02
2.753341568226445E+02 2.753341545232814E+02 2.753341513955345E+02 2.753341471101836E+02 2.753341411919924E+02
2.753341329473589E+02 2.753341213520623E+02 2.753341048747710E+02 2.753340811956402E+02 2.753340467509764E+02
2.753339959849559E+02 2.753339200997505E+02 2.753338049317364E+02 2.753336272766790E+02 2.753333484073886E+02
2.753329023974135E+02 2.753321745921076E+02 2.753309608396492E+02 2.753288883621216E+02 2.753252670298754E+02
2.753189399319119E+02 2.753095929386708E+02 2.753033970118676E+02 2.750166338239364E+02 2.753361115487376E+02
2.801760780804886E+02 2.801760780804979E+02 2.801760780805170E+02 2.801760780805446E+02 2.801760780805848E+02
2.801760780806446E+02 2.801760780807315E+02 2.801760780808543E+02 2.801760780810272E+02 2.801760780812656E+02
2.801760780815916E+02 2.801760780820321E+02 2.801760780826192E+02 2.801760780833906E+02 2.801760780843833E+02
2.801760780856271E+02 2.801760780871090E+02 2.801760780886291E+02 2.801760780899521E+02 2.801760780909039E+02
2.801760780912913E+02 2.801760780908903E+02 2.801760780894538E+02 2.801760780867053E+02 2.801760780823373E+02
2.801760780760128E+02 2.801760780673610E+02 2.801760780559743E+02 2.801760780414086E+02 2.801760780231808E+02
2.801760779988852E+02 2.801760779653009E+02 2.801760779209860E+02 2.801760778626682E+02 2.801760777860562E+02
2.801760776855087E+02 2.801760775535804E+02 2.801760773804106E+02 2.801760771528775E+02 2.801760768534453E+02
2.801760764585406E+02 2.801760759363028E+02 2.801760752433958E+02 2.801760743204688E+02 2.801760730856462E+02
2.801760714250718E+02 2.801760691790760E+02 2.801760661216952E+02 2.801760619300325E+02 2.801760561378730E+02
2.801760480646362E+02 2.801760367051251E+02 2.801760205561707E+02 2.801759973401984E+02 2.801759635578754E+02
2.801759137528898E+02 2.801758392837727E+02 2.801757262368012E+02 2.801755518143815E+02 2.801752779637007E+02
2.801748398991898E+02 2.801741249360200E+02 2.801729323885758E+02 2.801708956527010E+02 2.801673355907457E+02
2.801611171386695E+02 2.801520403250276E+02 2.801474004424487E+02 2.798506923974682E+02 2.801781152303746E+02
2.857684877775965E+02 2.857684877776072E+02 2.857684877776288E+02 2.857684877776611E+02 2.857684877777075E+02
2.85768487777764E+02 2.857684877778762E+02 2.857684877780185E+02 2.857684877782174E+02 2.857684877784935E+02
2.857684877788711E+02 2.857684877793834E+02 2.857684877800692E+02 2.857684877809756E+02 2.857684877821545E+02
2.857684877836518E+02 2.857684877854811E+02 2.857684877874372E+02 2.857684877892692E+02 2.857684877908084E+02
2.857684877918646E+02 2.857684877922214E+02 2.857684877916379E+02 2.857684877898432E+02 2.857684877865403E+02
2.857684877813974E+02 2.857684877740547E+02 2.857684877641161E+02 2.857684877511475E+02 2.857684877346770E+02
2.857684877124764E+02 2.857684876814730E+02 2.857684876402206E+02 2.857684875855529E+02 2.857684875133170E+02
2.857684874180413E+02 2.857684872925013E+02 2.857684871271172E+02 2.857684869091339E+02 2.857684866214900E+02
2.857684862412364E+02 2.857684857373384E+02 2.857684850675572E+02 2.857684841740191E+02 2.857684829768489E+02
2.857684813649241E+02 2.857684791823508E+02 2.857684762084299E+02 2.857684721276798E+02 2.857684664844584E+02
2.857684586134232E+02 2.857684475316263E+02 2.857684317688044E+02 2.857684090967199E+02 2.857683760911040E+02
2.857683274116033E+02 2.857682545987963E+02 2.857681440296683E+02 2.857679733792758E+02 2.857677053779915E+02
2.857672765640568E+02 2.857665765362404E+02 2.857654086231960E+02 2.857634133586252E+02 2.857599242395057E+02
2.857538307355406E+02 2.857450616331122E+02 2.857422720129725E+02 2.854339459637854E+02 2.857706526119136E+02
2.922277192196393E+02 2.922277192196517E+02 2.922277192196768E+02 2.922277192197143E+02 2.922277192197685E+02
2.922277192198484E+02 2.922277192199643E+02 2.922277192201296E+02 2.922277192203616E+02 2.922277192206832E+02
2.922277192211249E+02 2.922277192217240E+02 2.922277192225312E+02 2.922277192236036E+02 2.922277192250094E+02
2.922277192268183E+02 2.922277192290705E+02 2.922277192315594E+02 2.922277192340139E+02 2.922277192362688E+02
2.922277192381409E+02 2.922277192394203E+02 2.922277192398734E+02 2.922277192392387E+02 2.922277192372255E+02
2.922277192335156E+02 2.922277192277589E+02 2.922277192195700E+02 2.922277192085302E+02 2.922277191941803E+02
2.922277191745030E+02 2.922277191466055E+02 2.922277191090329E+02 2.922277190587477E+02 2.922277189917551E+02
2.922277189027883E+02 2.922277187848796E+02 2.922277186287841E+02 2.922277184221755E+02 2.922277181485533E+02
2.92227717856995E+02 2.922277173035508E+02 2.922277166611557E+02 2.922277158023718E+02 2.922277146496674E+02
2.922277130951216E+02 2.922277109872560E+02 2.922277081115263E+02 2.922277041611173E+02 2.922276986927267E+02
2.922276910587980E+02 2.922276803023286E+02 2.922276649914052E+02 2.922276429552656E+02 2.922276108570311E+02
2.922275634912764E+02 2.922274926102928E+02 2.922273849289667E+02 2.922272186714322E+02 2.922269574773662E+02
2.922265394211088E+02 2.922258567496222E+02 2.922247174436177E+02 2.922227702988171E+02 2.922193633580425E+02
2.922134135767933E+02 2.922049935554386E+02 2.922044039424719E+02 2.918826291020603E+02 2.922299634146613E+02
2.996881302945383E+02 2.996881302945528E+02 2.996881302945818E+02 2.996881302946252E+02 2.996881302946881E+02
2.996881302947814E+02 2.996881302949166E+02 2.996881302951093E+02 2.996881302953797E+02 2.996881302957551E+02
2.996881302962712E+02 2.996881302969753E+02 2.996881302979239E+02 2.996881302991920E+02 2.996881303008658E+02
2.996881303030406E+02 2.996881303057925E+02 2.996881303089102E+02 2.996881303120973E+02 2.996881303151951E+02

2.996881303180282E+02 2.996881303203946E+02 2.996881303220675E+02 2.996881303227965E+02 2.996881303223023E+02
2.996881303202775E+02 2.996881303163848E+02 2.996881303102527E+02 2.996881303014790E+02 2.996881302896198E+02
2.996881302729041E+02 2.996881302486534E+02 2.996881302153991E+02 2.996881301702522E+02 2.996881301094065E+02
2.996881300278313E+02 2.996881299188632E+02 2.99688129736431E+02 2.996881295803474E+02 2.996881293231276E+02
2.996881289806213E+02 2.996881285238936E+02 2.996881279134973E+02 2.996881270953049E+02 2.996881259945142E+02
2.996881245069332E+02 2.996881224862240E+02 2.996881197250066E+02 2.996881159265528E+02 2.996881106619192E+02
2.996881033042401E+02 2.996880929266911E+02 2.996880781419600E+02 2.996880568461107E+02 2.996880258038582E+02
2.996879799666023E+02 2.996879113326617E+02 2.9968787070095036E+02 2.996876458590546E+02 2.996873925769608E+02
2.996869870209484E+02 2.996863245116696E+02 2.996852184280045E+02 2.996833271470487E+02 2.996800154997880E+02
2.996742311603946E+02 2.996662051799570E+02 2.996682294242405E+02 2.993310712082639E+02 2.996903345668403E+02
3.083049050291521E+02 3.083049050291687E+02 3.083049050292021E+02 3.083049050292523E+02 3.083049050293253E+02
3.083049050294336E+02 3.083049050295907E+02 3.083049050298146E+02 3.083049050301290E+02 3.083049050305658E+02
3.083049050311677E+02 3.083049050319884E+02 3.083049050330994E+02 3.083049050345881E+02 3.083049050365660E+02
3.083049050391575E+02 3.083049050424757E+02 3.083049050463077E+02 3.083049050503268E+02 3.083049050543838E+02
3.083049050583097E+02 3.083049050619113E+02 3.083049050649743E+02 3.083049050672570E+02 3.083049050684936E+02
3.083049050683904E+02 3.083049050666247E+02 3.083049050628421E+02 3.083049050566554E+02 3.083049050476425E+02
3.083049050343149E+02 3.083049050142346E+02 3.083049049859239E+02 3.083049049466646E+02 3.083049048928655E+02
3.083049048197719E+02 3.083049047210665E+02 3.083049045883411E+02 3.083049044103511E+02 3.083049041720033E+02
3.083049038529240E+02 3.083049034254855E+02 3.083049028519794E+02 3.083049020806143E+02 3.083049010397522E+02
3.083048996295207E+02 3.083048977095447E+02 3.083048950807520E+02 3.083048914581132E+02 3.083048864293512E+02
3.083048793916128E+02 3.083048694531101E+02 3.083048552783224E+02 3.083048348409266E+02 3.083048050236549E+02
3.083047609601221E+02 3.083046949345401E+02 3.083045945106400E+02 3.083044392916840E+02 3.083041952008216E+02
3.083038041689954E+02 3.083031650903985E+02 3.083020976211772E+02 3.083002712812565E+02 3.082970703487350E+02
3.082914767582756E+02 3.082838927866743E+02 3.082890156402511E+02 3.079345399763070E+02 3.083069696480318E+02
3.182572809472045E+02 3.182572809472239E+02 3.182572809472629E+02 3.182572809473209E+02 3.182572809474046E+02
3.182572809475293E+02 3.182572809477100E+02 3.182572809479670E+02 3.182572809483294E+02 3.182572809488333E+02
3.182572809495277E+02 3.182572809504772E+02 3.182572809517648E+02 3.182572809534967E+02 3.182572809558058E+02
3.182572809588538E+02 3.182572809627927E+02 3.182572809674068E+02 3.182572809723391E+02 3.182572809774493E+02
3.182572809825760E+02 3.182572809875404E+02 3.182572809921343E+02 3.182572809961316E+02 3.182572809992819E+02
3.182572810013063E+02 3.182572810018986E+02 3.182572810007244E+02 3.182572809974154E+02 3.182572809915728E+02
3.182572809820227E+02 3.182572809666034E+02 3.182572809438246E+02 3.182572809111650E+02 3.182572808652812E+02
3.182572808017292E+02 3.182572807145929E+02 3.182572805959779E+02 3.182572804353050E+02 3.182572802183493E+02
3.182572799258739E+02 3.182572795317552E+02 3.182572790002920E+02 3.182572782823848E+02 3.182572773100474E+02
3.182572759884014E+02 3.182572741839651E+02 3.182572717072792E+02 3.182572682868666E+02 3.182572635297593E+02
3.182572568609515E+02 3.182572474293061E+02 3.182572339594325E+02 3.182572145151693E+02 3.182571861164170E+02
3.182571441086745E+02 3.182570811087682E+02 3.182569852114874E+02 3.182568368833015E+02 3.182566034771910E+02
3.182562293399249E+02 3.182556175315191E+02 3.182545950304927E+02 3.182528443660714E+02 3.182497724578661E+02
3.182443994153791E+02 3.182373073885167E+02 3.182460846144358E+02 3.178725437610117E+02 3.182592926979346E+02
3.297522785620337E+02 3.297522785620556E+02 3.297522785620997E+02 3.297522785621655E+02 3.297522785622610E+02
3.297522785624024E+02 3.297522785626080E+02 3.297522785629013E+02 3.297522785633140E+02 3.297522785638881E+02
3.297522785646804E+02 3.297522785657649E+02 3.297522785672384E+02 3.297522785692266E+02 3.297522785718864E+02
3.297522785754147E+02 3.297522785800110E+02 3.297522785854530E+02 3.297522785913549E+02 3.297522785975846E+02
3.297522786039921E+02 3.297522786104093E+02 3.297522786166430E+02 3.297522786224820E+02 3.297522786276891E+02
3.297522786320073E+02 3.297522786351489E+02 3.297522786367998E+02 3.297522786366180E+02 3.297522786342278E+02
3.297522786288014E+02 3.297522786184821E+02 3.297522786017766E+02 3.297522785763817E+02 3.297522785392354E+02
3.297522784862513E+02 3.297522784119653E+02 3.297522783090705E+02 3.297522781677479E+02 3.297522779747663E+02
3.297522777121927E+02 3.297522773556310E+02 3.297522768716880E+02 3.297522762143631E+02 3.297522753198853E+02
3.297522740991357E+02 3.297522724266058E+02 3.297522701239595E+02 3.297522669354194E+02 3.297522624904107E+02
3.297522562462538E+02 3.297522473990443E+02 3.297522347433185E+02 3.297522164478555E+02 3.297521896923347E+02
3.297521500692610E+02 3.297520905834796E+02 3.297519999497214E+02 3.297518596427770E+02 3.297516386868425E+02
3.297512842540102E+02 3.297507042796258E+02 3.297497343207856E+02 3.297480721738918E+02 3.297451513012192E+02
3.297400344282818E+02 3.297334846674516E+02 3.297465251657966E+02 3.293526793480764E+02 3.297543871601645E+02
3.430290101056837E+02 3.430290101057083E+02 3.430290101057579E+02 3.430290101058317E+02 3.430290101059386E+02
3.430290101060979E+02 3.430290101063288E+02 3.430290101066578E+02 3.430290101071213E+02 3.430290101077674E+02
3.430290101086592E+02 3.430290101098807E+02 3.430290101115436E+02 3.430290101137913E+02 3.430290101168086E+02
3.430290101208276E+02 3.430290101260938E+02 3.430290101323844E+02 3.430290101392825E+02 3.430290101466661E+02
3.430290101543968E+02 3.430290101623216E+02 3.430290101702622E+02 3.430290101780236E+02 3.430290101853897E+02
3.430290101921214E+02 3.430290101979560E+02 3.430290102026041E+02 3.430290102057494E+02 3.430290102070459E+02
3.430290102060408E+02 3.430290102012099E+02 3.430290101910656E+02 3.430290101735530E+02 3.430290101459286E+02
3.430290101045039E+02 3.430290100443382E+02 3.430290099587877E+02 3.430290098389041E+02 3.430290096725930E+02
3.430290094434137E+02 3.430290091289583E+02 3.430290086984875E+02 3.430290081095778E+02 3.430290073033226E+02
3.430290061972723E+02 3.430290046751502E+02 3.430290025715346E+02 3.430289996488836E+02 3.430289955626780E+02
3.430289898078900E+02 3.430289816357027E+02 3.430289699222874E+02 3.430289529590689E+02 3.430289281126545E+02
3.430288912647873E+02 3.430288358750896E+02 3.430287513855056E+02 3.430286204545706E+02 3.430284140699209E+02
3.430280827255512E+02 3.430275400941914E+02 3.430266318429465E+02 3.430250738087457E+02 3.430223308647306E+02
3.430175136846377E+02 3.430115549199911E+02 3.430294605541212E+02 3.426151319663734E+02 3.430310538388500E+02

3.583636555861478E+02 3.583636555861750E+02 3.583636555862296E+02 3.583636555863113E+02 3.583636555864297E+02
3.583636555866054E+02 3.583636555868606E+02 3.583636555872249E+02 3.583636555877378E+02 3.583636555884525E+02
3.583636555894399E+02 3.583636555907947E+02 3.583636555926412E+02 3.583636555951413E+02 3.583636555985056E+02
3.583636556030028E+02 3.583636556089253E+02 3.583636556160488E+02 3.583636556239288E+02 3.583636556324572E+02
3.583636556415059E+02 3.583636556509407E+02 3.583636556606002E+02 3.583636556703098E+02 3.583636556798731E+02
3.583636556890784E+02 3.583636556976862E+02 3.583636557054377E+02 3.583636557120477E+02 3.583636557172025E+02
3.583636557208469E+02 3.583636557218236E+02 3.583636557186595E+02 3.583636557095809E+02 3.583636556922054E+02
3.583636556632979E+02 3.583636556185059E+02 3.583636555519475E+02 3.583636554556669E+02 3.583636553188761E+02
3.583636551268545E+02 3.583636548594810E+02 3.583636544890844E+02 3.583636539773847E+02 3.583636532711221E+02
3.583636522955993E+02 3.583636509452966E+02 3.583636490698534E+02 3.583636464530447E+02 3.583636427808476E+02
3.583636375923665E+02 3.583636302034425E+02 3.583636195861887E+02 3.583636041763488E+02 3.583635815607370E+02
3.583635479622191E+02 3.583634973773172E+02 3.583634201073594E+02 3.583633002110531E+02 3.583631110005246E+02
3.583628069060146E+02 3.583623084060919E+02 3.583614731823807E+02 3.583600385918751E+02 3.583575071738398E+02
3.583530445890765E+02 3.583477224674040E+02 3.583709363585520E+02 3.579380001537588E+02 3.583656485492986E+02
3.760752130325495E+02 3.760752130325790E+02 3.760752130326382E+02 3.760752130327268E+02 3.760752130328548E+02
3.760752130330450E+02 3.760752130333212E+02 3.760752130337153E+02 3.760752130342701E+02 3.760752130350443E+02
3.760752130361143E+02 3.760752130375840E+02 3.760752130395874E+02 3.760752130423058E+02 3.760752130459709E+02
3.760752130508852E+02 3.760752130573826E+02 3.760752130652439E+02 3.760752130739987E+02 3.760752130835578E+02
3.760752130938083E+02 3.760752131046346E+02 3.760752131158946E+02 3.760752131274369E+02 3.760752131390889E+02
3.760752131506690E+02 3.760752131619690E+02 3.76075213172613E+02 3.760752131827975E+02 3.760752131918049E+02
3.760752132001316E+02 3.760752132070094E+02 3.760752132110089E+02 3.760752132106716E+02 3.760752132040120E+02
3.760752131883153E+02 3.760752131598953E+02 3.760752131137388E+02 3.760752130430295E+02 3.760752129384741E+02
3.760752127873357E+02 3.760752125721448E+02 3.760752122687928E+02 3.760752118438144E+02 3.760752112505485E+02
3.760752104233625E+02 3.760752092693547E+02 3.760752076558745E+02 3.760752053917992E+02 3.760752021991036E+02
3.760751976690805E+02 3.760751911941571E+02 3.760751818602932E+02 3.760751682747423E+02 3.760751482864068E+02
3.760751185247246E+02 3.760750736269865E+02 3.760750049214261E+02 3.760748981418586E+02 3.760747293844327E+02
3.760744577991525E+02 3.760740120362526E+02 3.760732642364402E+02 3.760719777910375E+02 3.760697012958138E+02
3.760656659531746E+02 3.760610246451454E+02 3.760894830752304E+02 3.756436401350816E+02 3.760764126365310E+02
3.965321219283247E+02 3.965321219283549E+02 3.965321219284157E+02 3.965321219285065E+02 3.965321219286380E+02
3.965321219288335E+02 3.965321219291174E+02 3.965321219295221E+02 3.965321219300928E+02 3.965321219308883E+02
3.965321219319891E+02 3.965321219335007E+02 3.965321219355657E+02 3.965321219383686E+02 3.965321219421551E+02
3.965321219472434E+02 3.965321219539944E+02 3.965321219621964E+02 3.965321219713804E+02 3.965321219814738E+02
3.965321219923813E+02 3.965321220040084E+02 3.965321220162376E+02 3.965321220289418E+02 3.965321220419794E+02
3.965321220552000E+02 3.965321220684286E+02 3.965321220814802E+02 3.965321220941465E+02 3.965321221061962E+02
3.965321221183256E+02 3.965321221301402E+02 3.965321221403032E+02 3.965321221476881E+02 3.965321221507466E+02
3.965321221473201E+02 3.965321221344605E+02 3.965321221081145E+02 3.965321220627391E+02 3.965321219907268E+02
3.965321218815910E+02 3.965321217208838E+02 3.965321214885854E+02 3.965321211567920E+02 3.965321206864923E+02
3.965321200226228E+02 3.965321190870543E+02 3.965321177679511E+02 3.965321159038289E+02 3.965321132592948E+02
3.965321094876775E+02 3.965321040727391E+02 3.965320962366107E+02 3.965320847922876E+02 3.965320679039321E+02
3.965320426912788E+02 3.965320045662151E+02 3.965319461011951E+02 3.965318550639890E+02 3.965317109381342E+02
3.965314786278854E+02 3.965310967689078E+02 3.965304552318025E+02 3.965293495766064E+02 3.965273863911413E+02
3.965238804893439E+02 3.965199723709208E+02 3.96523242929959E+02 3.961066973439993E+02 3.96537572657590E+02
4.199980597880457E+02 4.199980597880730E+02 4.199980597881278E+02 4.199980597882095E+02 4.199980597883280E+02
4.199980597885040E+02 4.199980597887594E+02 4.199980597891241E+02 4.199980597896380E+02 4.199980597903551E+02
4.199980597913469E+02 4.199980597927098E+02 4.199980597945716E+02 4.199980597971013E+02 4.199980598005219E+02
4.199980598051253E+02 4.199980598112442E+02 4.199980598186948E+02 4.199980598270628E+02 4.199980598362931E+02
4.199980598463089E+02 4.199980598570387E+02 4.1999805986583931E+02 4.199980598802687E+02 4.199980598925579E+02
4.199980599051436E+02 4.199980599178909E+02 4.199980599306525E+02 4.199980599432689E+02 4.19998059955593E+02
4.199980599683196E+02 4.199980599813979E+02 4.199980599936610E+02 4.199980600042836E+02 4.199980600121239E+02
4.199980600155624E+02 4.199980600123747E+02 4.199980599994725E+02 4.199980599726147E+02 4.199980599259465E+02
4.199980598513557E+02 4.199980597376302E+02 4.199980595691752E+02 4.199980593241835E+02 4.199980589721051E+02
4.199980584696916E+02 4.199980577554591E+02 4.199980567412273E+02 4.199980552994384E+02 4.199980532438546E+02
4.199980502997863E+02 4.199980460576203E+02 4.199980398993785E+02 4.199980308809131E+02 4.199980175403966E+02
4.199979975819812E+02 4.199979673449612E+02 4.199979208977305E+02 4.199978484632117E+02 4.199977336291827E+02
4.199975482974577E+02 4.199972432939594E+02 4.199967302497012E+02 4.199958446370084E+02 4.199942670814970E+02
4.199914262733229E+02 4.199883226439864E+02 4.200206239595487E+02 4.196027516522707E+02 4.199984059484727E+02
4.449987165965379E+02 4.449987165965641E+02 4.449987165966172E+02 4.449987165966966E+02 4.449987165968113E+02
4.449987165969820E+02 4.449987165972297E+02 4.449987165975835E+02 4.449987165980825E+02 4.449987165987783E+02
4.449987165997421E+02 4.449987166010666E+02 4.449987166028781E+02 4.449987166053431E+02 4.449987166086811E+02
4.449987166131849E+02 4.449987166191929E+02 4.449987166265385E+02 4.449987166348357E+02 4.449987166440487E+02
4.449987166541221E+02 4.449987166650086E+02 4.449987166766492E+02 4.449987166889708E+02 4.449987167019028E+02
4.449987167153643E+02 4.449987167292644E+02 4.449987167435025E+02 4.449987167579686E+02 4.449987167725381E+02
4.449987167882987E+02 4.449987168054763E+02 4.449987168230971E+02 4.449987168407182E+02 4.449987168576841E+02
4.449987168730292E+02 4.449987168853844E+02 4.449987168927904E+02 4.449987168925148E+02 4.449987168807054E+02
4.449987168519479E+02 4.449987167986708E+02 4.449987167102246E+02 4.449987165715701E+02 4.449987163614848E+02
4.449987160496814E+02 4.449987155928366E+02 4.449987149284498E+02 4.449987139656275E+02 4.449987125710321E+02

4.449987105471307E+02 4.449987075981845E+02 4.449987032763580E+02 4.449986968951035E+02 4.449986873880561E+02
4.449986730754809E+02 4.449986512716341E+02 4.449986176133715E+02 4.449985648913024E+02 4.449984809754052E+02
4.449983450525736E+02 4.449981206169126E+02 4.449977418942005E+02 4.449970858986001E+02 4.449959113581625E+02
4.449937727256402E+02 4.449914563285525E+02 4.450203033684675E+02 4.446744737193973E+02 4.449966327313371E+02
4.699970801878811E+02 4.699970801878974E+02 4.699970801879301E+02 4.699970801879788E+02 4.699970801880496E+02
4.699970801881547E+02 4.699970801883075E+02 4.699970801885258E+02 4.699970801888332E+02 4.699970801892624E+02
4.699970801898563E+02 4.699970801906734E+02 4.699970801917889E+02 4.699970801933070E+02 4.699970801953633E+02
4.699970801981382E+02 4.699970802018374E+02 4.699970802063565E+02 4.699970802114575E+02 4.699970802171183E+02
4.699970802233020E+02 4.699970802299779E+02 4.699970802371077E+02 4.699970802446448E+02 4.699970802525415E+02
4.699970802607465E+02 4.699970802692004E+02 4.699970802778387E+02 4.699970802865904E+02 4.699970802953741E+02
4.699970803048367E+02 4.699970803150875E+02 4.699970803255185E+02 4.699970803358308E+02 4.699970803455832E+02
4.699970803541324E+02 4.699970803605767E+02 4.699970803636243E+02 4.699970803614853E+02 4.699970803516418E+02
4.699970803305596E+02 4.699970802933092E+02 4.699970802329713E+02 4.699970801397781E+02 4.69997079999697E+02
4.699970797939203E+02 4.699970794935834E+02 4.699970790585197E+02 4.699970784299507E+02 4.699970775216877E+02
4.699970762060900E+02 4.699970742921109E+02 4.699970714905075E+02 4.699970673579162E+02 4.699970612057456E+02
4.699970519493572E+02 4.699970378544579E+02 4.699970161033711E+02 4.699969820397708E+02 4.699969278279396E+02
4.699968400203887E+02 4.699966950250575E+02 4.699964503237636E+02 4.699960263683056E+02 4.699952666399128E+02
4.699938770804307E+02 4.699923480015333E+02 4.700121785937125E+02 4.697816381976079E+02 4.699958280306800E+02
4.949982000840902E+02 4.949982000840880E+02 4.949982000840836E+02 4.949982000840768E+02 4.949982000840670E+02
4.949982000840524E+02 4.949982000840312E+02 4.949982000840009E+02 4.949982000839581E+02 4.949982000838980E+02
4.949982000838143E+02 4.949982000836977E+02 4.949982000835363E+02 4.949982000833114E+02 4.949982000829991E+02
4.949982000825628E+02 4.949982000819534E+02 4.949982000811562E+02 4.949982000801923E+02 4.949982000790416E+02
4.949982000776755E+02 4.949982000760666E+02 4.949982000741847E+02 4.949982000719904E+02 4.949982000694463E+02
4.949982000665107E+02 4.949982000631352E+02 4.949982000592685E+02 4.949982000548538E+02 4.949982000498293E+02
4.949982000436505E+02 4.949982000357591E+02 4.949982000260625E+02 4.949982000140910E+02 4.949981999992395E+02
4.949981999807261E+02 4.949981999575344E+02 4.949981999283322E+02 4.949981998913732E+02 4.949981998443468E+02
4.949981997841725E+02 4.949981997067290E+02 4.949981996064546E+02 4.949981994757770E+02 4.949981993043390E+02
4.949981990778015E+02 4.949981987761770E+02 4.949981983713176E+02 4.949981978231748E+02 4.949981970741622E+02
4.949981960405202E+02 4.949981945989434E+02 4.949981925655934E+02 4.949981896626461E+02 4.949981854642481E+02
4.949981793077442E+02 4.949981701455100E+02 4.949981562932915E+02 4.949981349948495E+02 4.949981016539489E+02
4.949980484497449E+02 4.949979617753796E+02 4.949978173325855E+02 4.949975702547395E+02 4.949971343628377E+02
4.949963538698757E+02 4.949954470653348E+02 4.950040818455124E+02 4.948844677323173E+02 4.950271611250381E+02
CONDUCTIVE Heat Input along Base (mW/m^2)

```
FREE_FORMAT
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0
# End of Keyword Data Block section
# -----
# Transient data
# TIME PERIOD #1
# .. tchg,delt,nsrce[],lchgpr[T/F],nparms[]
0.001 0.001 0 T 0
# PRINT 1
# .. pres_pr_intrv,enth_pr_intrv,temp_pr_intrv,satn_pr_intrv,iprsat[]
0 0 0 0 0
# PRINT 2
# .. dens_pr_intrv,iprden[],vis_pr_intrv,iprvis[],potential_pr_intrv,iprpot[]
0 0 0 0 0 0
# PRINT 3
# .. velocity_pr_intrv,iprvel[],bcflow_pr_intrv,iprbcflow[],source_pr_intrv,iprsorce[]
0 0 0 0 0 0
# PRINT 4
# .. pm_properties_pr_intrv,iprmprop[],poros_pr_intrv,permeability_pr_intrv
0 0 0 0
# PRINT 5
# .. balance_pr_intrv,dimno_pr_intrv,iprdimno[],residuals_pr_intrv,dump_pr_intrv
0 0 0 0 0
# PRINT 6
# .. plotscalar_pr_intrv,plotvector_pr_intrv,plotfile_type[],time_series_pr_intrv
0 0 0 0.001
```

3


```

23 1 11
#dVT
1 1 34
#LF
2 1 21
# TIME PERIOD #2 (instantaneous emplacement of magma)
# .. tchg,delt,nsrce[I],lchgpr[T/F],nparms[I]
100.0 0.01 1 T 2
# -----
# Start of Source Keyword Data Block section
# SOURCE/SINK number; (O) - nsrce > 0
# .. WELL,(unit_flow),(unit_heat)
# .. i[I],j[I],well_flow,[well_enth|well_temp],n-openint[I]
# .. NODE,(unit_flow),(unit_heat)
# .. i[I],j[I],k[I],node_flow,node_enth
# fluid sourcing from top of the pluton (= 3 cells)
NODE (kg/s) (C)
1 0. 21 0.5556 600.0
2 0. 21 1.6667 600.0
3 0. 21 2.7778 600.0
0 0 0 0.0 0.0
# End of Source Keyword Data Block section
# -----
# PRINT 1
# .. pres_pr_intrv,enth_pr_intrv,temp_pr_intrv,satn_pr_intrv,iprsat[I]
0 0 0 0 0
# PRINT 2
# .. dens_pr_intrv,iprden[I],vis_pr_intrv,iprvis[I],potential_pr_intrv,iprpot[I]
0 0 0 0 0 0
# PRINT 3
# .. velocity_pr_intrv,iprvel[I],bcflow_pr_intrv,iprbcfw[I],source_pr_intrv,iprsorce[I]
0 0 0 0 0 0
# PRINT 4
# .. pm_properties_pr_intrv,iprmprop[I],poros_pr_intrv,permeability_pr_intrv
0 0 0 0
# PRINT 5
# .. balance_pr_intrv,dimno_pr_intrv,iprdimno[I],residuals_pr_intrv,dump_pr_intrv
0 0 0 0 0
# PRINT 6
# .. plotscalar_pr_intrv,plotvector_pr_intrv,plotfile_type[I],time_series_pr_intrv
0 0 0 0.1
3
23 1 11
#dVT
1 1 34
#LF
2 1 21
PRESSURE (bar)
NODE
1 1 18 1140.
2 1 18 1140.
3 1 18 1140.
1 1 19 1122.
2 1 19 1122.
3 1 19 1122.
1 1 20 1103.
2 1 20 1103.
3 1 20 1103.
0 0 0 0
TEMPERATURE (C)
NODE
1 1 18 950
2 1 18 950
3 1 18 950
1 1 19 950
2 1 19 950

```

```
3 1 19 950
1 1 20 950
2 1 20 950
3 1 20 950
0 0 0 0
-1/
# ..End of the data file
#-----
#-----
```