Spokes

Luis Ángel Rodríguez García

2022-05-31

Spokes

Sample on the $(\mathbb{S}^2)^{168}$ where $p = 2$, $r = 168$ and $n = 177$.

```
load(paste(here("data-raw", "spokes"), "spokes.RData", sep = "/"))
n <- dim(dirs)[1]
p <- dim(dirs)[3]-1
r <- dim(dirs)[2]
spokes <- array(0, c(n, p+1, r))
for(i in seq_len(r)){
  spokes[,,i] <- dirs[,i,]
}

# Plot subjects for each spok
rgl::open3d()
```

```
## glX
##   1
```

```
rgl::mfrow3d(nr = 12, nc = 14, sharedMouse = TRUE)
n <- 10
col <- rainbow(n, alpha=0.8)
for (i in 1:ncol(dirs)) {
  col_i <- col # ids_labs + 1
  rgl::plot3d(dirs[1:n, i, ], xlim = c(-1, 1), ylim = c(-1, 1), zlim = c(-1, 1),
              col = col_i, axes = FALSE, box = FALSE, xlab = "",
              ylab = "", zlab = "")
  rgl::spheres3d(0, 0, 0, radius = 1, col = "lightblue", lit = FALSE,
                 alpha = 0.5)
}
```

Let's calculate the rho parameters based on a perplexity of 30:

```
#Time difference of 28.40103 mins
rho_spokes_perp25 <- rho_optim_bst(spokes, 25)
```

```
## Time difference of 2.759539 mins
```

```
#   [1] 15.99908 15.99912 15.99902 15.99814 15.99885 15.99985 16.53955 15.99998 15.99933 15.99936 15.99
#  [18] 15.99918 15.99936 15.99910 16.00000 15.99912 15.99938 15.99926 15.99985 15.99931 15.99922 15.99
#  [35] 15.99997 15.99900 15.99960 15.99927 15.99883 15.99922 15.99867 15.99950 15.99908 15.99982 25.19
#  [52] 15.99914 15.99945 15.99893 15.99891 15.99895 15.99908 15.99989 15.99956 15.99923 15.99842 15.99
#  [69] 15.99994 15.99995 15.99927 15.99914 15.99999 15.99926 15.99904 15.99920 15.99946 15.99801 15.99
#  [86] 15.99944 15.99899 15.99950 15.99899 15.99903 15.99907 15.99996 15.99946 15.99906 15.99913 15.99
# [103] 15.99951 15.99987 16.00000 15.99832 15.99945 15.99957 15.99937 15.99898 15.99976 15.99955 15.99
```

```
# [120] 15.99952 15.99959 15.99990 15.99942 15.99921 15.99996 15.99923 15.99794 15.99871 15.99791 15.99
# [137] 15.99876 15.99853 15.99899 15.99995 15.99917 15.99975 15.99847 15.99864 15.99925 15.99939 15.99
# [154] 15.99863 15.99971 15.99934 15.99838 15.99895 15.99834 15.99914 15.99998 15.99876 15.99994 15.99
# [171] 15.99897 15.99836 15.99905 16.13348 15.99902 18.53126 15.99907
```

First, let's reduce to dimension $\mathbb{S}^1$ then $d = 1$ (circumference):

```
Y <- psc_sne(spokes, d=1, rho_psc_list = rho_spokes_perp25,
             colors = ifelse(ids_labs, 2, 1), num_iteration=5000, eta = 10)
```

```
## It: 1; obj: 1.347e+01; abs: 0.000e+00; rel: 0.000e+00; norm: 2.585e-01
## It: 2; obj: 1.326e+01; abs: 2.045e-01; rel: 1.519e-02; norm: 3.086e-01
## It: 3; obj: 1.306e+01; abs: 2.049e-01; rel: 1.545e-02; norm: 3.818e-01
## It: 4; obj: 1.286e+01; abs: 1.946e-01; rel: 1.490e-02; norm: 4.382e-01
## It: 5; obj: 1.268e+01; abs: 1.831e-01; rel: 1.424e-02; norm: 4.824e-01
## It: 6; obj: 1.251e+01; abs: 1.706e-01; rel: 1.345e-02; norm: 5.224e-01
## It: 7; obj: 1.236e+01; abs: 1.478e-01; rel: 1.182e-02; norm: 5.555e-01
## It: 8; obj: 1.225e+01; abs: 1.145e-01; rel: 9.260e-03; norm: 5.840e-01
## It: 9; obj: 1.217e+01; abs: 7.919e-02; rel: 6.466e-03; norm: 6.149e-01
## It: 10; obj: 1.211e+01; abs: 5.651e-02; rel: 4.645e-03; norm: 6.455e-01
## It: 11; obj: 1.206e+01; abs: 4.809e-02; rel: 3.971e-03; norm: 6.703e-01
## It: 12; obj: 1.202e+01; abs: 4.292e-02; rel: 3.558e-03; norm: 6.904e-01
## It: 13; obj: 1.198e+01; abs: 3.588e-02; rel: 2.985e-03; norm: 7.095e-01
## It: 14; obj: 1.195e+01; abs: 2.966e-02; rel: 2.475e-03; norm: 7.287e-01
## It: 15; obj: 1.193e+01; abs: 2.499e-02; rel: 2.091e-03; norm: 7.486e-01
## It: 16; obj: 1.190e+01; abs: 2.472e-02; rel: 2.073e-03; norm: 7.704e-01
## It: 17; obj: 1.188e+01; abs: 2.910e-02; rel: 2.445e-03; norm: 7.972e-01
## It: 18; obj: 1.184e+01; abs: 3.940e-02; rel: 3.317e-03; norm: 8.310e-01
## It: 19; obj: 1.178e+01; abs: 5.981e-02; rel: 5.053e-03; norm: 8.717e-01
## It: 20; obj: 1.169e+01; abs: 8.244e-02; rel: 7.000e-03; norm: 9.233e-01
## It: 21; obj: 1.161e+01; abs: 7.991e-02; rel: 6.833e-03; norm: 9.933e-01
## It: 22; obj: 1.155e+01; abs: 6.047e-02; rel: 5.207e-03; norm: 1.078e+00
## It: 23; obj: 1.151e+01; abs: 4.544e-02; rel: 3.933e-03; norm: 1.168e+00
## It: 24; obj: 1.147e+01; abs: 3.415e-02; rel: 2.968e-03; norm: 1.259e+00
## It: 25; obj: 1.146e+01; abs: 1.863e-02; rel: 1.624e-03; norm: 1.340e+00
## It: 26; obj: 1.145e+01; abs: 2.862e-03; rel: 2.498e-04; norm: 1.410e+00
## It: 27; obj: 1.146e+01; abs: 9.752e-03; rel: 8.515e-04; norm: 1.469e+00
## It: 28; obj: 1.148e+01; abs: 2.059e-02; rel: 1.797e-03; norm: 1.520e+00
## It: 29; obj: 1.151e+01; abs: 2.774e-02; rel: 2.416e-03; norm: 1.564e+00
## It: 30; obj: 1.154e+01; abs: 3.204e-02; rel: 2.783e-03; norm: 1.603e+00
## It: 31; obj: 1.158e+01; abs: 3.449e-02; rel: 2.988e-03; norm: 1.637e+00
## It: 32; obj: 1.161e+01; abs: 3.610e-02; rel: 3.118e-03; norm: 1.668e+00
## It: 33; obj: 1.165e+01; abs: 3.726e-02; rel: 3.208e-03; norm: 1.698e+00
## It: 34; obj: 1.169e+01; abs: 3.801e-02; rel: 3.262e-03; norm: 1.726e+00
## It: 35; obj: 1.173e+01; abs: 3.819e-02; rel: 3.267e-03; norm: 1.754e+00
## It: 36; obj: 1.176e+01; abs: 3.760e-02; rel: 3.206e-03; norm: 1.780e+00
## It: 37; obj: 1.180e+01; abs: 3.624e-02; rel: 3.080e-03; norm: 1.805e+00
## It: 38; obj: 1.183e+01; abs: 3.422e-02; rel: 2.900e-03; norm: 1.828e+00
## It: 39; obj: 1.187e+01; abs: 3.150e-02; rel: 2.662e-03; norm: 1.847e+00
## It: 40; obj: 1.189e+01; abs: 2.820e-02; rel: 2.377e-03; norm: 1.864e+00
## It: 41; obj: 1.192e+01; abs: 2.477e-02; rel: 2.082e-03; norm: 1.877e+00
## It: 42; obj: 1.194e+01; abs: 2.158e-02; rel: 1.811e-03; norm: 1.887e+00
## It: 43; obj: 1.196e+01; abs: 1.879e-02; rel: 1.574e-03; norm: 1.895e+00
## It: 44; obj: 1.198e+01; abs: 1.638e-02; rel: 1.370e-03; norm: 1.902e+00
```

```
## It: 45; obj: 1.199e+01; abs: 1.432e-02; rel: 1.195e-03; norm: 1.907e+00
## It: 46; obj: 1.200e+01; abs: 1.254e-02; rel: 1.046e-03; norm: 1.911e+00
## It: 47; obj: 1.201e+01; abs: 1.102e-02; rel: 9.184e-04; norm: 1.915e+00
## It: 48; obj: 1.202e+01; abs: 9.718e-03; rel: 8.089e-04; norm: 1.918e+00
## It: 49; obj: 1.203e+01; abs: 8.596e-03; rel: 7.149e-04; norm: 1.921e+00
## It: 50; obj: 1.204e+01; abs: 7.627e-03; rel: 6.339e-04; norm: 1.923e+00
## It: 51; obj: 1.205e+01; abs: 6.786e-03; rel: 5.637e-04; norm: 1.925e+00
## It: 52; obj: 1.205e+01; abs: 6.054e-03; rel: 5.026e-04; norm: 1.926e+00
## It: 53; obj: 1.206e+01; abs: 5.414e-03; rel: 4.492e-04; norm: 1.928e+00
## It: 54; obj: 1.206e+01; abs: 4.852e-03; rel: 4.024e-04; norm: 1.929e+00
## It: 55; obj: 1.207e+01; abs: 4.357e-03; rel: 3.612e-04; norm: 1.930e+00
## It: 56; obj: 1.207e+01; abs: 3.918e-03; rel: 3.247e-04; norm: 1.931e+00
## It: 57; obj: 1.207e+01; abs: 3.530e-03; rel: 2.924e-04; norm: 1.932e+00
## It: 58; obj: 1.208e+01; abs: 3.184e-03; rel: 2.637e-04; norm: 1.933e+00
## It: 59; obj: 1.208e+01; abs: 2.876e-03; rel: 2.381e-04; norm: 1.934e+00
## It: 60; obj: 1.208e+01; abs: 2.601e-03; rel: 2.153e-04; norm: 1.934e+00
## It: 61; obj: 1.209e+01; abs: 2.354e-03; rel: 1.948e-04; norm: 1.935e+00
## It: 62; obj: 1.209e+01; abs: 2.133e-03; rel: 1.765e-04; norm: 1.935e+00
## It: 63; obj: 1.209e+01; abs: 1.934e-03; rel: 1.600e-04; norm: 1.936e+00
## It: 64; obj: 1.209e+01; abs: 1.755e-03; rel: 1.452e-04; norm: 1.936e+00
## It: 65; obj: 1.209e+01; abs: 1.594e-03; rel: 1.318e-04; norm: 1.936e+00
## It: 66; obj: 1.209e+01; abs: 1.449e-03; rel: 1.198e-04; norm: 1.937e+00
## It: 67; obj: 1.210e+01; abs: 1.317e-03; rel: 1.089e-04; norm: 1.937e+00
## It: 68; obj: 1.210e+01; abs: 1.199e-03; rel: 9.909e-05; norm: 1.937e+00
## It: 69; obj: 1.210e+01; abs: 1.091e-03; rel: 9.019e-05; norm: 1.938e+00
## It: 70; obj: 1.210e+01; abs: 9.935e-04; rel: 8.212e-05; norm: 1.938e+00
## It: 71; obj: 1.210e+01; abs: 9.052e-04; rel: 7.481e-05; norm: 1.938e+00
## It: 72; obj: 1.210e+01; abs: 8.250e-04; rel: 6.818e-05; norm: 1.938e+00
## It: 73; obj: 1.210e+01; abs: 7.521e-04; rel: 6.216e-05; norm: 1.938e+00
## It: 74; obj: 1.210e+01; abs: 6.860e-04; rel: 5.669e-05; norm: 1.938e+00
## It: 75; obj: 1.210e+01; abs: 6.258e-04; rel: 5.171e-05; norm: 1.939e+00
## It: 76; obj: 1.210e+01; abs: 5.711e-04; rel: 4.718e-05; norm: 1.939e+00
## It: 77; obj: 1.210e+01; abs: 5.212e-04; rel: 4.307e-05; norm: 1.939e+00
## It: 78; obj: 1.210e+01; abs: 4.759e-04; rel: 3.932e-05; norm: 1.939e+00
## It: 79; obj: 1.210e+01; abs: 4.345e-04; rel: 3.590e-05; norm: 1.939e+00
## It: 80; obj: 1.211e+01; abs: 3.969e-04; rel: 3.279e-05; norm: 1.939e+00
## It: 81; obj: 1.211e+01; abs: 3.625e-04; rel: 2.995e-05; norm: 1.939e+00
## It: 82; obj: 1.211e+01; abs: 3.312e-04; rel: 2.736e-05; norm: 1.939e+00
## It: 83; obj: 1.211e+01; abs: 3.027e-04; rel: 2.500e-05; norm: 1.939e+00
## It: 84; obj: 1.211e+01; abs: 2.766e-04; rel: 2.285e-05; norm: 1.939e+00
## It: 85; obj: 1.211e+01; abs: 2.528e-04; rel: 2.088e-05; norm: 1.939e+00
## It: 86; obj: 1.211e+01; abs: 2.311e-04; rel: 1.909e-05; norm: 1.939e+00
## It: 87; obj: 1.211e+01; abs: 2.112e-04; rel: 1.745e-05; norm: 1.940e+00
## It: 88; obj: 1.211e+01; abs: 1.931e-04; rel: 1.595e-05; norm: 1.940e+00
## It: 89; obj: 1.211e+01; abs: 1.766e-04; rel: 1.459e-05; norm: 1.940e+00
## It: 90; obj: 1.211e+01; abs: 1.615e-04; rel: 1.334e-05; norm: 1.940e+00
## It: 91; obj: 1.211e+01; abs: 1.477e-04; rel: 1.220e-05; norm: 1.940e+00
## It: 92; obj: 1.211e+01; abs: 1.350e-04; rel: 1.115e-05; norm: 1.940e+00
## It: 93; obj: 1.211e+01; abs: 1.235e-04; rel: 1.020e-05; norm: 1.940e+00
## It: 94; obj: 1.211e+01; abs: 1.130e-04; rel: 9.330e-06; norm: 1.940e+00
## It: 95; obj: 1.211e+01; abs: 1.033e-04; rel: 8.534e-06; norm: 1.940e+00
## It: 96; obj: 1.211e+01; abs: 9.452e-05; rel: 7.806e-06; norm: 1.940e+00
## It: 97; obj: 1.211e+01; abs: 8.646e-05; rel: 7.141e-06; norm: 1.940e+00
## It: 98; obj: 1.211e+01; abs: 7.910e-05; rel: 6.532e-06; norm: 1.940e+00
```

```
## It: 99; obj: 1.211e+01; abs: 7.236e-05; rel: 5.976e-06; norm: 1.940e+00
## It: 100; obj: 1.211e+01; abs: 6.620e-05; rel: 5.467e-06; norm: 1.940e+00
## It: 101; obj: 1.608e+00; abs: 1.050e+01; rel: 8.672e-01; norm: 2.014e-01
## It: 102; obj: 1.563e+00; abs: 4.563e-02; rel: 2.837e-02; norm: 1.992e-01
## It: 103; obj: 1.517e+00; abs: 4.543e-02; rel: 2.907e-02; norm: 1.955e-01
## It: 104; obj: 1.478e+00; abs: 3.911e-02; rel: 2.578e-02; norm: 1.907e-01
## It: 105; obj: 1.446e+00; abs: 3.186e-02; rel: 2.156e-02; norm: 1.852e-01
## It: 106; obj: 1.420e+00; abs: 2.579e-02; rel: 1.784e-02; norm: 1.795e-01
## It: 107; obj: 1.399e+00; abs: 2.118e-02; rel: 1.491e-02; norm: 1.741e-01
## It: 108; obj: 1.381e+00; abs: 1.771e-02; rel: 1.266e-02; norm: 1.691e-01
## It: 109; obj: 1.366e+00; abs: 1.505e-02; rel: 1.089e-02; norm: 1.644e-01
## It: 110; obj: 1.353e+00; abs: 1.296e-02; rel: 9.482e-03; norm: 1.601e-01
## It: 111; obj: 1.342e+00; abs: 1.128e-02; rel: 8.335e-03; norm: 1.563e-01
## It: 112; obj: 1.332e+00; abs: 9.924e-03; rel: 7.394e-03; norm: 1.528e-01
## It: 113; obj: 1.323e+00; abs: 8.813e-03; rel: 6.615e-03; norm: 1.496e-01
## It: 114; obj: 1.316e+00; abs: 7.890e-03; rel: 5.962e-03; norm: 1.469e-01
## It: 115; obj: 1.308e+00; abs: 7.113e-03; rel: 5.407e-03; norm: 1.449e-01
## It: 116; obj: 1.302e+00; abs: 6.455e-03; rel: 4.933e-03; norm: 1.440e-01
## It: 117; obj: 1.296e+00; abs: 5.896e-03; rel: 4.528e-03; norm: 1.440e-01
## It: 118; obj: 1.291e+00; abs: 5.423e-03; rel: 4.184e-03; norm: 1.442e-01
## It: 119; obj: 1.286e+00; abs: 5.023e-03; rel: 3.892e-03; norm: 1.445e-01
## It: 120; obj: 1.281e+00; abs: 4.683e-03; rel: 3.642e-03; norm: 1.447e-01
## It: 121; obj: 1.277e+00; abs: 4.390e-03; rel: 3.427e-03; norm: 1.448e-01
## It: 122; obj: 1.272e+00; abs: 4.136e-03; rel: 3.240e-03; norm: 1.448e-01
## It: 123; obj: 1.269e+00; abs: 3.912e-03; rel: 3.074e-03; norm: 1.447e-01
## It: 124; obj: 1.265e+00; abs: 3.712e-03; rel: 2.926e-03; norm: 1.446e-01
## It: 125; obj: 1.261e+00; abs: 3.533e-03; rel: 2.793e-03; norm: 1.445e-01
## It: 126; obj: 1.258e+00; abs: 3.373e-03; rel: 2.674e-03; norm: 1.443e-01
## It: 127; obj: 1.255e+00; abs: 3.229e-03; rel: 2.567e-03; norm: 1.440e-01
## It: 128; obj: 1.252e+00; abs: 3.101e-03; rel: 2.472e-03; norm: 1.437e-01
## It: 129; obj: 1.249e+00; abs: 2.984e-03; rel: 2.384e-03; norm: 1.434e-01
## It: 130; obj: 1.246e+00; abs: 2.875e-03; rel: 2.302e-03; norm: 1.430e-01
## It: 131; obj: 1.243e+00; abs: 2.767e-03; rel: 2.221e-03; norm: 1.426e-01
## It: 132; obj: 1.240e+00; abs: 2.656e-03; rel: 2.137e-03; norm: 1.422e-01
## It: 133; obj: 1.238e+00; abs: 2.539e-03; rel: 2.047e-03; norm: 1.417e-01
## It: 134; obj: 1.235e+00; abs: 2.417e-03; rel: 1.953e-03; norm: 1.413e-01
## It: 135; obj: 1.233e+00; abs: 2.294e-03; rel: 1.857e-03; norm: 1.408e-01
## It: 136; obj: 1.231e+00; abs: 2.173e-03; rel: 1.762e-03; norm: 1.403e-01
## It: 137; obj: 1.229e+00; abs: 2.060e-03; rel: 1.673e-03; norm: 1.398e-01
## It: 138; obj: 1.227e+00; abs: 1.955e-03; rel: 1.591e-03; norm: 1.393e-01
## It: 139; obj: 1.225e+00; abs: 1.861e-03; rel: 1.517e-03; norm: 1.388e-01
## It: 140; obj: 1.223e+00; abs: 1.776e-03; rel: 1.450e-03; norm: 1.383e-01
## It: 141; obj: 1.222e+00; abs: 1.702e-03; rel: 1.391e-03; norm: 1.378e-01
## It: 142; obj: 1.220e+00; abs: 1.635e-03; rel: 1.339e-03; norm: 1.373e-01
## It: 143; obj: 1.218e+00; abs: 1.577e-03; rel: 1.293e-03; norm: 1.368e-01
## It: 144; obj: 1.217e+00; abs: 1.526e-03; rel: 1.252e-03; norm: 1.363e-01
## It: 145; obj: 1.215e+00; abs: 1.480e-03; rel: 1.216e-03; norm: 1.358e-01
## It: 146; obj: 1.214e+00; abs: 1.439e-03; rel: 1.184e-03; norm: 1.353e-01
## It: 147; obj: 1.212e+00; abs: 1.402e-03; rel: 1.155e-03; norm: 1.348e-01
## It: 148; obj: 1.211e+00; abs: 1.366e-03; rel: 1.127e-03; norm: 1.344e-01
## It: 149; obj: 1.210e+00; abs: 1.331e-03; rel: 1.099e-03; norm: 1.339e-01
## It: 150; obj: 1.208e+00; abs: 1.296e-03; rel: 1.071e-03; norm: 1.335e-01
## It: 151; obj: 1.207e+00; abs: 1.259e-03; rel: 1.042e-03; norm: 1.331e-01
## It: 152; obj: 1.206e+00; abs: 1.221e-03; rel: 1.011e-03; norm: 1.328e-01
```

```
## It: 153; obj: 1.205e+00; abs: 1.181e-03; rel: 9.796e-04; norm: 1.324e-01
## It: 154; obj: 1.204e+00; abs: 1.141e-03; rel: 9.470e-04; norm: 1.321e-01
## It: 155; obj: 1.203e+00; abs: 1.100e-03; rel: 9.141e-04; norm: 1.318e-01
## It: 156; obj: 1.202e+00; abs: 1.060e-03; rel: 8.812e-04; norm: 1.315e-01
## It: 157; obj: 1.201e+00; abs: 1.020e-03; rel: 8.488e-04; norm: 1.312e-01
## It: 158; obj: 1.200e+00; abs: 9.809e-04; rel: 8.171e-04; norm: 1.309e-01
## It: 159; obj: 1.199e+00; abs: 9.430e-04; rel: 7.862e-04; norm: 1.306e-01
## It: 160; obj: 1.198e+00; abs: 9.062e-04; rel: 7.561e-04; norm: 1.303e-01
## It: 161; obj: 1.197e+00; abs: 8.705e-04; rel: 7.268e-04; norm: 1.301e-01
## It: 162; obj: 1.196e+00; abs: 8.356e-04; rel: 6.982e-04; norm: 1.298e-01
## It: 163; obj: 1.195e+00; abs: 8.014e-04; rel: 6.701e-04; norm: 1.295e-01
## It: 164; obj: 1.194e+00; abs: 7.678e-04; rel: 6.424e-04; norm: 1.292e-01
## It: 165; obj: 1.194e+00; abs: 7.345e-04; rel: 6.149e-04; norm: 1.290e-01
## It: 166; obj: 1.193e+00; abs: 7.013e-04; rel: 5.875e-04; norm: 1.287e-01
## It: 167; obj: 1.192e+00; abs: 6.683e-04; rel: 5.602e-04; norm: 1.285e-01
## It: 168; obj: 1.192e+00; abs: 6.355e-04; rel: 5.330e-04; norm: 1.282e-01
## It: 169; obj: 1.191e+00; abs: 6.033e-04; rel: 5.062e-04; norm: 1.280e-01
## It: 170; obj: 1.190e+00; abs: 5.718e-04; rel: 4.801e-04; norm: 1.278e-01
## It: 171; obj: 1.190e+00; abs: 5.415e-04; rel: 4.548e-04; norm: 1.275e-01
## It: 172; obj: 1.189e+00; abs: 5.126e-04; rel: 4.308e-04; norm: 1.273e-01
## It: 173; obj: 1.189e+00; abs: 4.853e-04; rel: 4.080e-04; norm: 1.272e-01
## It: 174; obj: 1.188e+00; abs: 4.598e-04; rel: 3.868e-04; norm: 1.270e-01
## It: 175; obj: 1.188e+00; abs: 4.363e-04; rel: 3.671e-04; norm: 1.268e-01
## It: 176; obj: 1.188e+00; abs: 4.146e-04; rel: 3.490e-04; norm: 1.267e-01
## It: 177; obj: 1.187e+00; abs: 3.950e-04; rel: 3.326e-04; norm: 1.265e-01
## It: 178; obj: 1.187e+00; abs: 3.773e-04; rel: 3.178e-04; norm: 1.264e-01
## It: 179; obj: 1.187e+00; abs: 3.615e-04; rel: 3.046e-04; norm: 1.263e-01
## It: 180; obj: 1.186e+00; abs: 3.477e-04; rel: 2.930e-04; norm: 1.262e-01
## It: 181; obj: 1.186e+00; abs: 3.358e-04; rel: 2.831e-04; norm: 1.261e-01
## It: 182; obj: 1.185e+00; abs: 3.257e-04; rel: 2.747e-04; norm: 1.261e-01
## It: 183; obj: 1.185e+00; abs: 3.176e-04; rel: 2.679e-04; norm: 1.260e-01
## It: 184; obj: 1.185e+00; abs: 3.112e-04; rel: 2.626e-04; norm: 1.260e-01
## It: 185; obj: 1.185e+00; abs: 3.066e-04; rel: 2.588e-04; norm: 1.260e-01
## It: 186; obj: 1.184e+00; abs: 3.038e-04; rel: 2.564e-04; norm: 1.260e-01
## It: 187; obj: 1.184e+00; abs: 3.025e-04; rel: 2.554e-04; norm: 1.260e-01
## It: 188; obj: 1.184e+00; abs: 3.026e-04; rel: 2.556e-04; norm: 1.260e-01
## It: 189; obj: 1.183e+00; abs: 3.040e-04; rel: 2.569e-04; norm: 1.260e-01
## It: 190; obj: 1.183e+00; abs: 3.066e-04; rel: 2.591e-04; norm: 1.261e-01
## It: 191; obj: 1.183e+00; abs: 3.099e-04; rel: 2.619e-04; norm: 1.261e-01
## It: 192; obj: 1.182e+00; abs: 3.137e-04; rel: 2.652e-04; norm: 1.262e-01
## It: 193; obj: 1.182e+00; abs: 3.176e-04; rel: 2.686e-04; norm: 1.262e-01
## It: 194; obj: 1.182e+00; abs: 3.215e-04; rel: 2.720e-04; norm: 1.263e-01
## It: 195; obj: 1.181e+00; abs: 3.249e-04; rel: 2.749e-04; norm: 1.264e-01
## It: 196; obj: 1.181e+00; abs: 3.276e-04; rel: 2.773e-04; norm: 1.264e-01
## It: 197; obj: 1.181e+00; abs: 3.294e-04; rel: 2.789e-04; norm: 1.265e-01
## It: 198; obj: 1.180e+00; abs: 3.304e-04; rel: 2.798e-04; norm: 1.266e-01
## It: 199; obj: 1.180e+00; abs: 3.305e-04; rel: 2.800e-04; norm: 1.267e-01
## It: 200; obj: 1.180e+00; abs: 3.299e-04; rel: 2.795e-04; norm: 1.268e-01
## It: 201; obj: 1.179e+00; abs: 3.285e-04; rel: 2.784e-04; norm: 1.269e-01
## It: 202; obj: 1.179e+00; abs: 3.264e-04; rel: 2.768e-04; norm: 1.270e-01
## It: 203; obj: 1.179e+00; abs: 3.237e-04; rel: 2.745e-04; norm: 1.270e-01
## It: 204; obj: 1.179e+00; abs: 3.200e-04; rel: 2.715e-04; norm: 1.271e-01
## It: 205; obj: 1.178e+00; abs: 3.154e-04; rel: 2.676e-04; norm: 1.272e-01
## It: 206; obj: 1.178e+00; abs: 3.096e-04; rel: 2.627e-04; norm: 1.273e-01
```

```
## It: 207; obj: 1.178e+00; abs: 3.024e-04; rel: 2.567e-04; norm: 1.274e-01
## It: 208; obj: 1.177e+00; abs: 2.939e-04; rel: 2.496e-04; norm: 1.274e-01
## It: 209; obj: 1.177e+00; abs: 2.840e-04; rel: 2.412e-04; norm: 1.275e-01
## It: 210; obj: 1.177e+00; abs: 2.730e-04; rel: 2.319e-04; norm: 1.276e-01
## It: 211; obj: 1.176e+00; abs: 2.610e-04; rel: 2.218e-04; norm: 1.277e-01
## It: 212; obj: 1.176e+00; abs: 2.483e-04; rel: 2.111e-04; norm: 1.277e-01
## It: 213; obj: 1.176e+00; abs: 2.353e-04; rel: 2.000e-04; norm: 1.278e-01
## It: 214; obj: 1.176e+00; abs: 2.222e-04; rel: 1.889e-04; norm: 1.279e-01
## It: 215; obj: 1.176e+00; abs: 2.093e-04; rel: 1.780e-04; norm: 1.279e-01
## It: 216; obj: 1.175e+00; abs: 1.968e-04; rel: 1.674e-04; norm: 1.280e-01
## It: 217; obj: 1.175e+00; abs: 1.849e-04; rel: 1.573e-04; norm: 1.281e-01
## It: 218; obj: 1.175e+00; abs: 1.736e-04; rel: 1.477e-04; norm: 1.281e-01
## It: 219; obj: 1.175e+00; abs: 1.631e-04; rel: 1.389e-04; norm: 1.282e-01
## It: 220; obj: 1.175e+00; abs: 1.534e-04; rel: 1.306e-04; norm: 1.282e-01
## It: 221; obj: 1.175e+00; abs: 1.445e-04; rel: 1.230e-04; norm: 1.283e-01
## It: 222; obj: 1.174e+00; abs: 1.362e-04; rel: 1.159e-04; norm: 1.283e-01
## It: 223; obj: 1.174e+00; abs: 1.285e-04; rel: 1.094e-04; norm: 1.284e-01
## It: 224; obj: 1.174e+00; abs: 1.214e-04; rel: 1.034e-04; norm: 1.284e-01
## It: 225; obj: 1.174e+00; abs: 1.148e-04; rel: 9.776e-05; norm: 1.284e-01
## It: 226; obj: 1.174e+00; abs: 1.085e-04; rel: 9.244e-05; norm: 1.285e-01
## It: 227; obj: 1.174e+00; abs: 1.026e-04; rel: 8.740e-05; norm: 1.285e-01
## It: 228; obj: 1.174e+00; abs: 9.693e-05; rel: 8.257e-05; norm: 1.285e-01
## It: 229; obj: 1.174e+00; abs: 9.148e-05; rel: 7.794e-05; norm: 1.285e-01
## It: 230; obj: 1.174e+00; abs: 8.624e-05; rel: 7.348e-05; norm: 1.286e-01
## It: 231; obj: 1.173e+00; abs: 8.119e-05; rel: 6.918e-05; norm: 1.286e-01
## It: 232; obj: 1.173e+00; abs: 7.634e-05; rel: 6.505e-05; norm: 1.286e-01
## It: 233; obj: 1.173e+00; abs: 7.169e-05; rel: 6.110e-05; norm: 1.286e-01
## It: 234; obj: 1.173e+00; abs: 6.727e-05; rel: 5.734e-05; norm: 1.286e-01
## It: 235; obj: 1.173e+00; abs: 6.310e-05; rel: 5.378e-05; norm: 1.286e-01
## It: 236; obj: 1.173e+00; abs: 5.920e-05; rel: 5.046e-05; norm: 1.286e-01
## It: 237; obj: 1.173e+00; abs: 5.560e-05; rel: 4.739e-05; norm: 1.286e-01
## It: 238; obj: 1.173e+00; abs: 5.231e-05; rel: 4.459e-05; norm: 1.287e-01
## It: 239; obj: 1.173e+00; abs: 4.937e-05; rel: 4.208e-05; norm: 1.287e-01
## It: 240; obj: 1.173e+00; abs: 4.680e-05; rel: 3.989e-05; norm: 1.287e-01
## It: 241; obj: 1.173e+00; abs: 4.464e-05; rel: 3.806e-05; norm: 1.287e-01
## It: 242; obj: 1.173e+00; abs: 4.294e-05; rel: 3.661e-05; norm: 1.287e-01
## It: 243; obj: 1.173e+00; abs: 4.178e-05; rel: 3.562e-05; norm: 1.286e-01
## It: 244; obj: 1.173e+00; abs: 4.125e-05; rel: 3.518e-05; norm: 1.286e-01
## It: 245; obj: 1.173e+00; abs: 4.153e-05; rel: 3.541e-05; norm: 1.286e-01
## It: 246; obj: 1.173e+00; abs: 4.284e-05; rel: 3.653e-05; norm: 1.286e-01
## It: 247; obj: 1.173e+00; abs: 4.552e-05; rel: 3.882e-05; norm: 1.286e-01
## It: 248; obj: 1.173e+00; abs: 6.639e-05; rel: 5.662e-05; norm: 1.286e-01
## It: 249; obj: 1.172e+00; abs: 9.520e-05; rel: 8.119e-05; norm: 1.286e-01
## It: 250; obj: 1.172e+00; abs: 1.408e-04; rel: 1.201e-04; norm: 1.286e-01
## It: 251; obj: 1.172e+00; abs: 2.142e-04; rel: 1.827e-04; norm: 1.286e-01
## It: 252; obj: 1.172e+00; abs: 3.180e-04; rel: 2.713e-04; norm: 1.285e-01
## It: 253; obj: 1.171e+00; abs: 4.199e-04; rel: 3.583e-04; norm: 1.285e-01
## It: 254; obj: 1.171e+00; abs: 4.389e-04; rel: 3.747e-04; norm: 1.284e-01
## It: 255; obj: 1.171e+00; abs: 3.249e-04; rel: 2.774e-04; norm: 1.283e-01
## It: 256; obj: 1.170e+00; abs: 1.455e-04; rel: 1.243e-04; norm: 1.282e-01
## It: 257; obj: 1.170e+00; abs: 5.241e-06; rel: 4.478e-06; norm: 1.281e-01
## It: 258; obj: 1.171e+00; abs: 5.495e-05; rel: 4.695e-05; norm: 1.280e-01
## It: 259; obj: 1.171e+00; abs: 5.276e-05; rel: 4.508e-05; norm: 1.279e-01
## It: 260; obj: 1.171e+00; abs: 2.029e-05; rel: 1.733e-05; norm: 1.279e-01
```

```
## It: 261; obj: 1.171e+00; abs: 2.031e-05; rel: 1.735e-05; norm: 1.278e-01
## It: 262; obj: 1.171e+00; abs: 5.824e-05; rel: 4.976e-05; norm: 1.277e-01
## It: 263; obj: 1.170e+00; abs: 8.809e-05; rel: 7.526e-05; norm: 1.277e-01
## It: 264; obj: 1.170e+00; abs: 1.053e-04; rel: 8.997e-05; norm: 1.276e-01
## It: 265; obj: 1.170e+00; abs: 1.057e-04; rel: 9.028e-05; norm: 1.276e-01
## It: 266; obj: 1.170e+00; abs: 8.816e-05; rel: 7.534e-05; norm: 1.276e-01
## It: 267; obj: 1.170e+00; abs: 5.795e-05; rel: 4.952e-05; norm: 1.276e-01
## It: 268; obj: 1.170e+00; abs: 2.548e-05; rel: 2.178e-05; norm: 1.277e-01
## It: 269; obj: 1.170e+00; abs: 1.603e-06; rel: 1.370e-06; norm: 1.277e-01
## It: 270; obj: 1.170e+00; abs: 7.767e-06; rel: 6.638e-06; norm: 1.278e-01
## It: 271; obj: 1.170e+00; abs: 3.556e-06; rel: 3.039e-06; norm: 1.278e-01
## It: 272; obj: 1.170e+00; abs: 8.451e-06; rel: 7.223e-06; norm: 1.278e-01
## It: 273; obj: 1.170e+00; abs: 2.114e-05; rel: 1.807e-05; norm: 1.279e-01
## It: 274; obj: 1.170e+00; abs: 2.906e-05; rel: 2.483e-05; norm: 1.279e-01
## It: 275; obj: 1.170e+00; abs: 2.995e-05; rel: 2.560e-05; norm: 1.279e-01
## It: 276; obj: 1.170e+00; abs: 2.493e-05; rel: 2.131e-05; norm: 1.279e-01
## It: 277; obj: 1.170e+00; abs: 1.715e-05; rel: 1.466e-05; norm: 1.279e-01
## It: 278; obj: 1.170e+00; abs: 9.986e-06; rel: 8.535e-06; norm: 1.279e-01
## It: 279; obj: 1.170e+00; abs: 5.541e-06; rel: 4.736e-06; norm: 1.280e-01
## It: 280; obj: 1.170e+00; abs: 4.313e-06; rel: 3.686e-06; norm: 1.280e-01
## It: 281; obj: 1.170e+00; abs: 5.573e-06; rel: 4.764e-06; norm: 1.280e-01
## It: 282; obj: 1.170e+00; abs: 8.057e-06; rel: 6.887e-06; norm: 1.280e-01
## It: 283; obj: 1.170e+00; abs: 1.054e-05; rel: 9.006e-06; norm: 1.280e-01
## It: 284; obj: 1.170e+00; abs: 1.216e-05; rel: 1.040e-05; norm: 1.280e-01
## It: 285; obj: 1.170e+00; abs: 1.260e-05; rel: 1.077e-05; norm: 1.280e-01
## It: 286; obj: 1.170e+00; abs: 1.200e-05; rel: 1.026e-05; norm: 1.280e-01
## It: 287; obj: 1.170e+00; abs: 1.081e-05; rel: 9.239e-06; norm: 1.280e-01
## It: 288; obj: 1.170e+00; abs: 9.573e-06; rel: 8.183e-06; norm: 1.281e-01
## It: 289; obj: 1.170e+00; abs: 8.709e-06; rel: 7.445e-06; norm: 1.281e-01
## It: 290; obj: 1.170e+00; abs: 8.387e-06; rel: 7.170e-06; norm: 1.281e-01
## It: 291; obj: 1.170e+00; abs: 8.523e-06; rel: 7.286e-06; norm: 1.281e-01
## It: 292; obj: 1.170e+00; abs: 8.871e-06; rel: 7.583e-06; norm: 1.281e-01
## It: 293; obj: 1.170e+00; abs: 9.156e-06; rel: 7.827e-06; norm: 1.281e-01
## It: 294; obj: 1.170e+00; abs: 9.181e-06; rel: 7.848e-06; norm: 1.282e-01
## It: 295; obj: 1.170e+00; abs: 8.885e-06; rel: 7.596e-06; norm: 1.282e-01
## It: 296; obj: 1.170e+00; abs: 8.333e-06; rel: 7.124e-06; norm: 1.282e-01
## It: 297; obj: 1.170e+00; abs: 7.662e-06; rel: 6.550e-06; norm: 1.282e-01
## It: 298; obj: 1.170e+00; abs: 7.013e-06; rel: 5.995e-06; norm: 1.282e-01
## It: 299; obj: 1.170e+00; abs: 6.488e-06; rel: 5.546e-06; norm: 1.282e-01
## It: 300; obj: 1.170e+00; abs: 6.125e-06; rel: 5.237e-06; norm: 1.283e-01
## It: 301; obj: 1.170e+00; abs: 5.907e-06; rel: 5.050e-06; norm: 1.283e-01
## It: 302; obj: 1.170e+00; abs: 5.781e-06; rel: 4.942e-06; norm: 1.283e-01
## It: 303; obj: 1.170e+00; abs: 5.688e-06; rel: 4.863e-06; norm: 1.283e-01
## It: 304; obj: 1.170e+00; abs: 5.583e-06; rel: 4.773e-06; norm: 1.283e-01
## It: 305; obj: 1.170e+00; abs: 5.444e-06; rel: 4.654e-06; norm: 1.283e-01
## It: 306; obj: 1.170e+00; abs: 5.273e-06; rel: 4.508e-06; norm: 1.284e-01
## It: 307; obj: 1.170e+00; abs: 5.088e-06; rel: 4.350e-06; norm: 1.284e-01
## It: 308; obj: 1.170e+00; abs: 4.908e-06; rel: 4.196e-06; norm: 1.284e-01
## It: 309; obj: 1.170e+00; abs: 4.750e-06; rel: 4.061e-06; norm: 1.284e-01
## It: 310; obj: 1.170e+00; abs: 4.620e-06; rel: 3.949e-06; norm: 1.284e-01
## It: 311; obj: 1.170e+00; abs: 4.511e-06; rel: 3.857e-06; norm: 1.285e-01
## It: 312; obj: 1.170e+00; abs: 4.416e-06; rel: 3.775e-06; norm: 1.285e-01
## It: 313; obj: 1.170e+00; abs: 4.321e-06; rel: 3.694e-06; norm: 1.285e-01
## It: 314; obj: 1.170e+00; abs: 4.219e-06; rel: 3.607e-06; norm: 1.285e-01
```

```
## It: 315; obj: 1.170e+00; abs: 4.107e-06; rel: 3.511e-06; norm: 1.285e-01
## It: 316; obj: 1.170e+00; abs: 3.987e-06; rel: 3.409e-06; norm: 1.285e-01
## It: 317; obj: 1.170e+00; abs: 3.865e-06; rel: 3.304e-06; norm: 1.285e-01
## It: 318; obj: 1.170e+00; abs: 3.744e-06; rel: 3.201e-06; norm: 1.286e-01
## It: 319; obj: 1.170e+00; abs: 3.630e-06; rel: 3.104e-06; norm: 1.286e-01
## It: 320; obj: 1.170e+00; abs: 3.523e-06; rel: 3.012e-06; norm: 1.286e-01
## It: 321; obj: 1.170e+00; abs: 3.421e-06; rel: 2.925e-06; norm: 1.286e-01
## It: 322; obj: 1.170e+00; abs: 3.322e-06; rel: 2.841e-06; norm: 1.286e-01
## It: 323; obj: 1.170e+00; abs: 3.224e-06; rel: 2.756e-06; norm: 1.286e-01
## It: 324; obj: 1.170e+00; abs: 3.124e-06; rel: 2.671e-06; norm: 1.286e-01
## It: 325; obj: 1.170e+00; abs: 3.021e-06; rel: 2.583e-06; norm: 1.286e-01
## It: 326; obj: 1.170e+00; abs: 2.915e-06; rel: 2.492e-06; norm: 1.286e-01
## It: 327; obj: 1.170e+00; abs: 2.808e-06; rel: 2.401e-06; norm: 1.287e-01
## It: 328; obj: 1.170e+00; abs: 2.701e-06; rel: 2.309e-06; norm: 1.287e-01
## It: 329; obj: 1.170e+00; abs: 2.595e-06; rel: 2.218e-06; norm: 1.287e-01
## It: 330; obj: 1.170e+00; abs: 2.489e-06; rel: 2.128e-06; norm: 1.287e-01
## It: 331; obj: 1.170e+00; abs: 2.386e-06; rel: 2.040e-06; norm: 1.287e-01
## It: 332; obj: 1.170e+00; abs: 2.284e-06; rel: 1.952e-06; norm: 1.287e-01
## It: 333; obj: 1.170e+00; abs: 2.183e-06; rel: 1.866e-06; norm: 1.287e-01
## It: 334; obj: 1.170e+00; abs: 2.084e-06; rel: 1.782e-06; norm: 1.287e-01
## It: 335; obj: 1.170e+00; abs: 1.988e-06; rel: 1.699e-06; norm: 1.287e-01
## It: 336; obj: 1.170e+00; abs: 1.894e-06; rel: 1.619e-06; norm: 1.287e-01
## It: 337; obj: 1.170e+00; abs: 1.804e-06; rel: 1.542e-06; norm: 1.287e-01
## It: 338; obj: 1.170e+00; abs: 1.718e-06; rel: 1.469e-06; norm: 1.287e-01
## It: 339; obj: 1.170e+00; abs: 1.636e-06; rel: 1.399e-06; norm: 1.287e-01
## It: 340; obj: 1.170e+00; abs: 1.560e-06; rel: 1.334e-06; norm: 1.287e-01
## It: 341; obj: 1.170e+00; abs: 1.488e-06; rel: 1.272e-06; norm: 1.287e-01
## It: 342; obj: 1.170e+00; abs: 1.421e-06; rel: 1.215e-06; norm: 1.287e-01
## It: 343; obj: 1.170e+00; abs: 1.359e-06; rel: 1.162e-06; norm: 1.287e-01
## It: 344; obj: 1.170e+00; abs: 1.300e-06; rel: 1.112e-06; norm: 1.287e-01
## It: 345; obj: 1.170e+00; abs: 1.246e-06; rel: 1.066e-06; norm: 1.287e-01
## It: 346; obj: 1.170e+00; abs: 1.196e-06; rel: 1.023e-06; norm: 1.287e-01
## It: 347; obj: 1.170e+00; abs: 1.150e-06; rel: 9.835e-07; norm: 1.287e-01
## It: 348; obj: 1.170e+00; abs: 1.108e-06; rel: 9.473e-07; norm: 1.287e-01
## It: 349; obj: 1.170e+00; abs: 1.069e-06; rel: 9.143e-07; norm: 1.287e-01
## It: 350; obj: 1.170e+00; abs: 1.034e-06; rel: 8.843e-07; norm: 1.287e-01
## It: 351; obj: 1.170e+00; abs: 1.003e-06; rel: 8.572e-07; norm: 1.287e-01
## It: 352; obj: 1.170e+00; abs: 9.739e-07; rel: 8.327e-07; norm: 1.287e-01
## It: 353; obj: 1.170e+00; abs: 9.482e-07; rel: 8.108e-07; norm: 1.287e-01
## It: 354; obj: 1.170e+00; abs: 9.253e-07; rel: 7.911e-07; norm: 1.287e-01
## It: 355; obj: 1.170e+00; abs: 9.048e-07; rel: 7.736e-07; norm: 1.287e-01
## It: 356; obj: 1.170e+00; abs: 8.866e-07; rel: 7.581e-07; norm: 1.287e-01
## It: 357; obj: 1.170e+00; abs: 8.706e-07; rel: 7.444e-07; norm: 1.287e-01
## It: 358; obj: 1.170e+00; abs: 8.566e-07; rel: 7.324e-07; norm: 1.287e-01
## It: 359; obj: 1.170e+00; abs: 8.444e-07; rel: 7.220e-07; norm: 1.287e-01
## It: 360; obj: 1.170e+00; abs: 8.339e-07; rel: 7.130e-07; norm: 1.287e-01
## It: 361; obj: 1.170e+00; abs: 8.250e-07; rel: 7.054e-07; norm: 1.287e-01
## It: 362; obj: 1.170e+00; abs: 8.176e-07; rel: 6.991e-07; norm: 1.287e-01
## It: 363; obj: 1.170e+00; abs: 8.116e-07; rel: 6.940e-07; norm: 1.287e-01
## It: 364; obj: 1.170e+00; abs: 8.069e-07; rel: 6.899e-07; norm: 1.287e-01
## It: 365; obj: 1.170e+00; abs: 8.035e-07; rel: 6.870e-07; norm: 1.287e-01
## It: 366; obj: 1.170e+00; abs: 8.012e-07; rel: 6.851e-07; norm: 1.287e-01
## It: 367; obj: 1.170e+00; abs: 8.001e-07; rel: 6.841e-07; norm: 1.287e-01
## It: 368; obj: 1.170e+00; abs: 8.001e-07; rel: 6.841e-07; norm: 1.287e-01
```

```
## It: 369; obj: 1.170e+00; abs: 8.011e-07; rel: 6.849e-07; norm: 1.287e-01
## It: 370; obj: 1.170e+00; abs: 8.030e-07; rel: 6.866e-07; norm: 1.287e-01
## It: 371; obj: 1.170e+00; abs: 8.060e-07; rel: 6.891e-07; norm: 1.287e-01
## It: 372; obj: 1.170e+00; abs: 8.098e-07; rel: 6.924e-07; norm: 1.287e-01
## It: 373; obj: 1.170e+00; abs: 8.144e-07; rel: 6.964e-07; norm: 1.287e-01
## It: 374; obj: 1.170e+00; abs: 8.199e-07; rel: 7.011e-07; norm: 1.287e-01
## It: 375; obj: 1.170e+00; abs: 8.263e-07; rel: 7.065e-07; norm: 1.287e-01
## It: 376; obj: 1.170e+00; abs: 8.333e-07; rel: 7.125e-07; norm: 1.287e-01
## It: 377; obj: 1.170e+00; abs: 8.412e-07; rel: 7.192e-07; norm: 1.287e-01
## It: 378; obj: 1.170e+00; abs: 8.497e-07; rel: 7.266e-07; norm: 1.287e-01
## It: 379; obj: 1.170e+00; abs: 8.590e-07; rel: 7.344e-07; norm: 1.287e-01
## It: 380; obj: 1.170e+00; abs: 8.688e-07; rel: 7.429e-07; norm: 1.287e-01
## It: 381; obj: 1.170e+00; abs: 8.792e-07; rel: 7.517e-07; norm: 1.287e-01
## It: 382; obj: 1.170e+00; abs: 8.900e-07; rel: 7.610e-07; norm: 1.287e-01
## It: 383; obj: 1.170e+00; abs: 9.012e-07; rel: 7.706e-07; norm: 1.287e-01
## It: 384; obj: 1.170e+00; abs: 9.127e-07; rel: 7.804e-07; norm: 1.287e-01
## It: 385; obj: 1.170e+00; abs: 9.243e-07; rel: 7.903e-07; norm: 1.287e-01
## It: 386; obj: 1.170e+00; abs: 9.358e-07; rel: 8.001e-07; norm: 1.287e-01
## It: 387; obj: 1.170e+00; abs: 9.470e-07; rel: 8.097e-07; norm: 1.287e-01
## It: 388; obj: 1.170e+00; abs: 9.578e-07; rel: 8.190e-07; norm: 1.287e-01
## It: 389; obj: 1.170e+00; abs: 9.679e-07; rel: 8.276e-07; norm: 1.287e-01
## It: 390; obj: 1.170e+00; abs: 9.770e-07; rel: 8.354e-07; norm: 1.287e-01
## It: 391; obj: 1.170e+00; abs: 9.849e-07; rel: 8.421e-07; norm: 1.287e-01
## It: 392; obj: 1.170e+00; abs: 9.912e-07; rel: 8.476e-07; norm: 1.287e-01
## It: 393; obj: 1.170e+00; abs: 9.957e-07; rel: 8.514e-07; norm: 1.287e-01
## It: 394; obj: 1.170e+00; abs: 9.981e-07; rel: 8.534e-07; norm: 1.287e-01
## It: 395; obj: 1.170e+00; abs: 9.979e-07; rel: 8.532e-07; norm: 1.287e-01
## It: 396; obj: 1.170e+00; abs: 9.949e-07; rel: 8.507e-07; norm: 1.287e-01
## It: 397; obj: 1.170e+00; abs: 9.888e-07; rel: 8.454e-07; norm: 1.287e-01
## It: 398; obj: 1.170e+00; abs: 9.792e-07; rel: 8.373e-07; norm: 1.287e-01
## It: 399; obj: 1.170e+00; abs: 9.661e-07; rel: 8.260e-07; norm: 1.287e-01
## It: 400; obj: 1.170e+00; abs: 9.490e-07; rel: 8.115e-07; norm: 1.287e-01
## It: 401; obj: 1.170e+00; abs: 9.281e-07; rel: 7.936e-07; norm: 1.287e-01
## It: 402; obj: 1.170e+00; abs: 9.031e-07; rel: 7.722e-07; norm: 1.287e-01
## It: 403; obj: 1.170e+00; abs: 8.741e-07; rel: 7.474e-07; norm: 1.287e-01
## It: 404; obj: 1.170e+00; abs: 8.413e-07; rel: 7.194e-07; norm: 1.287e-01
## It: 405; obj: 1.170e+00; abs: 8.048e-07; rel: 6.882e-07; norm: 1.287e-01
## It: 406; obj: 1.170e+00; abs: 7.650e-07; rel: 6.541e-07; norm: 1.287e-01
## It: 407; obj: 1.170e+00; abs: 7.222e-07; rel: 6.176e-07; norm: 1.287e-01
## It: 408; obj: 1.170e+00; abs: 6.770e-07; rel: 5.789e-07; norm: 1.287e-01
## It: 409; obj: 1.170e+00; abs: 6.299e-07; rel: 5.386e-07; norm: 1.287e-01
## It: 410; obj: 1.170e+00; abs: 5.816e-07; rel: 4.973e-07; norm: 1.287e-01
## It: 411; obj: 1.170e+00; abs: 5.325e-07; rel: 4.554e-07; norm: 1.287e-01
## It: 412; obj: 1.170e+00; abs: 4.836e-07; rel: 4.135e-07; norm: 1.287e-01
## It: 413; obj: 1.170e+00; abs: 4.353e-07; rel: 3.722e-07; norm: 1.287e-01
## It: 414; obj: 1.170e+00; abs: 3.883e-07; rel: 3.320e-07; norm: 1.287e-01
## It: 415; obj: 1.170e+00; abs: 3.432e-07; rel: 2.934e-07; norm: 1.287e-01
## It: 416; obj: 1.170e+00; abs: 3.005e-07; rel: 2.569e-07; norm: 1.287e-01
## It: 417; obj: 1.170e+00; abs: 2.605e-07; rel: 2.228e-07; norm: 1.287e-01
## It: 418; obj: 1.170e+00; abs: 2.237e-07; rel: 1.912e-07; norm: 1.288e-01
## It: 419; obj: 1.170e+00; abs: 1.901e-07; rel: 1.626e-07; norm: 1.288e-01
## It: 420; obj: 1.170e+00; abs: 1.600e-07; rel: 1.368e-07; norm: 1.288e-01
## It: 421; obj: 1.170e+00; abs: 1.332e-07; rel: 1.139e-07; norm: 1.288e-01
## It: 422; obj: 1.170e+00; abs: 1.099e-07; rel: 9.393e-08; norm: 1.288e-01
```

```
## It: 423; obj: 1.170e+00; abs: 8.965e-08; rel: 7.666e-08; norm: 1.288e-01
## It: 424; obj: 1.170e+00; abs: 7.244e-08; rel: 6.194e-08; norm: 1.288e-01
## It: 425; obj: 1.170e+00; abs: 5.796e-08; rel: 4.956e-08; norm: 1.288e-01
## It: 426; obj: 1.170e+00; abs: 4.594e-08; rel: 3.928e-08; norm: 1.288e-01
## It: 427; obj: 1.170e+00; abs: 3.609e-08; rel: 3.086e-08; norm: 1.288e-01
## It: 428; obj: 1.170e+00; abs: 2.813e-08; rel: 2.405e-08; norm: 1.288e-01
## It: 429; obj: 1.170e+00; abs: 2.177e-08; rel: 1.861e-08; norm: 1.288e-01
## It: 430; obj: 1.170e+00; abs: 1.676e-08; rel: 1.433e-08; norm: 1.288e-01
## It: 431; obj: 1.170e+00; abs: 1.286e-08; rel: 1.099e-08; norm: 1.288e-01
## It: 432; obj: 1.170e+00; abs: 9.857e-09; rel: 8.428e-09; norm: 1.288e-01
## It: 433; obj: 1.170e+00; abs: 7.572e-09; rel: 6.474e-09; norm: 1.288e-01
## It: 434; obj: 1.170e+00; abs: 5.847e-09; rel: 4.999e-09; norm: 1.288e-01
## It: 435; obj: 1.170e+00; abs: 4.552e-09; rel: 3.892e-09; norm: 1.288e-01
## It: 436; obj: 1.170e+00; abs: 3.583e-09; rel: 3.063e-09; norm: 1.288e-01
## It: 437; obj: 1.170e+00; abs: 2.854e-09; rel: 2.441e-09; norm: 1.288e-01
## It: 438; obj: 1.170e+00; abs: 2.302e-09; rel: 1.968e-09; norm: 1.288e-01
## It: 439; obj: 1.170e+00; abs: 1.876e-09; rel: 1.604e-09; norm: 1.288e-01
## It: 440; obj: 1.170e+00; abs: 1.541e-09; rel: 1.318e-09; norm: 1.288e-01
## It: 441; obj: 1.170e+00; abs: 1.271e-09; rel: 1.086e-09; norm: 1.288e-01
## It: 442; obj: 1.170e+00; abs: 1.048e-09; rel: 8.961e-10; norm: 1.288e-01
## It: 443; obj: 1.170e+00; abs: 8.614e-10; rel: 7.366e-10; norm: 1.288e-01
## It: 444; obj: 1.170e+00; abs: 7.039e-10; rel: 6.019e-10; norm: 1.288e-01
## It: 445; obj: 1.170e+00; abs: 5.708e-10; rel: 4.880e-10; norm: 1.288e-01
## It: 446; obj: 1.170e+00; abs: 4.592e-10; rel: 3.927e-10; norm: 1.288e-01
## It: 447; obj: 1.170e+00; abs: 3.673e-10; rel: 3.141e-10; norm: 1.288e-01
## It: 448; obj: 1.170e+00; abs: 2.930e-10; rel: 2.506e-10; norm: 1.288e-01
## It: 449; obj: 1.170e+00; abs: 2.344e-10; rel: 2.005e-10; norm: 1.288e-01
## It: 450; obj: 1.170e+00; abs: 1.893e-10; rel: 1.619e-10; norm: 1.288e-01
## It: 451; obj: 1.170e+00; abs: 1.553e-10; rel: 1.328e-10; norm: 1.288e-01
## It: 452; obj: 1.170e+00; abs: 1.299e-10; rel: 1.111e-10; norm: 1.288e-01
## It: 453; obj: 1.170e+00; abs: 1.108e-10; rel: 9.474e-11; norm: 1.288e-01
## It: 454; obj: 1.170e+00; abs: 9.579e-11; rel: 8.191e-11; norm: 1.288e-01
## It: 455; obj: 1.170e+00; abs: 8.312e-11; rel: 7.107e-11; norm: 1.288e-01
## It: 456; obj: 1.170e+00; abs: 7.159e-11; rel: 6.121e-11; norm: 1.288e-01
## It: 457; obj: 1.170e+00; abs: 6.042e-11; rel: 5.166e-11; norm: 1.288e-01
## It: 458; obj: 1.170e+00; abs: 4.928e-11; rel: 4.214e-11; norm: 1.288e-01
## It: 459; obj: 1.170e+00; abs: 3.829e-11; rel: 3.274e-11; norm: 1.288e-01
## It: 460; obj: 1.170e+00; abs: 2.772e-11; rel: 2.371e-11; norm: 1.288e-01
## It: 461; obj: 1.170e+00; abs: 1.814e-11; rel: 1.551e-11; norm: 1.288e-01
## It: 462; obj: 1.170e+00; abs: 9.937e-12; rel: 8.497e-12; norm: 1.288e-01
## It: 463; obj: 1.170e+00; abs: 3.618e-12; rel: 3.094e-12; norm: 1.288e-01
## It: 464; obj: 1.170e+00; abs: 7.578e-13; rel: 6.480e-13; norm: 1.288e-01
## It: 465; obj: 1.170e+00; abs: 3.016e-12; rel: 2.579e-12; norm: 1.288e-01
## It: 466; obj: 1.170e+00; abs: 3.413e-12; rel: 2.918e-12; norm: 1.288e-01
## It: 467; obj: 1.170e+00; abs: 2.343e-12; rel: 2.004e-12; norm: 1.288e-01
## It: 468; obj: 1.170e+00; abs: 1.845e-13; rel: 1.578e-13; norm: 1.288e-01
## It: 469; obj: 1.170e+00; abs: 2.407e-12; rel: 2.058e-12; norm: 1.288e-01
## It: 470; obj: 1.170e+00; abs: 5.056e-12; rel: 4.323e-12; norm: 1.288e-01
## It: 471; obj: 1.170e+00; abs: 7.221e-12; rel: 6.174e-12; norm: 1.288e-01
## It: 472; obj: 1.170e+00; abs: 8.664e-12; rel: 7.408e-12; norm: 1.288e-01
## It: 473; obj: 1.170e+00; abs: 9.210e-12; rel: 7.875e-12; norm: 1.288e-01
## It: 474; obj: 1.170e+00; abs: 8.833e-12; rel: 7.553e-12; norm: 1.288e-01
## It: 475; obj: 1.170e+00; abs: 7.640e-12; rel: 6.533e-12; norm: 1.288e-01
## It: 476; obj: 1.170e+00; abs: 5.866e-12; rel: 5.015e-12; norm: 1.288e-01
```

```
## It: 477; obj: 1.170e+00; abs: 3.769e-12; rel: 3.222e-12; norm: 1.288e-01
## It: 478; obj: 1.170e+00; abs: 1.653e-12; rel: 1.414e-12; norm: 1.288e-01
## It: 479; obj: 1.170e+00; abs: 2.314e-13; rel: 1.978e-13; norm: 1.288e-01
## It: 480; obj: 1.170e+00; abs: 1.640e-12; rel: 1.403e-12; norm: 1.288e-01
## It: 481; obj: 1.170e+00; abs: 2.528e-12; rel: 2.162e-12; norm: 1.288e-01
## It: 482; obj: 1.170e+00; abs: 2.818e-12; rel: 2.409e-12; norm: 1.288e-01
## It: 483; obj: 1.170e+00; abs: 2.530e-12; rel: 2.163e-12; norm: 1.288e-01
## It: 484; obj: 1.170e+00; abs: 1.832e-12; rel: 1.566e-12; norm: 1.288e-01
## It: 485; obj: 1.170e+00; abs: 8.420e-13; rel: 7.200e-13; norm: 1.288e-01
## It: 486; obj: 1.170e+00; abs: 2.400e-13; rel: 2.052e-13; norm: 1.288e-01
## It: 487; obj: 1.170e+00; abs: 1.296e-12; rel: 1.108e-12; norm: 1.288e-01
## It: 488; obj: 1.170e+00; abs: 2.119e-12; rel: 1.812e-12; norm: 1.288e-01
## It: 489; obj: 1.170e+00; abs: 2.641e-12; rel: 2.259e-12; norm: 1.288e-01
## It: 490; obj: 1.170e+00; abs: 2.846e-12; rel: 2.433e-12; norm: 1.288e-01
## It: 491; obj: 1.170e+00; abs: 2.678e-12; rel: 2.290e-12; norm: 1.288e-01
## It: 492; obj: 1.170e+00; abs: 2.281e-12; rel: 1.950e-12; norm: 1.288e-01
## It: 493; obj: 1.170e+00; abs: 1.674e-12; rel: 1.432e-12; norm: 1.288e-01
## It: 494; obj: 1.170e+00; abs: 9.468e-13; rel: 8.096e-13; norm: 1.288e-01
## It: 495; obj: 1.170e+00; abs: 2.554e-13; rel: 2.183e-13; norm: 1.288e-01
## It: 496; obj: 1.170e+00; abs: 3.384e-13; rel: 2.893e-13; norm: 1.288e-01
## It: 497; obj: 1.170e+00; abs: 7.845e-13; rel: 6.708e-13; norm: 1.288e-01
## It: 498; obj: 1.170e+00; abs: 1.015e-12; rel: 8.679e-13; norm: 1.288e-01
## It: 499; obj: 1.170e+00; abs: 1.062e-12; rel: 9.077e-13; norm: 1.288e-01
## It: 500; obj: 1.170e+00; abs: 9.035e-13; rel: 7.725e-13; norm: 1.288e-01
## It: 501; obj: 1.170e+00; abs: 6.033e-13; rel: 5.159e-13; norm: 1.288e-01
## It: 502; obj: 1.170e+00; abs: 2.398e-13; rel: 2.051e-13; norm: 1.288e-01
## It: 503; obj: 1.170e+00; abs: 1.665e-13; rel: 1.424e-13; norm: 1.288e-01
## It: 504; obj: 1.170e+00; abs: 5.178e-13; rel: 4.428e-13; norm: 1.288e-01
## It: 505; obj: 1.170e+00; abs: 7.896e-13; rel: 6.751e-13; norm: 1.288e-01
## It: 506; obj: 1.170e+00; abs: 9.446e-13; rel: 8.077e-13; norm: 1.288e-01
## It: 507; obj: 1.170e+00; abs: 9.968e-13; rel: 8.523e-13; norm: 1.288e-01
## It: 508; obj: 1.170e+00; abs: 9.173e-13; rel: 7.843e-13; norm: 1.288e-01
## It: 509; obj: 1.170e+00; abs: 7.809e-13; rel: 6.677e-13; norm: 1.288e-01
## It: 510; obj: 1.170e+00; abs: 5.080e-13; rel: 4.344e-13; norm: 1.288e-01
## It: 511; obj: 1.170e+00; abs: 2.678e-13; rel: 2.290e-13; norm: 1.288e-01
## It: 512; obj: 1.170e+00; abs: 4.730e-14; rel: 4.044e-14; norm: 1.288e-01
## It: 513; obj: 1.170e+00; abs: 1.819e-13; rel: 1.555e-13; norm: 1.288e-01
## It: 514; obj: 1.170e+00; abs: 3.022e-13; rel: 2.584e-13; norm: 1.288e-01
## It: 515; obj: 1.170e+00; abs: 3.706e-13; rel: 3.169e-13; norm: 1.288e-01
## It: 516; obj: 1.170e+00; abs: 3.737e-13; rel: 3.195e-13; norm: 1.288e-01
## It: 517; obj: 1.170e+00; abs: 2.944e-13; rel: 2.518e-13; norm: 1.288e-01
## It: 518; obj: 1.170e+00; abs: 1.845e-13; rel: 1.578e-13; norm: 1.288e-01
## It: 519; obj: 1.170e+00; abs: 5.840e-14; rel: 4.993e-14; norm: 1.288e-01
## It: 520; obj: 1.170e+00; abs: 8.060e-14; rel: 6.892e-14; norm: 1.288e-01
## It: 521; obj: 1.170e+00; abs: 2.118e-13; rel: 1.811e-13; norm: 1.288e-01
## It: 522; obj: 1.170e+00; abs: 2.904e-13; rel: 2.483e-13; norm: 1.288e-01
## It: 523; obj: 1.170e+00; abs: 3.588e-13; rel: 3.068e-13; norm: 1.288e-01
## It: 524; obj: 1.170e+00; abs: 3.539e-13; rel: 3.026e-13; norm: 1.288e-01
## It: 525; obj: 1.170e+00; abs: 3.182e-13; rel: 2.721e-13; norm: 1.288e-01
## It: 526; obj: 1.170e+00; abs: 2.418e-13; rel: 2.068e-13; norm: 1.288e-01
## It: 527; obj: 1.170e+00; abs: 1.497e-13; rel: 1.280e-13; norm: 1.288e-01
## It: 528; obj: 1.170e+00; abs: 8.660e-14; rel: 7.405e-14; norm: 1.288e-01
## It: 529; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 530; obj: 1.170e+00; abs: 7.927e-14; rel: 6.778e-14; norm: 1.288e-01
```

```
## It: 531; obj: 1.170e+00; abs: 1.126e-13; rel: 9.626e-14; norm: 1.288e-01
## It: 532; obj: 1.170e+00; abs: 1.483e-13; rel: 1.268e-13; norm: 1.288e-01
## It: 533; obj: 1.170e+00; abs: 1.388e-13; rel: 1.187e-13; norm: 1.288e-01
## It: 534; obj: 1.170e+00; abs: 9.237e-14; rel: 7.898e-14; norm: 1.288e-01
## It: 535; obj: 1.170e+00; abs: 4.996e-14; rel: 4.272e-14; norm: 1.288e-01
## It: 536; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
## It: 537; obj: 1.170e+00; abs: 4.596e-14; rel: 3.930e-14; norm: 1.288e-01
## It: 538; obj: 1.170e+00; abs: 7.283e-14; rel: 6.227e-14; norm: 1.288e-01
## It: 539; obj: 1.170e+00; abs: 1.092e-13; rel: 9.341e-14; norm: 1.288e-01
## It: 540; obj: 1.170e+00; abs: 1.432e-13; rel: 1.225e-13; norm: 1.288e-01
## It: 541; obj: 1.170e+00; abs: 1.197e-13; rel: 1.023e-13; norm: 1.288e-01
## It: 542; obj: 1.170e+00; abs: 1.006e-13; rel: 8.601e-14; norm: 1.288e-01
## It: 543; obj: 1.170e+00; abs: 8.749e-14; rel: 7.481e-14; norm: 1.288e-01
## It: 544; obj: 1.170e+00; abs: 4.996e-14; rel: 4.272e-14; norm: 1.288e-01
## It: 545; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 546; obj: 1.170e+00; abs: 8.216e-15; rel: 7.025e-15; norm: 1.288e-01
## It: 547; obj: 1.170e+00; abs: 3.508e-14; rel: 3.000e-14; norm: 1.288e-01
## It: 548; obj: 1.170e+00; abs: 3.242e-14; rel: 2.772e-14; norm: 1.288e-01
## It: 549; obj: 1.170e+00; abs: 4.508e-14; rel: 3.854e-14; norm: 1.288e-01
## It: 550; obj: 1.170e+00; abs: 5.129e-14; rel: 4.386e-14; norm: 1.288e-01
## It: 551; obj: 1.170e+00; abs: 3.908e-14; rel: 3.342e-14; norm: 1.288e-01
## It: 552; obj: 1.170e+00; abs: 1.976e-14; rel: 1.690e-14; norm: 1.288e-01
## It: 553; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 554; obj: 1.170e+00; abs: 2.021e-14; rel: 1.728e-14; norm: 1.288e-01
## It: 555; obj: 1.170e+00; abs: 3.086e-14; rel: 2.639e-14; norm: 1.288e-01
## It: 556; obj: 1.170e+00; abs: 3.997e-14; rel: 3.418e-14; norm: 1.288e-01
## It: 557; obj: 1.170e+00; abs: 5.640e-14; rel: 4.822e-14; norm: 1.288e-01
## It: 558; obj: 1.170e+00; abs: 4.885e-14; rel: 4.177e-14; norm: 1.288e-01
## It: 559; obj: 1.170e+00; abs: 2.953e-14; rel: 2.525e-14; norm: 1.288e-01
## It: 560; obj: 1.170e+00; abs: 2.398e-14; rel: 2.051e-14; norm: 1.288e-01
## It: 561; obj: 1.170e+00; abs: 1.954e-14; rel: 1.671e-14; norm: 1.288e-01
## It: 562; obj: 1.170e+00; abs: 8.216e-15; rel: 7.025e-15; norm: 1.288e-01
## It: 563; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 564; obj: 1.170e+00; abs: 1.577e-14; rel: 1.348e-14; norm: 1.288e-01
## It: 565; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 566; obj: 1.170e+00; abs: 1.599e-14; rel: 1.367e-14; norm: 1.288e-01
## It: 567; obj: 1.170e+00; abs: 2.420e-14; rel: 2.069e-14; norm: 1.288e-01
## It: 568; obj: 1.170e+00; abs: 1.332e-14; rel: 1.139e-14; norm: 1.288e-01
## It: 569; obj: 1.170e+00; abs: 1.465e-14; rel: 1.253e-14; norm: 1.288e-01
## It: 570; obj: 1.170e+00; abs: 2.065e-14; rel: 1.766e-14; norm: 1.288e-01
## It: 571; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 572; obj: 1.170e+00; abs: 3.464e-14; rel: 2.962e-14; norm: 1.288e-01
## It: 573; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 574; obj: 1.170e+00; abs: 1.932e-14; rel: 1.652e-14; norm: 1.288e-01
## It: 575; obj: 1.170e+00; abs: 2.442e-14; rel: 2.088e-14; norm: 1.288e-01
## It: 576; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 577; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 578; obj: 1.170e+00; abs: 2.531e-14; rel: 2.164e-14; norm: 1.288e-01
## It: 579; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 580; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 581; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 582; obj: 1.170e+00; abs: 6.439e-15; rel: 5.506e-15; norm: 1.288e-01
## It: 583; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 584; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
```

```
## It: 585; obj: 1.170e+00; abs: 1.643e-14; rel: 1.405e-14; norm: 1.288e-01
## It: 586; obj: 1.170e+00; abs: 1.421e-14; rel: 1.215e-14; norm: 1.288e-01
## It: 587; obj: 1.170e+00; abs: 1.354e-14; rel: 1.158e-14; norm: 1.288e-01
## It: 588; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 589; obj: 1.170e+00; abs: 9.770e-15; rel: 8.354e-15; norm: 1.288e-01
## It: 590; obj: 1.170e+00; abs: 2.975e-14; rel: 2.544e-14; norm: 1.288e-01
## It: 591; obj: 1.170e+00; abs: 9.104e-15; rel: 7.784e-15; norm: 1.288e-01
## It: 592; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 593; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 594; obj: 1.170e+00; abs: 8.882e-15; rel: 7.594e-15; norm: 1.288e-01
## It: 595; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 596; obj: 1.170e+00; abs: 9.104e-15; rel: 7.784e-15; norm: 1.288e-01
## It: 597; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 598; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 599; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 600; obj: 1.170e+00; abs: 1.221e-14; rel: 1.044e-14; norm: 1.288e-01
## It: 601; obj: 1.170e+00; abs: 1.465e-14; rel: 1.253e-14; norm: 1.288e-01
## It: 602; obj: 1.170e+00; abs: 1.266e-14; rel: 1.082e-14; norm: 1.288e-01
## It: 603; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 604; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 605; obj: 1.170e+00; abs: 1.243e-14; rel: 1.063e-14; norm: 1.288e-01
## It: 606; obj: 1.170e+00; abs: 1.088e-14; rel: 9.303e-15; norm: 1.288e-01
## It: 607; obj: 1.170e+00; abs: 1.266e-14; rel: 1.082e-14; norm: 1.288e-01
## It: 608; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 609; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 610; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 611; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 612; obj: 1.170e+00; abs: 8.216e-15; rel: 7.025e-15; norm: 1.288e-01
## It: 613; obj: 1.170e+00; abs: 1.665e-14; rel: 1.424e-14; norm: 1.288e-01
## It: 614; obj: 1.170e+00; abs: 1.865e-14; rel: 1.595e-14; norm: 1.288e-01
## It: 615; obj: 1.170e+00; abs: 1.177e-14; rel: 1.006e-14; norm: 1.288e-01
## It: 616; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 617; obj: 1.170e+00; abs: 1.310e-14; rel: 1.120e-14; norm: 1.288e-01
## It: 618; obj: 1.170e+00; abs: 8.882e-15; rel: 7.594e-15; norm: 1.288e-01
## It: 619; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 620; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 621; obj: 1.170e+00; abs: 1.199e-14; rel: 1.025e-14; norm: 1.288e-01
## It: 622; obj: 1.170e+00; abs: 8.882e-15; rel: 7.594e-15; norm: 1.288e-01
## It: 623; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 624; obj: 1.170e+00; abs: 1.221e-14; rel: 1.044e-14; norm: 1.288e-01
## It: 625; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
## It: 626; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 627; obj: 1.170e+00; abs: 9.104e-15; rel: 7.784e-15; norm: 1.288e-01
## It: 628; obj: 1.170e+00; abs: 2.420e-14; rel: 2.069e-14; norm: 1.288e-01
## It: 629; obj: 1.170e+00; abs: 1.732e-14; rel: 1.481e-14; norm: 1.288e-01
## It: 630; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 631; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 632; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 633; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 634; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 635; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 636; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 637; obj: 1.170e+00; abs: 2.021e-14; rel: 1.728e-14; norm: 1.288e-01
## It: 638; obj: 1.170e+00; abs: 2.065e-14; rel: 1.766e-14; norm: 1.288e-01
```

```
## It: 639; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 640; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 641; obj: 1.170e+00; abs: 1.488e-14; rel: 1.272e-14; norm: 1.288e-01
## It: 642; obj: 1.170e+00; abs: 1.288e-14; rel: 1.101e-14; norm: 1.288e-01
## It: 643; obj: 1.170e+00; abs: 6.883e-15; rel: 5.886e-15; norm: 1.288e-01
## It: 644; obj: 1.170e+00; abs: 2.265e-14; rel: 1.937e-14; norm: 1.288e-01
## It: 645; obj: 1.170e+00; abs: 1.710e-14; rel: 1.462e-14; norm: 1.288e-01
## It: 646; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 647; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 648; obj: 1.170e+00; abs: 1.310e-14; rel: 1.120e-14; norm: 1.288e-01
## It: 649; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 650; obj: 1.170e+00; abs: 1.621e-14; rel: 1.386e-14; norm: 1.288e-01
## It: 651; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 652; obj: 1.170e+00; abs: 1.177e-14; rel: 1.006e-14; norm: 1.288e-01
## It: 653; obj: 1.170e+00; abs: 8.882e-15; rel: 7.594e-15; norm: 1.288e-01
## It: 654; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 655; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 656; obj: 1.170e+00; abs: 1.599e-14; rel: 1.367e-14; norm: 1.288e-01
## It: 657; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 658; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 659; obj: 1.170e+00; abs: 2.043e-14; rel: 1.747e-14; norm: 1.288e-01
## It: 660; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 661; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 662; obj: 1.170e+00; abs: 7.994e-15; rel: 6.835e-15; norm: 1.288e-01
## It: 663; obj: 1.170e+00; abs: 1.399e-14; rel: 1.196e-14; norm: 1.288e-01
## It: 664; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 665; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 666; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 667; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 668; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 669; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 670; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 671; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 672; obj: 1.170e+00; abs: 9.104e-15; rel: 7.784e-15; norm: 1.288e-01
## It: 673; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 674; obj: 1.170e+00; abs: 2.243e-14; rel: 1.918e-14; norm: 1.288e-01
## It: 675; obj: 1.170e+00; abs: 1.443e-14; rel: 1.234e-14; norm: 1.288e-01
## It: 676; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 677; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 678; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 679; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 680; obj: 1.170e+00; abs: 1.399e-14; rel: 1.196e-14; norm: 1.288e-01
## It: 681; obj: 1.170e+00; abs: 1.021e-14; rel: 8.734e-15; norm: 1.288e-01
## It: 682; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 683; obj: 1.170e+00; abs: 8.438e-15; rel: 7.215e-15; norm: 1.288e-01
## It: 684; obj: 1.170e+00; abs: 6.883e-15; rel: 5.886e-15; norm: 1.288e-01
## It: 685; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 686; obj: 1.170e+00; abs: 1.554e-14; rel: 1.329e-14; norm: 1.288e-01
## It: 687; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 688; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 689; obj: 1.170e+00; abs: 1.643e-14; rel: 1.405e-14; norm: 1.288e-01
## It: 690; obj: 1.170e+00; abs: 2.132e-14; rel: 1.823e-14; norm: 1.288e-01
## It: 691; obj: 1.170e+00; abs: 1.532e-14; rel: 1.310e-14; norm: 1.288e-01
## It: 692; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
```

```
## It: 693; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 694; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 695; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 696; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 697; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 698; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 699; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 700; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 701; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 702; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 703; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 704; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 705; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 706; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 707; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 708; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 709; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 710; obj: 1.170e+00; abs: 7.550e-15; rel: 6.455e-15; norm: 1.288e-01
## It: 711; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 712; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 713; obj: 1.170e+00; abs: 1.266e-14; rel: 1.082e-14; norm: 1.288e-01
## It: 714; obj: 1.170e+00; abs: 1.066e-14; rel: 9.113e-15; norm: 1.288e-01
## It: 715; obj: 1.170e+00; abs: 8.438e-15; rel: 7.215e-15; norm: 1.288e-01
## It: 716; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 717; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 718; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 719; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 720; obj: 1.170e+00; abs: 1.554e-14; rel: 1.329e-14; norm: 1.288e-01
## It: 721; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 722; obj: 1.170e+00; abs: 1.132e-14; rel: 9.683e-15; norm: 1.288e-01
## It: 723; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 724; obj: 1.170e+00; abs: 9.770e-15; rel: 8.354e-15; norm: 1.288e-01
## It: 725; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 726; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 727; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 728; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 729; obj: 1.170e+00; abs: 5.329e-15; rel: 4.557e-15; norm: 1.288e-01
## It: 730; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 731; obj: 1.170e+00; abs: 1.421e-14; rel: 1.215e-14; norm: 1.288e-01
## It: 732; obj: 1.170e+00; abs: 2.354e-14; rel: 2.013e-14; norm: 1.288e-01
## It: 733; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 734; obj: 1.170e+00; abs: 7.550e-15; rel: 6.455e-15; norm: 1.288e-01
## It: 735; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 736; obj: 1.170e+00; abs: 1.843e-14; rel: 1.576e-14; norm: 1.288e-01
## It: 737; obj: 1.170e+00; abs: 2.354e-14; rel: 2.013e-14; norm: 1.288e-01
## It: 738; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 739; obj: 1.170e+00; abs: 1.221e-14; rel: 1.044e-14; norm: 1.288e-01
## It: 740; obj: 1.170e+00; abs: 9.104e-15; rel: 7.784e-15; norm: 1.288e-01
## It: 741; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 742; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 743; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 744; obj: 1.170e+00; abs: 1.266e-14; rel: 1.082e-14; norm: 1.288e-01
## It: 745; obj: 1.170e+00; abs: 1.399e-14; rel: 1.196e-14; norm: 1.288e-01
## It: 746; obj: 1.170e+00; abs: 9.770e-15; rel: 8.354e-15; norm: 1.288e-01
```

```
## It: 747; obj: 1.170e+00; abs: 1.088e-14; rel: 9.303e-15; norm: 1.288e-01
## It: 748; obj: 1.170e+00; abs: 1.288e-14; rel: 1.101e-14; norm: 1.288e-01
## It: 749; obj: 1.170e+00; abs: 1.066e-14; rel: 9.113e-15; norm: 1.288e-01
## It: 750; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 751; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 752; obj: 1.170e+00; abs: 8.660e-15; rel: 7.405e-15; norm: 1.288e-01
## It: 753; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 754; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 755; obj: 1.170e+00; abs: 1.332e-14; rel: 1.139e-14; norm: 1.288e-01
## It: 756; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 757; obj: 1.170e+00; abs: 6.439e-15; rel: 5.506e-15; norm: 1.288e-01
## It: 758; obj: 1.170e+00; abs: 1.044e-14; rel: 8.924e-15; norm: 1.288e-01
## It: 759; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 760; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 761; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
## It: 762; obj: 1.170e+00; abs: 1.066e-14; rel: 9.113e-15; norm: 1.288e-01
## It: 763; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 764; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 765; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 766; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 767; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 768; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 769; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 770; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 771; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 772; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 773; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 774; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 775; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 776; obj: 1.170e+00; abs: 1.021e-14; rel: 8.734e-15; norm: 1.288e-01
## It: 777; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 778; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 779; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 780; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 781; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 782; obj: 1.170e+00; abs: 1.221e-14; rel: 1.044e-14; norm: 1.288e-01
## It: 783; obj: 1.170e+00; abs: 2.132e-14; rel: 1.823e-14; norm: 1.288e-01
## It: 784; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 785; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
## It: 786; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 787; obj: 1.170e+00; abs: 8.660e-15; rel: 7.405e-15; norm: 1.288e-01
## It: 788; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 789; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 790; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 791; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 792; obj: 1.170e+00; abs: 1.310e-14; rel: 1.120e-14; norm: 1.288e-01
## It: 793; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 794; obj: 1.170e+00; abs: 1.510e-14; rel: 1.291e-14; norm: 1.288e-01
## It: 795; obj: 1.170e+00; abs: 1.421e-14; rel: 1.215e-14; norm: 1.288e-01
## It: 796; obj: 1.170e+00; abs: 1.288e-14; rel: 1.101e-14; norm: 1.288e-01
## It: 797; obj: 1.170e+00; abs: 6.439e-15; rel: 5.506e-15; norm: 1.288e-01
## It: 798; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 799; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 800; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
```

```
## It: 801; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 802; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 803; obj: 1.170e+00; abs: 1.443e-14; rel: 1.234e-14; norm: 1.288e-01
## It: 804; obj: 1.170e+00; abs: 1.110e-14; rel: 9.493e-15; norm: 1.288e-01
## It: 805; obj: 1.170e+00; abs: 6.883e-15; rel: 5.886e-15; norm: 1.288e-01
## It: 806; obj: 1.170e+00; abs: 1.066e-14; rel: 9.113e-15; norm: 1.288e-01
## It: 807; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 808; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 809; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 810; obj: 1.170e+00; abs: 1.044e-14; rel: 8.924e-15; norm: 1.288e-01
## It: 811; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 812; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 813; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 814; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 815; obj: 1.170e+00; abs: 8.660e-15; rel: 7.405e-15; norm: 1.288e-01
## It: 816; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 817; obj: 1.170e+00; abs: 7.550e-15; rel: 6.455e-15; norm: 1.288e-01
## It: 818; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 819; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 820; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 821; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 822; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 823; obj: 1.170e+00; abs: 9.770e-15; rel: 8.354e-15; norm: 1.288e-01
## It: 824; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 825; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 826; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 827; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 828; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 829; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 830; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 831; obj: 1.170e+00; abs: 1.243e-14; rel: 1.063e-14; norm: 1.288e-01
## It: 832; obj: 1.170e+00; abs: 1.199e-14; rel: 1.025e-14; norm: 1.288e-01
## It: 833; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 834; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 835; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 836; obj: 1.170e+00; abs: 1.443e-14; rel: 1.234e-14; norm: 1.288e-01
## It: 837; obj: 1.170e+00; abs: 1.821e-14; rel: 1.557e-14; norm: 1.288e-01
## It: 838; obj: 1.170e+00; abs: 7.550e-15; rel: 6.455e-15; norm: 1.288e-01
## It: 839; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 840; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 841; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 842; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 843; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 844; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 845; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 846; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 847; obj: 1.170e+00; abs: 9.548e-15; rel: 8.164e-15; norm: 1.288e-01
## It: 848; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 849; obj: 1.170e+00; abs: 7.550e-15; rel: 6.455e-15; norm: 1.288e-01
## It: 850; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 851; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 852; obj: 1.170e+00; abs: 5.329e-15; rel: 4.557e-15; norm: 1.288e-01
## It: 853; obj: 1.170e+00; abs: 8.438e-15; rel: 7.215e-15; norm: 1.288e-01
## It: 854; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 855; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 856; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 857; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 858; obj: 1.170e+00; abs: 7.105e-15; rel: 6.076e-15; norm: 1.288e-01
## It: 859; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 860; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 861; obj: 1.170e+00; abs: 1.332e-14; rel: 1.139e-14; norm: 1.288e-01
## It: 862; obj: 1.170e+00; abs: 5.773e-15; rel: 4.936e-15; norm: 1.288e-01
## It: 863; obj: 1.170e+00; abs: 6.883e-15; rel: 5.886e-15; norm: 1.288e-01
## It: 864; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 865; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 866; obj: 1.170e+00; abs: 5.329e-15; rel: 4.557e-15; norm: 1.288e-01
## It: 867; obj: 1.170e+00; abs: 1.177e-14; rel: 1.006e-14; norm: 1.288e-01
## It: 868; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 869; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 870; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 871; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 872; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 873; obj: 1.170e+00; abs: 4.663e-15; rel: 3.987e-15; norm: 1.288e-01
## It: 874; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 875; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 876; obj: 1.170e+00; abs: 5.995e-15; rel: 5.126e-15; norm: 1.288e-01
## It: 877; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 878; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 879; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 880; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 881; obj: 1.170e+00; abs: 1.865e-14; rel: 1.595e-14; norm: 1.288e-01
## It: 882; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 883; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 884; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 885; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 886; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 887; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 888; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 889; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 890; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 891; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 892; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 893; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 894; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 895; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 896; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 897; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 898; obj: 1.170e+00; abs: 3.775e-15; rel: 3.228e-15; norm: 1.288e-01
## It: 899; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 900; obj: 1.170e+00; abs: 6.661e-15; rel: 5.696e-15; norm: 1.288e-01
## It: 901; obj: 1.170e+00; abs: 7.327e-15; rel: 6.265e-15; norm: 1.288e-01
## It: 902; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 903; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 904; obj: 1.170e+00; abs: 1.688e-14; rel: 1.443e-14; norm: 1.288e-01
## It: 905; obj: 1.170e+00; abs: 1.066e-14; rel: 9.113e-15; norm: 1.288e-01
## It: 906; obj: 1.170e+00; abs: 1.399e-14; rel: 1.196e-14; norm: 1.288e-01
## It: 907; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 908; obj: 1.170e+00; abs: 1.221e-14; rel: 1.044e-14; norm: 1.288e-01
```

```
## It: 909; obj: 1.170e+00; abs: 5.329e-15; rel: 4.557e-15; norm: 1.288e-01
## It: 910; obj: 1.170e+00; abs: 1.199e-14; rel: 1.025e-14; norm: 1.288e-01
## It: 911; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 912; obj: 1.170e+00; abs: 9.992e-15; rel: 8.544e-15; norm: 1.288e-01
## It: 913; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 914; obj: 1.170e+00; abs: 5.107e-15; rel: 4.367e-15; norm: 1.288e-01
## It: 915; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 916; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 917; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 918; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 919; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 920; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 921; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 922; obj: 1.170e+00; abs: 5.551e-15; rel: 4.747e-15; norm: 1.288e-01
## It: 923; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 924; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 925; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 926; obj: 1.170e+00; abs: 5.329e-15; rel: 4.557e-15; norm: 1.288e-01
## It: 927; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 928; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 929; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 930; obj: 1.170e+00; abs: 1.088e-14; rel: 9.303e-15; norm: 1.288e-01
## It: 931; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 932; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 933; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 934; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 935; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 936; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 937; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 938; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 939; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 940; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 941; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 942; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 943; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 944; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 945; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 946; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 947; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 948; obj: 1.170e+00; abs: 4.219e-15; rel: 3.607e-15; norm: 1.288e-01
## It: 949; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 950; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 951; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 952; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 953; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 954; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 955; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 956; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 957; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 958; obj: 1.170e+00; abs: 4.885e-15; rel: 4.177e-15; norm: 1.288e-01
## It: 959; obj: 1.170e+00; abs: 7.772e-15; rel: 6.645e-15; norm: 1.288e-01
## It: 960; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 961; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 962; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 963; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 964; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 965; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 966; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 967; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 968; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 969; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 970; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 971; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 972; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 973; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 974; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 975; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 976; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 977; obj: 1.170e+00; abs: 3.331e-15; rel: 2.848e-15; norm: 1.288e-01
## It: 978; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 979; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 980; obj: 1.170e+00; abs: 3.997e-15; rel: 3.418e-15; norm: 1.288e-01
## It: 981; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 982; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 983; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 984; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 985; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 986; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 987; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 988; obj: 1.170e+00; abs: 4.441e-15; rel: 3.797e-15; norm: 1.288e-01
## It: 989; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 990; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 991; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 992; obj: 1.170e+00; abs: 3.109e-15; rel: 2.658e-15; norm: 1.288e-01
## It: 993; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 994; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 995; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 996; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 997; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 998; obj: 1.170e+00; abs: 2.442e-15; rel: 2.088e-15; norm: 1.288e-01
## It: 999; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 1000; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 1001; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1002; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 1003; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1004; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1005; obj: 1.170e+00; abs: 6.217e-15; rel: 5.316e-15; norm: 1.288e-01
## It: 1006; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1007; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 1008; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1009; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1010; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1011; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 1012; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 1013; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 1014; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 1015; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 1016; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
```

```
## It: 1017; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1018; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 1019; obj: 1.170e+00; abs: 3.553e-15; rel: 3.038e-15; norm: 1.288e-01
## It: 1020; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1021; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1022; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 1023; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1024; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1025; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1026; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1027; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1028; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1029; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1030; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 1031; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1032; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1033; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1034; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1035; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1036; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1037; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 1038; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1039; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1040; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1041; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1042; obj: 1.170e+00; abs: 2.887e-15; rel: 2.468e-15; norm: 1.288e-01
## It: 1043; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1044; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1045; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1046; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1047; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1048; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1049; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1050; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1051; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1052; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1053; obj: 1.170e+00; abs: 1.554e-15; rel: 1.329e-15; norm: 1.288e-01
## It: 1054; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1055; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1056; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1057; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1058; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1059; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1060; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1061; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1062; obj: 1.170e+00; abs: 2.665e-15; rel: 2.278e-15; norm: 1.288e-01
## It: 1063; obj: 1.170e+00; abs: 2.220e-15; rel: 1.899e-15; norm: 1.288e-01
## It: 1064; obj: 1.170e+00; abs: 1.998e-15; rel: 1.709e-15; norm: 1.288e-01
## It: 1065; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1066; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1067; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1068; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1069; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1070; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
```

```
## It: 1071; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1072; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1073; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1074; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1075; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1076; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1077; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1078; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1079; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1080; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1081; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1082; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1083; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1084; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1085; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1086; obj: 1.170e+00; abs: 1.776e-15; rel: 1.519e-15; norm: 1.288e-01
## It: 1087; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1088; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1089; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1090; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1091; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1092; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1093; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1094; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1095; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1096; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1097; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1098; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1099; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1100; obj: 1.170e+00; abs: 1.332e-15; rel: 1.139e-15; norm: 1.288e-01
## It: 1101; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1102; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1103; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1104; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1105; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1106; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1107; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1108; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1109; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1110; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1111; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1112; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1113; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1114; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1115; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1116; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1117; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1118; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1119; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1120; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1121; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1122; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1123; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1124; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
```

```
## It: 1125; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1126; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1127; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1128; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1129; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1130; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1131; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1132; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1133; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1134; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1135; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1136; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1137; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1138; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1139; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1140; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1141; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1142; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1143; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1144; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1145; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1146; obj: 1.170e+00; abs: 1.110e-15; rel: 9.493e-16; norm: 1.288e-01
## It: 1147; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1148; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1149; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1150; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1151; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1152; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1153; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1154; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1155; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1156; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1157; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1158; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1159; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1160; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1161; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1162; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1163; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1164; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1165; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1166; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1167; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1168; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1169; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1170; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1171; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1172; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1173; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1174; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1175; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1176; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1177; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1178; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 1179; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1180; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1181; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1182; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1183; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1184; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1185; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1186; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1187; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1188; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1189; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1190; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1191; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1192; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1193; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1194; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1195; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1196; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1197; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1198; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1199; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1200; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1201; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1202; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1203; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1204; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1205; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1206; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1207; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1208; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1209; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1210; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1211; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1212; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1213; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1214; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1215; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1216; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1217; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1218; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1219; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1220; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1221; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1222; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1223; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1224; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1225; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1226; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1227; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1228; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1229; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1230; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1231; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1232; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 1233; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1234; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1235; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1236; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1237; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1238; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1239; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1240; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1241; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1242; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1243; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1244; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1245; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1246; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1247; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1248; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1249; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1250; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1251; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1252; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1253; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1254; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1255; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1256; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1257; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1258; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1259; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1260; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1261; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1262; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1263; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1264; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1265; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1266; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1267; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1268; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1269; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1270; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1271; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1272; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1273; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1274; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1275; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1276; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1277; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1278; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1279; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1280; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1281; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1282; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1283; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 1284; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1285; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1286; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 1287; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1288; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1289; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1290; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1291; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1292; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1293; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1294; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1295; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1296; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1297; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1298; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1299; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1300; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1301; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1302; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1303; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1304; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1305; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1306; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1307; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1308; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1309; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1310; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1311; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1312; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1313; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1314; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1315; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1316; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1317; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1318; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1319; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1320; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1321; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1322; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1323; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1324; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1325; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1326; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1327; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1328; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1329; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1330; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1331; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1332; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1333; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1334; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1335; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1336; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1337; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1338; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1339; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1340; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1341; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1342; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1343; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1344; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1345; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1346; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1347; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1348; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1349; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1350; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1351; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1352; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1353; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1354; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1355; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1356; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1357; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1358; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1359; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1360; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1361; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1362; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1363; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1364; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1365; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1366; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1367; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1368; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1369; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1370; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1371; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1372; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1373; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1374; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1375; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1376; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1377; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1378; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1379; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1380; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1381; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1382; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1383; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1384; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1385; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1386; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1387; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1388; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1389; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1390; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1391; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1392; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1393; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1394; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 1395; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1396; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1397; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1398; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1399; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1400; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1401; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1402; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1403; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1404; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1405; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1406; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1407; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1408; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1409; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1410; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1411; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1412; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1413; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1414; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1415; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1416; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1417; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1418; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1419; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1420; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1421; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1422; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1423; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1424; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1425; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1426; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1427; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1428; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1429; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1430; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1431; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1432; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1433; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1434; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1435; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1436; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1437; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1438; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1439; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1440; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1441; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1442; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1443; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1444; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1445; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1446; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1447; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1448; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 1449; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1450; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1451; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1452; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1453; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1454; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1455; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1456; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1457; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1458; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1459; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1460; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1461; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1462; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1463; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1464; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1465; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1466; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1467; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1468; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1469; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1470; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1471; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1472; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1473; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1474; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1475; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1476; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1477; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1478; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1479; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1480; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1481; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1482; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1483; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1484; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1485; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1486; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1487; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1488; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1489; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1490; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1491; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1492; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1493; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1494; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1495; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1496; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1497; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1498; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1499; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1500; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1501; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1502; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 1503; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1504; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1505; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1506; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1507; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1508; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1509; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1510; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1511; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1512; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1513; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1514; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1515; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1516; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1517; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1518; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1519; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1520; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1521; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1522; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1523; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1524; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1525; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1526; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1527; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1528; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1529; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1530; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1531; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1532; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1533; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1534; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1535; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1536; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1537; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1538; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1539; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1540; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1541; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1542; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1543; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1544; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1545; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1546; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1547; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1548; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1549; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1550; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1551; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1552; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1553; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1554; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1555; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1556; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1557; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1558; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1559; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1560; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1561; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1562; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1563; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1564; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1565; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1566; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1567; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1568; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1569; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1570; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1571; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1572; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1573; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1574; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1575; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1576; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1577; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1578; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1579; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1580; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1581; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1582; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1583; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1584; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1585; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1586; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1587; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1588; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1589; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1590; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1591; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1592; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1593; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1594; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1595; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1596; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1597; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1598; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1599; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1600; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1601; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1602; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1603; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1604; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1605; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1606; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1607; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1608; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1609; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1610; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1611; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1612; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1613; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1614; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1615; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1616; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1617; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1618; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1619; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1620; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1621; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1622; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1623; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1624; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1625; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1626; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1627; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1628; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1629; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1630; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1631; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1632; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1633; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1634; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1635; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1636; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1637; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1638; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1639; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1640; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1641; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1642; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1643; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1644; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1645; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1646; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1647; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1648; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1649; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1650; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1651; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1652; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1653; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1654; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1655; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1656; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1657; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1658; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1659; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1660; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1661; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1662; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1663; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1664; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1665; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1666; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1667; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1668; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1669; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1670; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1671; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1672; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1673; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1674; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1675; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1676; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1677; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1678; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1679; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1680; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1681; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1682; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1683; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1684; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1685; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1686; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1687; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1688; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1689; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1690; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1691; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1692; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1693; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1694; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1695; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1696; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1697; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1698; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1699; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1700; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1701; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1702; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1703; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1704; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1705; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1706; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1707; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1708; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1709; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1710; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1711; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1712; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1713; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1714; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1715; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1716; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1717; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1718; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 1719; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1720; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1721; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1722; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1723; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1724; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1725; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1726; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1727; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1728; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1729; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1730; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1731; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1732; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1733; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1734; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1735; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1736; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1737; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1738; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1739; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1740; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1741; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1742; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1743; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1744; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1745; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1746; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1747; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1748; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1749; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1750; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1751; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1752; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1753; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1754; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1755; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1756; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1757; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1758; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1759; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1760; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1761; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1762; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1763; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1764; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1765; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1766; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1767; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1768; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1769; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1770; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1771; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1772; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1773; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1774; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1775; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1776; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1777; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1778; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1779; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1780; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1781; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1782; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1783; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1784; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1785; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1786; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1787; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1788; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1789; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1790; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1791; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1792; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1793; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1794; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1795; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1796; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1797; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1798; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1799; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1800; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1801; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1802; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1803; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1804; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1805; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1806; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1807; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1808; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1809; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1810; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1811; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1812; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1813; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1814; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1815; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1816; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1817; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1818; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1819; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1820; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1821; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1822; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1823; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1824; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1825; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1826; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 1827; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1828; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1829; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1830; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1831; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1832; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1833; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1834; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1835; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1836; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1837; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1838; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1839; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1840; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1841; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1842; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1843; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1844; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1845; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1846; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1847; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1848; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1849; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1850; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1851; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1852; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1853; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1854; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1855; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1856; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1857; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1858; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1859; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1860; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1861; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1862; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1863; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1864; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1865; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1866; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1867; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1868; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1869; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1870; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1871; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1872; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1873; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1874; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1875; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1876; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1877; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1878; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1879; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1880; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1881; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 1882; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1883; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1884; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1885; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1886; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1887; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1888; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1889; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1890; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1891; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1892; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1893; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1894; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1895; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1896; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1897; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1898; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1899; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1900; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1901; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1902; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1903; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1904; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1905; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1906; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1907; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1908; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1909; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1910; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1911; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1912; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1913; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1914; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1915; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1916; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1917; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1918; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1919; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1920; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1921; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1922; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1923; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1924; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1925; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1926; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1927; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1928; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1929; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1930; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1931; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1932; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1933; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1934; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 1935; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1936; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1937; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1938; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1939; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1940; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1941; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1942; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1943; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1944; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1945; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1946; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1947; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1948; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1949; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1950; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1951; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1952; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1953; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1954; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1955; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1956; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1957; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1958; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1959; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1960; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1961; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1962; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1963; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1964; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1965; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1966; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1967; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1968; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1969; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1970; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1971; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 1972; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1973; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1974; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1975; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1976; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1977; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1978; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1979; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1980; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1981; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1982; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1983; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1984; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1985; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1986; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1987; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1988; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 1989; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1990; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1991; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1992; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1993; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1994; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1995; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1996; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 1997; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1998; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 1999; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2000; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2001; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2002; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2003; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2004; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2005; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2006; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2007; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2008; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2009; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2010; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2011; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2012; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2013; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2014; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2015; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2016; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2017; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2018; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2019; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2020; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2021; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2022; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2023; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2024; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2025; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2026; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2027; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2028; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2029; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2030; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2031; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2032; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2033; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2034; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2035; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2036; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2037; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2038; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2039; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2040; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2041; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2042; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2043; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2044; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2045; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2046; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2047; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2048; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2049; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2050; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2051; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2052; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2053; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2054; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2055; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2056; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2057; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2058; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2059; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2060; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2061; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2062; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2063; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2064; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2065; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2066; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2067; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2068; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2069; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2070; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2071; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2072; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2073; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2074; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2075; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2076; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2077; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2078; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2079; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2080; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2081; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2082; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2083; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2084; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2085; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2086; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2087; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2088; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2089; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2090; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2091; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2092; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2093; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2094; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2095; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2096; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2097; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2098; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2099; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2100; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2101; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2102; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2103; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2104; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2105; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2106; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2107; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2108; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2109; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2110; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2111; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2112; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2113; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2114; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2115; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2116; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2117; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2118; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2119; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2120; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2121; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2122; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2123; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2124; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2125; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2126; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2127; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2128; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2129; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2130; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2131; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2132; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2133; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2134; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2135; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2136; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2137; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2138; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2139; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2140; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2141; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2142; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2143; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2144; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2145; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2146; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2147; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2148; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2149; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2150; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 2151; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2152; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2153; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2154; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2155; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2156; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2157; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2158; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2159; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2160; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2161; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2162; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2163; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2164; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2165; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2166; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2167; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2168; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2169; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2170; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2171; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2172; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2173; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2174; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2175; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2176; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2177; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2178; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2179; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2180; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2181; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2182; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2183; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2184; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2185; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2186; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2187; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2188; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2189; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2190; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2191; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2192; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2193; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2194; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2195; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2196; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2197; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2198; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2199; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2200; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2201; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2202; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2203; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2204; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2205; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2206; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2207; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2208; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2209; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2210; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2211; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2212; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2213; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2214; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2215; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2216; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2217; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2218; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2219; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2220; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2221; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2222; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2223; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2224; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2225; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2226; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2227; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2228; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2229; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2230; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2231; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2232; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2233; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2234; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2235; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2236; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2237; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2238; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2239; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2240; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2241; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2242; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2243; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2244; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2245; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2246; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2247; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2248; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2249; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2250; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2251; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2252; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2253; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2254; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2255; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2256; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2257; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2258; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2259; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2260; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2261; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2262; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2263; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2264; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2265; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2266; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2267; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2268; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2269; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2270; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2271; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2272; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2273; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2274; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2275; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2276; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2277; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2278; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2279; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2280; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2281; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2282; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2283; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2284; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2285; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2286; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2287; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2288; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2289; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2290; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2291; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2292; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2293; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2294; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2295; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2296; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2297; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2298; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2299; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2300; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2301; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2302; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2303; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2304; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2305; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2306; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2307; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2308; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2309; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2310; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2311; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2312; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2313; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2314; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2315; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2316; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2317; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2318; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2319; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2320; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2321; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2322; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2323; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2324; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2325; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2326; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2327; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2328; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2329; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2330; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2331; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2332; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2333; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2334; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2335; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2336; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2337; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2338; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2339; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2340; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2341; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2342; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2343; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2344; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2345; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2346; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2347; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2348; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2349; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2350; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2351; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2352; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2353; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2354; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2355; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2356; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2357; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2358; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2359; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2360; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2361; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2362; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2363; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2364; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2365; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2366; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2367; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2368; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2369; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2370; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2371; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2372; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2373; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2374; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2375; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2376; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2377; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2378; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2379; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2380; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2381; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2382; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2383; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2384; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2385; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2386; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2387; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2388; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2389; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2390; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2391; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2392; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2393; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2394; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2395; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2396; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2397; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2398; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2399; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2400; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2401; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2402; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2403; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2404; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2405; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2406; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2407; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2408; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2409; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2410; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2411; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2412; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2413; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2414; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2415; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2416; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2417; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2418; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2419; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2420; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2421; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2422; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2423; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2424; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2425; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2426; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2427; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2428; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2429; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2430; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2431; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2432; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2433; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2434; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2435; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2436; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2437; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2438; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2439; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2440; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2441; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2442; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2443; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2444; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2445; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2446; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2447; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2448; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2449; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2450; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2451; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2452; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2453; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2454; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2455; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2456; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2457; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2458; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2459; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2460; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2461; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2462; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2463; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2464; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2465; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2466; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2467; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2468; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2469; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2470; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2471; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2472; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2473; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2474; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2475; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2476; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2477; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2478; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2479; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2480; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2481; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2482; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2483; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2484; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2485; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2486; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2487; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2488; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2489; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2490; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2491; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2492; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2493; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2494; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2495; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2496; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2497; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2498; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2499; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2500; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2501; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2502; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2503; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2504; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2505; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2506; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2507; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2508; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2509; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2510; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2511; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2512; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2513; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2514; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2515; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2516; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2517; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2518; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2519; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2520; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2521; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2522; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2523; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2524; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2525; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2526; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2527; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2528; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 2529; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2530; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2531; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2532; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2533; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2534; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2535; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2536; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2537; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2538; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2539; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2540; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2541; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2542; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2543; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2544; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2545; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2546; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2547; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2548; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2549; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2550; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2551; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2552; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2553; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2554; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2555; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2556; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2557; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2558; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2559; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2560; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2561; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2562; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2563; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2564; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2565; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2566; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2567; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2568; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2569; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2570; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2571; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2572; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2573; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2574; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2575; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2576; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2577; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2578; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2579; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2580; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2581; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2582; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2583; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2584; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2585; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2586; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2587; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2588; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2589; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2590; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2591; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2592; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2593; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2594; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2595; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2596; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2597; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2598; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2599; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2600; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2601; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2602; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2603; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2604; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2605; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2606; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2607; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2608; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2609; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2610; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2611; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2612; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2613; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2614; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2615; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2616; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2617; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2618; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2619; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2620; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2621; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2622; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2623; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2624; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2625; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2626; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2627; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2628; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2629; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2630; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2631; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2632; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2633; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2634; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2635; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2636; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2637; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2638; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2639; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2640; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2641; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2642; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2643; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2644; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2645; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2646; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2647; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2648; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2649; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2650; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2651; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2652; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2653; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2654; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2655; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2656; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2657; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2658; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2659; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2660; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2661; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2662; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2663; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2664; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2665; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2666; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2667; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2668; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2669; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2670; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2671; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2672; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2673; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2674; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2675; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2676; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2677; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2678; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2679; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2680; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2681; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2682; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2683; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2684; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2685; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2686; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2687; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2688; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2689; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2690; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2691; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2692; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2693; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2694; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2695; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2696; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2697; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2698; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2699; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2700; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2701; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2702; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2703; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2704; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2705; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2706; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2707; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2708; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2709; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2710; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2711; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2712; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2713; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2714; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2715; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2716; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2717; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2718; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2719; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2720; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2721; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2722; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2723; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2724; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2725; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2726; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2727; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2728; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2729; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2730; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2731; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2732; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2733; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2734; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2735; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2736; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2737; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2738; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2739; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2740; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2741; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2742; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2743; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2744; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2745; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2746; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2747; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2748; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2749; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2750; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2751; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2752; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2753; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2754; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2755; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2756; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2757; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2758; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2759; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2760; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2761; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2762; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2763; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2764; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2765; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2766; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2767; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2768; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2769; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2770; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2771; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2772; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2773; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2774; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2775; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2776; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2777; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2778; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2779; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2780; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2781; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2782; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2783; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2784; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2785; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2786; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2787; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2788; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2789; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2790; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2791; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2792; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2793; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2794; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2795; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2796; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2797; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2798; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2799; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2800; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2801; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2802; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2803; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2804; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2805; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2806; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2807; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2808; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2809; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2810; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2811; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2812; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2813; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2814; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2815; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2816; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2817; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2818; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2819; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2820; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2821; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2822; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2823; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2824; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2825; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2826; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2827; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2828; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2829; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2830; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2831; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2832; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2833; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2834; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2835; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2836; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2837; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2838; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2839; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2840; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2841; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2842; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2843; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2844; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2845; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2846; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2847; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2848; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2849; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2850; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2851; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2852; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2853; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2854; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2855; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2856; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2857; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2858; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2859; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2860; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2861; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2862; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2863; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2864; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2865; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2866; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2867; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2868; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2869; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2870; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2871; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2872; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2873; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2874; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2875; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2876; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2877; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2878; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2879; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2880; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2881; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2882; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2883; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2884; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2885; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2886; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2887; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2888; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2889; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2890; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2891; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2892; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2893; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2894; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2895; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2896; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2897; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2898; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2899; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2900; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2901; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2902; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2903; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2904; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2905; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2906; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 2907; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2908; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2909; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2910; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2911; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2912; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2913; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2914; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2915; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2916; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2917; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2918; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2919; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2920; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2921; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2922; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2923; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2924; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2925; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2926; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2927; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2928; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2929; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2930; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2931; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2932; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2933; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2934; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2935; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2936; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2937; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2938; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2939; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2940; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2941; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2942; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2943; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2944; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2945; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2946; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2947; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2948; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2949; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2950; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2951; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2952; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2953; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2954; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2955; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2956; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2957; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2958; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2959; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2960; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 2961; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2962; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2963; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2964; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2965; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2966; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2967; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2968; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2969; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2970; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2971; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2972; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2973; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2974; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2975; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2976; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2977; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2978; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2979; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2980; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2981; obj: 1.170e+00; abs: 8.882e-16; rel: 7.594e-16; norm: 1.288e-01
## It: 2982; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 2983; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2984; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2985; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2986; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2987; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2988; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2989; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 2990; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2991; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2992; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2993; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2994; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2995; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2996; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2997; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 2998; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 2999; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3000; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3001; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3002; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3003; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3004; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3005; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3006; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3007; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3008; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3009; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3010; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3011; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3012; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3013; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3014; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3015; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3016; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3017; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3018; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3019; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3020; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3021; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3022; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3023; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3024; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3025; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3026; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3027; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3028; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3029; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3030; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3031; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3032; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3033; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3034; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3035; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3036; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3037; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3038; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3039; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3040; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3041; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3042; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3043; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3044; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3045; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3046; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3047; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3048; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3049; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3050; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3051; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3052; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3053; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3054; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3055; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3056; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3057; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3058; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3059; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3060; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3061; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3062; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3063; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3064; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3065; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3066; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3067; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3068; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3069; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3070; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3071; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3072; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3073; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3074; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3075; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3076; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3077; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3078; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3079; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3080; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3081; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3082; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3083; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3084; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3085; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3086; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3087; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3088; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3089; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3090; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3091; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3092; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3093; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3094; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3095; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3096; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3097; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3098; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3099; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3100; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3101; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3102; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3103; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3104; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3105; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3106; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3107; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3108; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3109; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3110; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3111; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3112; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3113; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3114; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3115; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3116; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3117; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3118; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3119; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3120; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3121; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3122; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3123; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3124; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3125; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3126; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3127; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3128; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3129; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3130; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3131; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3132; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3133; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3134; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3135; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3136; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3137; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3138; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3139; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3140; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3141; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3142; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3143; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3144; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3145; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3146; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3147; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3148; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3149; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3150; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3151; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3152; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3153; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3154; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3155; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3156; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3157; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3158; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3159; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3160; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3161; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3162; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3163; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3164; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3165; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3166; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3167; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3168; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3169; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3170; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3171; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3172; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3173; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3174; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3175; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3176; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 3177; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3178; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3179; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3180; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3181; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3182; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3183; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3184; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3185; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3186; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3187; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3188; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3189; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3190; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3191; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3192; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3193; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3194; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3195; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3196; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3197; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3198; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3199; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3200; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3201; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3202; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3203; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3204; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3205; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3206; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3207; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3208; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3209; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3210; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3211; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3212; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3213; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3214; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3215; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3216; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3217; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3218; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3219; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3220; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3221; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3222; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3223; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3224; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3225; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3226; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3227; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3228; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3229; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3230; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3231; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3232; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3233; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3234; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3235; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3236; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3237; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3238; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3239; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3240; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3241; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3242; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3243; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3244; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3245; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3246; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3247; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3248; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3249; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3250; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3251; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3252; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3253; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3254; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3255; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3256; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3257; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3258; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3259; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3260; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3261; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3262; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3263; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3264; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3265; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3266; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3267; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3268; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3269; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3270; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3271; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3272; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3273; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3274; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3275; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3276; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3277; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3278; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3279; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3280; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3281; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3282; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3283; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3284; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3285; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3286; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3287; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3288; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3289; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3290; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3291; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3292; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3293; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3294; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3295; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3296; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3297; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3298; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3299; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3300; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3301; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3302; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3303; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3304; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3305; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3306; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3307; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3308; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3309; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3310; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3311; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3312; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3313; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3314; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3315; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3316; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3317; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3318; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3319; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3320; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3321; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3322; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3323; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3324; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3325; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3326; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3327; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3328; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3329; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3330; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3331; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3332; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3333; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3334; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3335; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3336; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3337; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3338; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3339; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3340; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3341; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3342; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3343; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3344; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3345; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3346; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3347; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3348; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3349; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3350; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3351; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3352; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3353; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3354; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3355; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3356; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3357; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3358; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3359; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3360; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3361; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3362; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3363; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3364; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3365; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3366; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3367; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3368; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3369; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3370; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3371; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3372; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3373; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3374; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3375; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3376; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3377; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3378; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3379; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3380; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3381; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3382; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3383; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3384; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3385; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3386; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3387; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3388; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3389; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3390; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3391; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3392; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3393; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3394; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3395; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3396; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3397; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3398; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3399; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3400; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3401; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3402; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3403; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3404; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3405; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3406; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3407; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3408; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3409; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3410; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3411; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3412; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3413; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3414; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3415; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3416; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3417; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3418; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3419; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3420; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3421; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3422; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3423; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3424; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3425; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3426; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3427; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3428; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3429; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3430; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3431; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3432; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3433; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3434; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3435; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3436; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3437; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3438; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3439; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3440; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3441; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3442; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3443; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3444; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3445; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3446; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3447; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3448; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3449; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3450; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3451; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3452; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3453; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3454; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3455; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3456; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3457; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3458; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3459; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3460; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3461; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3462; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3463; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3464; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3465; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3466; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3467; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3468; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3469; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3470; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3471; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3472; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3473; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3474; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3475; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3476; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3477; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3478; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3479; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3480; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3481; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3482; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3483; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3484; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3485; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3486; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3487; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3488; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3489; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3490; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3491; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3492; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3493; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3494; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3495; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3496; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3497; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3498; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3499; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3500; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3501; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3502; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3503; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3504; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3505; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3506; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3507; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3508; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3509; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3510; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3511; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3512; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3513; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3514; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3515; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3516; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3517; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3518; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3519; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3520; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3521; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3522; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3523; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3524; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3525; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3526; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3527; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3528; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3529; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3530; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3531; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3532; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3533; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3534; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3535; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3536; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3537; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3538; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3539; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3540; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3541; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3542; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3543; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3544; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3545; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3546; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3547; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3548; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3549; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3550; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3551; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3552; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3553; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3554; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3555; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3556; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3557; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3558; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3559; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3560; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3561; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3562; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3563; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3564; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3565; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3566; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3567; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3568; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3569; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3570; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3571; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3572; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3573; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3574; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3575; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3576; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3577; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3578; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3579; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3580; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3581; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3582; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3583; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3584; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3585; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3586; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3587; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3588; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3589; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3590; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3591; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3592; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3593; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3594; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3595; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3596; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3597; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3598; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3599; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3600; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3601; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3602; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3603; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3604; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3605; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3606; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3607; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3608; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3609; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3610; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3611; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3612; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3613; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3614; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3615; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3616; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3617; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3618; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3619; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3620; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3621; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3622; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3623; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3624; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3625; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3626; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3627; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3628; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3629; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3630; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3631; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3632; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3633; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3634; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3635; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3636; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3637; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3638; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3639; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3640; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3641; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3642; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3643; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3644; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3645; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3646; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3647; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3648; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3649; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3650; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3651; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3652; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3653; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3654; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3655; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3656; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3657; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3658; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3659; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3660; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3661; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3662; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3663; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3664; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3665; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3666; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3667; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3668; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3669; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3670; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3671; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3672; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3673; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3674; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3675; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3676; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3677; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3678; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3679; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3680; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3681; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3682; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3683; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3684; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3685; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3686; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3687; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3688; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3689; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3690; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3691; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3692; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3693; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3694; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3695; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3696; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3697; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3698; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3699; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3700; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3701; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3702; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3703; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3704; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3705; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3706; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3707; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3708; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3709; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3710; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3711; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3712; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3713; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3714; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3715; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3716; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3717; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3718; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3719; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3720; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3721; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3722; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3723; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3724; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3725; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3726; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3727; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3728; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3729; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3730; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3731; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3732; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3733; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3734; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3735; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3736; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3737; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3738; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3739; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3740; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3741; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3742; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3743; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3744; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3745; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3746; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3747; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3748; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3749; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3750; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3751; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3752; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3753; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3754; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3755; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3756; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3757; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3758; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3759; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3760; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3761; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3762; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3763; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3764; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3765; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3766; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3767; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3768; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3769; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3770; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3771; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3772; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3773; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3774; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3775; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3776; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3777; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3778; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3779; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3780; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3781; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3782; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3783; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3784; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3785; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3786; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3787; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3788; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3789; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3790; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3791; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3792; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3793; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3794; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3795; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3796; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3797; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3798; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3799; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3800; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3801; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3802; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3803; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3804; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3805; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3806; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3807; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3808; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3809; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3810; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3811; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3812; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3813; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3814; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3815; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3816; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3817; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3818; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3819; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3820; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3821; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3822; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3823; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3824; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3825; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3826; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3827; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3828; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3829; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3830; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3831; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3832; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3833; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3834; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3835; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3836; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3837; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3838; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3839; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3840; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3841; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3842; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3843; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3844; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3845; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3846; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3847; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3848; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3849; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3850; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3851; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3852; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3853; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3854; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3855; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3856; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3857; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3858; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3859; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3860; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3861; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3862; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3863; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3864; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3865; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3866; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3867; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3868; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3869; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3870; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3871; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3872; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3873; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3874; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3875; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3876; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3877; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3878; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 3879; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3880; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3881; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3882; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3883; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3884; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3885; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3886; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3887; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3888; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3889; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3890; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3891; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3892; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3893; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3894; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3895; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3896; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3897; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3898; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3899; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3900; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3901; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3902; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3903; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3904; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3905; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3906; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3907; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3908; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3909; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3910; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3911; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3912; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3913; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3914; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3915; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3916; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3917; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3918; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3919; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3920; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3921; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3922; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3923; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3924; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3925; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3926; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3927; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3928; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3929; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3930; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3931; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3932; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 3933; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3934; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3935; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 3936; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3937; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3938; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3939; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3940; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3941; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3942; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3943; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3944; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3945; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3946; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3947; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3948; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3949; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3950; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3951; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3952; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3953; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3954; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3955; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3956; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3957; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3958; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3959; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3960; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3961; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3962; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3963; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3964; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3965; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3966; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3967; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3968; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3969; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3970; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3971; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3972; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3973; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3974; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 3975; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3976; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3977; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3978; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3979; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3980; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3981; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3982; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3983; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3984; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3985; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3986; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 3987; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3988; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3989; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3990; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3991; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3992; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3993; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3994; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3995; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3996; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3997; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 3998; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 3999; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4000; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4001; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4002; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4003; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4004; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4005; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4006; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4007; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4008; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4009; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4010; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4011; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4012; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4013; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4014; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4015; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4016; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4017; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4018; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4019; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4020; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4021; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4022; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4023; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4024; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4025; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4026; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4027; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4028; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4029; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4030; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4031; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4032; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4033; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4034; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4035; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4036; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4037; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4038; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4039; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4040; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4041; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4042; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4043; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4044; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4045; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4046; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4047; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4048; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4049; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4050; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4051; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4052; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4053; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4054; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4055; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4056; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4057; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4058; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4059; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4060; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4061; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4062; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4063; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4064; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4065; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4066; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4067; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4068; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4069; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4070; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4071; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4072; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4073; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4074; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4075; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4076; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4077; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4078; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4079; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4080; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4081; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4082; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4083; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4084; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4085; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4086; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4087; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4088; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4089; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4090; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4091; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4092; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4093; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4094; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 4095; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4096; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4097; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4098; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4099; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4100; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4101; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4102; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4103; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4104; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4105; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4106; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4107; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4108; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4109; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4110; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4111; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4112; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4113; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4114; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4115; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4116; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4117; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4118; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4119; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4120; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4121; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4122; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4123; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4124; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4125; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4126; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4127; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4128; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4129; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4130; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4131; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4132; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4133; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4134; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4135; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4136; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4137; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4138; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4139; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4140; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4141; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4142; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4143; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4144; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4145; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4146; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4147; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4148; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 4149; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4150; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4151; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4152; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4153; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4154; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4155; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4156; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4157; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4158; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4159; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4160; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 4161; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4162; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4163; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4164; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4165; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4166; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4167; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4168; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4169; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4170; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4171; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4172; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4173; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4174; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4175; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4176; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4177; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4178; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4179; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4180; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4181; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4182; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4183; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4184; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4185; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4186; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4187; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4188; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4189; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4190; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4191; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4192; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4193; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4194; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4195; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4196; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4197; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4198; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4199; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4200; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4201; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4202; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4203; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4204; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4205; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4206; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4207; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4208; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4209; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4210; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4211; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4212; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4213; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4214; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4215; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4216; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4217; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4218; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4219; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4220; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4221; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4222; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4223; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4224; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4225; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4226; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4227; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4228; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4229; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4230; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4231; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4232; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4233; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4234; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4235; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4236; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4237; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4238; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4239; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4240; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4241; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4242; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4243; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4244; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4245; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4246; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4247; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4248; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4249; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4250; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4251; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4252; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4253; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4254; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4255; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4256; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 4257; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4258; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4259; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4260; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4261; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4262; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4263; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4264; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4265; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4266; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4267; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4268; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4269; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4270; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4271; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4272; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4273; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4274; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4275; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4276; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4277; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4278; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4279; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4280; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4281; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4282; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4283; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 4284; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4285; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4286; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4287; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4288; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4289; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4290; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4291; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4292; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4293; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4294; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4295; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4296; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4297; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4298; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4299; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4300; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4301; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4302; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4303; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4304; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4305; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4306; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4307; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4308; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4309; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4310; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 4311; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4312; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4313; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4314; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4315; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4316; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4317; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4318; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4319; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4320; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4321; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4322; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4323; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4324; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4325; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4326; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4327; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4328; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4329; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4330; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4331; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4332; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4333; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4334; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4335; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4336; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4337; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4338; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4339; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4340; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4341; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4342; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4343; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4344; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4345; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4346; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4347; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4348; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4349; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4350; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4351; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4352; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4353; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4354; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4355; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4356; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4357; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4358; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4359; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4360; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4361; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4362; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4363; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4364; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 4365; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4366; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4367; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4368; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4369; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4370; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4371; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4372; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4373; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4374; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4375; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4376; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4377; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4378; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4379; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4380; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4381; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4382; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4383; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4384; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 4385; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4386; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4387; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4388; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4389; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4390; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4391; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4392; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4393; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4394; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4395; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4396; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4397; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4398; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4399; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4400; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4401; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4402; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4403; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4404; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4405; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4406; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4407; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4408; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4409; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4410; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4411; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4412; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4413; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4414; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4415; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4416; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4417; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4418; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4419; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4420; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4421; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4422; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4423; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4424; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4425; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4426; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4427; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4428; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4429; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4430; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4431; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4432; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4433; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4434; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4435; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4436; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4437; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4438; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4439; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4440; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4441; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4442; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4443; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4444; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4445; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4446; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4447; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4448; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4449; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4450; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4451; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4452; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4453; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4454; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4455; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4456; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4457; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4458; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4459; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4460; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4461; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4462; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4463; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4464; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4465; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4466; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4467; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4468; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4469; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4470; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4471; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4472; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4473; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4474; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4475; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4476; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4477; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4478; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4479; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4480; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4481; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4482; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4483; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4484; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4485; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4486; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4487; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4488; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4489; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4490; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4491; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4492; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4493; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4494; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4495; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4496; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4497; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4498; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4499; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4500; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4501; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4502; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4503; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4504; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4505; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4506; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4507; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4508; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4509; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4510; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4511; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4512; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4513; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4514; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4515; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4516; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4517; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4518; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4519; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4520; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4521; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4522; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4523; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4524; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4525; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4526; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 4527; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4528; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4529; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4530; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4531; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4532; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4533; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4534; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4535; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4536; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4537; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4538; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4539; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4540; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4541; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4542; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4543; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4544; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4545; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4546; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4547; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4548; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4549; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4550; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4551; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4552; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4553; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4554; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4555; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4556; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4557; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4558; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4559; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4560; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4561; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4562; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4563; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4564; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4565; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4566; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4567; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4568; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4569; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4570; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4571; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4572; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4573; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4574; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4575; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4576; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4577; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4578; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4579; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4580; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
```

```
## It: 4581; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4582; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4583; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4584; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4585; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 4586; obj: 1.170e+00; abs: 6.661e-16; rel: 5.696e-16; norm: 1.288e-01
## It: 4587; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4588; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4589; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4590; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4591; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4592; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4593; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4594; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4595; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4596; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4597; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4598; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4599; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4600; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4601; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4602; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4603; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4604; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4605; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4606; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4607; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4608; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4609; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4610; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4611; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4612; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4613; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4614; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4615; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4616; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4617; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4618; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4619; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4620; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4621; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4622; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4623; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4624; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4625; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4626; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4627; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4628; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4629; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4630; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4631; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4632; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4633; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4634; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
```

```
## It: 4635; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4636; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4637; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4638; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4639; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4640; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4641; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4642; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4643; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4644; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4645; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4646; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4647; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4648; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4649; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4650; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4651; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4652; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4653; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4654; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4655; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4656; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4657; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4658; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4659; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4660; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4661; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4662; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4663; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4664; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4665; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4666; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4667; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4668; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4669; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4670; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4671; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4672; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4673; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4674; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4675; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4676; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4677; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4678; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4679; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4680; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4681; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4682; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4683; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4684; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4685; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4686; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4687; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4688; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4689; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4690; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4691; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4692; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4693; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4694; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4695; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4696; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4697; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4698; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4699; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4700; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4701; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4702; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4703; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4704; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4705; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4706; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4707; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4708; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4709; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4710; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4711; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4712; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4713; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4714; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4715; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4716; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4717; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4718; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4719; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4720; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4721; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4722; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4723; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4724; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4725; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4726; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4727; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4728; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4729; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4730; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4731; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4732; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4733; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4734; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4735; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4736; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4737; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4738; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4739; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4740; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4741; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4742; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

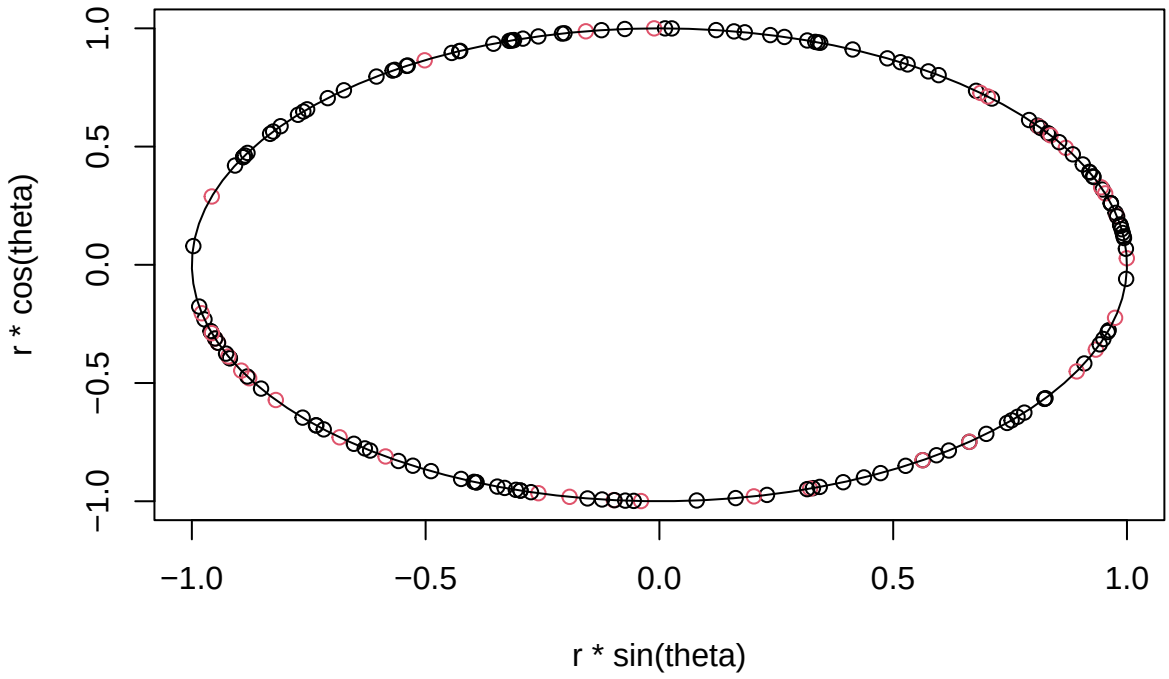
```
## It: 4743; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4744; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4745; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4746; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4747; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4748; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4749; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4750; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4751; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4752; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4753; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4754; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4755; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4756; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4757; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4758; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4759; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4760; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4761; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4762; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4763; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4764; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4765; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4766; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4767; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4768; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4769; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4770; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4771; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4772; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4773; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4774; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4775; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4776; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4777; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4778; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4779; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4780; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4781; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4782; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4783; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4784; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4785; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4786; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4787; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4788; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4789; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4790; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4791; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4792; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4793; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4794; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4795; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4796; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4797; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4798; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4799; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4800; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4801; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4802; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4803; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4804; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4805; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4806; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4807; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4808; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4809; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4810; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4811; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4812; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4813; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4814; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4815; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4816; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4817; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4818; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4819; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4820; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4821; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4822; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4823; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4824; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4825; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4826; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4827; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4828; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4829; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4830; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4831; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4832; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4833; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4834; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4835; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4836; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4837; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4838; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4839; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4840; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4841; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4842; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4843; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4844; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4845; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4846; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4847; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4848; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4849; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4850; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4851; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4852; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4853; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4854; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4855; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4856; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4857; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4858; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4859; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4860; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4861; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4862; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4863; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4864; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4865; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4866; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4867; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4868; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4869; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4870; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4871; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4872; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4873; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4874; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4875; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4876; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4877; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4878; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4879; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4880; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4881; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4882; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4883; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4884; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4885; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4886; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4887; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4888; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4889; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4890; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4891; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4892; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4893; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4894; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4895; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4896; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4897; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4898; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4899; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4900; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4901; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4902; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4903; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4904; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

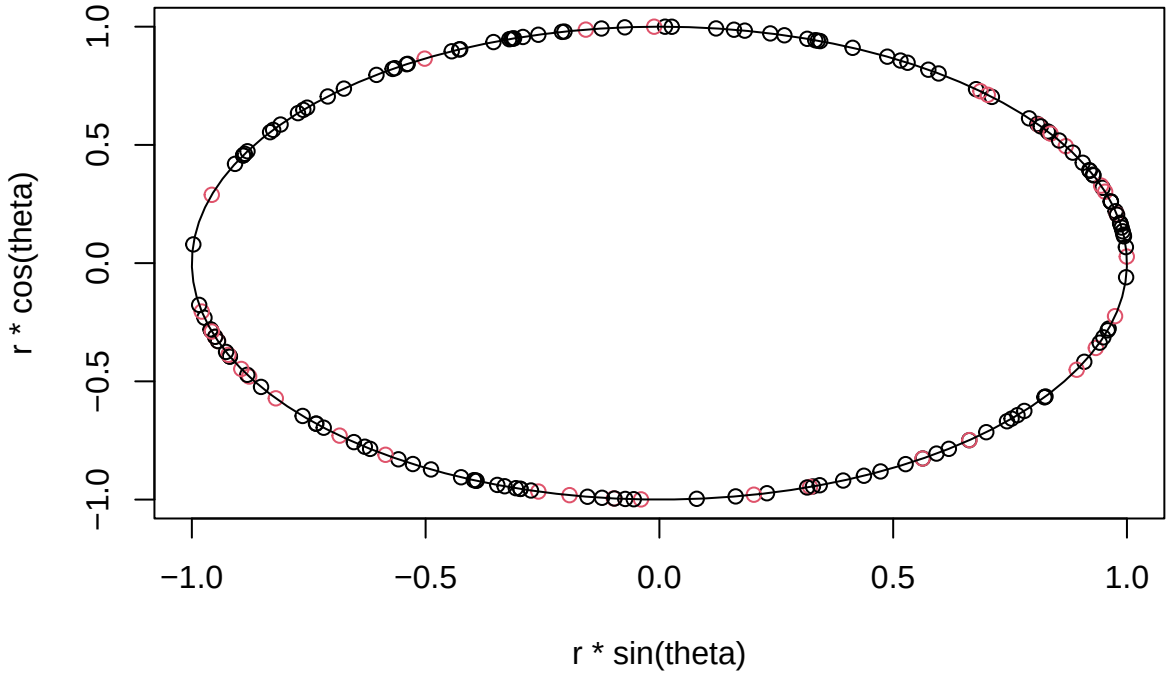
```
## It: 4905; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4906; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4907; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4908; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4909; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4910; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4911; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4912; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4913; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4914; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4915; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4916; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4917; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4918; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4919; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4920; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4921; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4922; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4923; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4924; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4925; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4926; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4927; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4928; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4929; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4930; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4931; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4932; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4933; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4934; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4935; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4936; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4937; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4938; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4939; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4940; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4941; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4942; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4943; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4944; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4945; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4946; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4947; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4948; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4949; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4950; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4951; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4952; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4953; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4954; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4955; obj: 1.170e+00; abs: 4.441e-16; rel: 3.797e-16; norm: 1.288e-01
## It: 4956; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4957; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4958; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```

```
## It: 4959; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4960; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4961; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4962; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4963; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4964; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4965; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4966; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4967; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4968; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4969; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4970; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4971; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4972; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4973; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4974; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4975; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4976; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4977; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4978; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4979; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4980; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4981; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4982; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4983; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4984; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4985; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4986; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4987; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4988; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4989; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4990; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4991; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4992; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4993; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4994; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4995; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4996; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 4997; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4998; obj: 1.170e+00; abs: 0.000e+00; rel: 0.000e+00; norm: 1.288e-01
## It: 4999; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
## It: 5000; obj: 1.170e+00; abs: 2.220e-16; rel: 1.899e-16; norm: 1.288e-01
```




```
Y_rad <- DirStats::to_rad(Y)
r <- 1
theta <<- Y_rad
plot(r*sin(theta),
     r*cos(theta),
     col=ifelse(ids_labs, 2, 1),
     xlim=c(-max(r),max(r)),
     ylim=c(-max(r),max(r)))

polygon(max(r)*sin(seq(0,2*pi,length.out=100)),max(r)*cos(seq(0,2*pi,length.out=100)))
```



Now we are going to reduce to dimension $\mathbb{S}^2$ then $d = 2$ (sphere):

```
Y <- psc_sne(spokes, d=2, rho_psc_list = rho_spokes_perp25,
             colors = ifelse(ids_labs, 2, 1), num_iteration=1000, eta=10)
```

```
## It: 1; obj: 1.487e+01; abs: 0.000e+00; rel: 0.000e+00; norm: 2.410e-01
## It: 2; obj: 1.414e+01; abs: 7.306e-01; rel: 4.913e-02; norm: 3.205e-01
## It: 3; obj: 1.341e+01; abs: 7.328e-01; rel: 5.182e-02; norm: 4.612e-01
## It: 4; obj: 1.271e+01; abs: 6.956e-01; rel: 5.188e-02; norm: 6.039e-01
## It: 5; obj: 1.220e+01; abs: 5.069e-01; rel: 3.987e-02; norm: 7.924e-01
## It: 6; obj: 1.178e+01; abs: 4.222e-01; rel: 3.459e-02; norm: 9.880e-01
## It: 7; obj: 1.136e+01; abs: 4.248e-01; rel: 3.605e-02; norm: 1.161e+00
## It: 8; obj: 1.099e+01; abs: 3.706e-01; rel: 3.262e-02; norm: 1.325e+00
## It: 9; obj: 1.075e+01; abs: 2.412e-01; rel: 2.196e-02; norm: 1.488e+00
## It: 10; obj: 1.060e+01; abs: 1.474e-01; rel: 1.371e-02; norm: 1.637e+00
## It: 11; obj: 1.051e+01; abs: 8.466e-02; rel: 7.988e-03; norm: 1.775e+00
## It: 12; obj: 1.045e+01; abs: 6.900e-02; rel: 6.562e-03; norm: 1.897e+00
## It: 13; obj: 1.040e+01; abs: 4.336e-02; rel: 4.152e-03; norm: 2.000e+00
## It: 14; obj: 1.039e+01; abs: 1.052e-02; rel: 1.011e-03; norm: 2.100e+00
## It: 15; obj: 1.041e+01; abs: 1.775e-02; rel: 1.708e-03; norm: 2.211e+00
## It: 16; obj: 1.045e+01; abs: 4.089e-02; rel: 3.928e-03; norm: 2.330e+00
## It: 17; obj: 1.051e+01; abs: 5.786e-02; rel: 5.537e-03; norm: 2.460e+00
## It: 18; obj: 1.058e+01; abs: 6.767e-02; rel: 6.440e-03; norm: 2.599e+00
## It: 19; obj: 1.065e+01; abs: 7.389e-02; rel: 6.987e-03; norm: 2.740e+00
## It: 20; obj: 1.073e+01; abs: 7.896e-02; rel: 7.415e-03; norm: 2.881e+00
## It: 21; obj: 1.081e+01; abs: 8.343e-02; rel: 7.776e-03; norm: 3.019e+00
## It: 22; obj: 1.090e+01; abs: 8.767e-02; rel: 8.109e-03; norm: 3.151e+00
## It: 23; obj: 1.099e+01; abs: 9.169e-02; rel: 8.412e-03; norm: 3.274e+00
## It: 24; obj: 1.109e+01; abs: 9.451e-02; rel: 8.599e-03; norm: 3.387e+00
## It: 25; obj: 1.118e+01; abs: 9.474e-02; rel: 8.547e-03; norm: 3.487e+00
## It: 26; obj: 1.127e+01; abs: 9.153e-02; rel: 8.187e-03; norm: 3.572e+00
## It: 27; obj: 1.136e+01; abs: 8.518e-02; rel: 7.557e-03; norm: 3.641e+00
## It: 28; obj: 1.143e+01; abs: 7.683e-02; rel: 6.765e-03; norm: 3.697e+00
```

```
## It: 29; obj: 1.150e+01; abs: 6.769e-02; rel: 5.920e-03; norm: 3.740e+00
## It: 30; obj: 1.156e+01; abs: 5.866e-02; rel: 5.100e-03; norm: 3.774e+00
## It: 31; obj: 1.161e+01; abs: 5.029e-02; rel: 4.350e-03; norm: 3.800e+00
## It: 32; obj: 1.165e+01; abs: 4.284e-02; rel: 3.690e-03; norm: 3.820e+00
## It: 33; obj: 1.169e+01; abs: 3.639e-02; rel: 3.123e-03; norm: 3.836e+00
## It: 34; obj: 1.172e+01; abs: 3.091e-02; rel: 2.644e-03; norm: 3.848e+00
## It: 35; obj: 1.175e+01; abs: 2.630e-02; rel: 2.244e-03; norm: 3.858e+00
## It: 36; obj: 1.177e+01; abs: 2.244e-02; rel: 1.910e-03; norm: 3.866e+00
## It: 37; obj: 1.179e+01; abs: 1.922e-02; rel: 1.633e-03; norm: 3.872e+00
## It: 38; obj: 1.181e+01; abs: 1.653e-02; rel: 1.402e-03; norm: 3.877e+00
## It: 39; obj: 1.182e+01; abs: 1.428e-02; rel: 1.209e-03; norm: 3.881e+00
## It: 40; obj: 1.183e+01; abs: 1.239e-02; rel: 1.048e-03; norm: 3.885e+00
## It: 41; obj: 1.184e+01; abs: 1.079e-02; rel: 9.119e-04; norm: 3.888e+00
## It: 42; obj: 1.185e+01; abs: 9.439e-03; rel: 7.970e-04; norm: 3.890e+00
## It: 43; obj: 1.186e+01; abs: 8.290e-03; rel: 6.994e-04; norm: 3.892e+00
## It: 44; obj: 1.187e+01; abs: 7.308e-03; rel: 6.162e-04; norm: 3.894e+00
## It: 45; obj: 1.187e+01; abs: 6.466e-03; rel: 5.448e-04; norm: 3.896e+00
## It: 46; obj: 1.188e+01; abs: 5.741e-03; rel: 4.834e-04; norm: 3.897e+00
## It: 47; obj: 1.188e+01; abs: 5.113e-03; rel: 4.304e-04; norm: 3.898e+00
## It: 48; obj: 1.189e+01; abs: 4.569e-03; rel: 3.844e-04; norm: 3.899e+00
## It: 49; obj: 1.189e+01; abs: 4.094e-03; rel: 3.444e-04; norm: 3.900e+00
## It: 50; obj: 1.190e+01; abs: 3.680e-03; rel: 3.094e-04; norm: 3.901e+00
## It: 51; obj: 1.190e+01; abs: 3.316e-03; rel: 2.788e-04; norm: 3.902e+00
## It: 52; obj: 1.190e+01; abs: 2.997e-03; rel: 2.518e-04; norm: 3.902e+00
## It: 53; obj: 1.191e+01; abs: 2.715e-03; rel: 2.281e-04; norm: 3.903e+00
## It: 54; obj: 1.191e+01; abs: 2.466e-03; rel: 2.071e-04; norm: 3.903e+00
## It: 55; obj: 1.191e+01; abs: 2.245e-03; rel: 1.886e-04; norm: 3.904e+00
## It: 56; obj: 1.191e+01; abs: 2.049e-03; rel: 1.721e-04; norm: 3.904e+00
## It: 57; obj: 1.192e+01; abs: 1.875e-03; rel: 1.574e-04; norm: 3.905e+00
## It: 58; obj: 1.192e+01; abs: 1.719e-03; rel: 1.443e-04; norm: 3.905e+00
## It: 59; obj: 1.192e+01; abs: 1.580e-03; rel: 1.326e-04; norm: 3.905e+00
## It: 60; obj: 1.192e+01; abs: 1.456e-03; rel: 1.222e-04; norm: 3.906e+00
## It: 61; obj: 1.192e+01; abs: 1.344e-03; rel: 1.128e-04; norm: 3.906e+00
## It: 62; obj: 1.192e+01; abs: 1.244e-03; rel: 1.044e-04; norm: 3.906e+00
## It: 63; obj: 1.192e+01; abs: 1.154e-03; rel: 9.677e-05; norm: 3.906e+00
## It: 64; obj: 1.192e+01; abs: 1.072e-03; rel: 8.994e-05; norm: 3.906e+00
## It: 65; obj: 1.193e+01; abs: 9.989e-04; rel: 8.377e-05; norm: 3.907e+00
## It: 66; obj: 1.193e+01; abs: 9.324e-04; rel: 7.818e-05; norm: 3.907e+00
## It: 67; obj: 1.193e+01; abs: 8.722e-04; rel: 7.313e-05; norm: 3.907e+00
## It: 68; obj: 1.193e+01; abs: 8.175e-04; rel: 6.854e-05; norm: 3.907e+00
## It: 69; obj: 1.193e+01; abs: 7.679e-04; rel: 6.438e-05; norm: 3.907e+00
## It: 70; obj: 1.193e+01; abs: 7.227e-04; rel: 6.058e-05; norm: 3.907e+00
## It: 71; obj: 1.193e+01; abs: 6.815e-04; rel: 5.712e-05; norm: 3.907e+00
## It: 72; obj: 1.193e+01; abs: 6.438e-04; rel: 5.397e-05; norm: 3.908e+00
## It: 73; obj: 1.193e+01; abs: 6.094e-04; rel: 5.108e-05; norm: 3.908e+00
## It: 74; obj: 1.193e+01; abs: 5.778e-04; rel: 4.843e-05; norm: 3.908e+00
## It: 75; obj: 1.193e+01; abs: 5.489e-04; rel: 4.600e-05; norm: 3.908e+00
## It: 76; obj: 1.193e+01; abs: 5.223e-04; rel: 4.377e-05; norm: 3.908e+00
## It: 77; obj: 1.193e+01; abs: 4.977e-04; rel: 4.171e-05; norm: 3.908e+00
## It: 78; obj: 1.193e+01; abs: 4.751e-04; rel: 3.981e-05; norm: 3.908e+00
## It: 79; obj: 1.193e+01; abs: 4.542e-04; rel: 3.806e-05; norm: 3.908e+00
## It: 80; obj: 1.194e+01; abs: 4.349e-04; rel: 3.644e-05; norm: 3.908e+00
## It: 81; obj: 1.194e+01; abs: 4.169e-04; rel: 3.493e-05; norm: 3.908e+00
## It: 82; obj: 1.194e+01; abs: 4.003e-04; rel: 3.353e-05; norm: 3.908e+00
```

```
## It: 83; obj: 1.194e+01; abs: 3.847e-04; rel: 3.223e-05; norm: 3.908e+00
## It: 84; obj: 1.194e+01; abs: 3.703e-04; rel: 3.102e-05; norm: 3.908e+00
## It: 85; obj: 1.194e+01; abs: 3.568e-04; rel: 2.989e-05; norm: 3.908e+00
## It: 86; obj: 1.194e+01; abs: 3.441e-04; rel: 2.883e-05; norm: 3.909e+00
## It: 87; obj: 1.194e+01; abs: 3.323e-04; rel: 2.784e-05; norm: 3.909e+00
## It: 88; obj: 1.194e+01; abs: 3.212e-04; rel: 2.690e-05; norm: 3.909e+00
## It: 89; obj: 1.194e+01; abs: 3.107e-04; rel: 2.603e-05; norm: 3.909e+00
## It: 90; obj: 1.194e+01; abs: 3.009e-04; rel: 2.520e-05; norm: 3.909e+00
## It: 91; obj: 1.194e+01; abs: 2.916e-04; rel: 2.442e-05; norm: 3.909e+00
## It: 92; obj: 1.194e+01; abs: 2.828e-04; rel: 2.369e-05; norm: 3.909e+00
## It: 93; obj: 1.194e+01; abs: 2.745e-04; rel: 2.299e-05; norm: 3.909e+00
## It: 94; obj: 1.194e+01; abs: 2.666e-04; rel: 2.233e-05; norm: 3.909e+00
## It: 95; obj: 1.194e+01; abs: 2.592e-04; rel: 2.171e-05; norm: 3.909e+00
## It: 96; obj: 1.194e+01; abs: 2.521e-04; rel: 2.111e-05; norm: 3.909e+00
## It: 97; obj: 1.194e+01; abs: 2.453e-04; rel: 2.054e-05; norm: 3.909e+00
## It: 98; obj: 1.194e+01; abs: 2.389e-04; rel: 2.000e-05; norm: 3.909e+00
## It: 99; obj: 1.194e+01; abs: 2.327e-04; rel: 1.949e-05; norm: 3.909e+00
## It: 100; obj: 1.194e+01; abs: 2.268e-04; rel: 1.900e-05; norm: 3.909e+00
## It: 101; obj: 1.497e+00; abs: 1.044e+01; rel: 8.746e-01; norm: 3.978e-01
## It: 102; obj: 1.364e+00; abs: 1.334e-01; rel: 8.912e-02; norm: 3.740e-01
## It: 103; obj: 1.244e+00; abs: 1.203e-01; rel: 8.821e-02; norm: 3.393e-01
## It: 104; obj: 1.142e+00; abs: 1.020e-01; rel: 8.201e-02; norm: 3.104e-01
## It: 105; obj: 1.062e+00; abs: 7.964e-02; rel: 6.976e-02; norm: 2.867e-01
## It: 106; obj: 1.007e+00; abs: 5.450e-02; rel: 5.132e-02; norm: 2.664e-01
## It: 107; obj: 9.715e-01; abs: 3.592e-02; rel: 3.565e-02; norm: 2.490e-01
## It: 108; obj: 9.463e-01; abs: 2.519e-02; rel: 2.593e-02; norm: 2.339e-01
## It: 109; obj: 9.273e-01; abs: 1.899e-02; rel: 2.007e-02; norm: 2.210e-01
## It: 110; obj: 9.125e-01; abs: 1.483e-02; rel: 1.599e-02; norm: 2.102e-01
## It: 111; obj: 9.008e-01; abs: 1.174e-02; rel: 1.287e-02; norm: 2.015e-01
## It: 112; obj: 8.911e-01; abs: 9.645e-03; rel: 1.071e-02; norm: 1.942e-01
## It: 113; obj: 8.828e-01; abs: 8.359e-03; rel: 9.380e-03; norm: 1.880e-01
## It: 114; obj: 8.753e-01; abs: 7.501e-03; rel: 8.497e-03; norm: 1.834e-01
## It: 115; obj: 8.687e-01; abs: 6.533e-03; rel: 7.464e-03; norm: 1.824e-01
## It: 116; obj: 8.634e-01; abs: 5.288e-03; rel: 6.087e-03; norm: 1.818e-01
## It: 117; obj: 8.591e-01; abs: 4.330e-03; rel: 5.014e-03; norm: 1.809e-01
## It: 118; obj: 8.554e-01; abs: 3.726e-03; rel: 4.337e-03; norm: 1.798e-01
## It: 119; obj: 8.521e-01; abs: 3.289e-03; rel: 3.845e-03; norm: 1.788e-01
## It: 120; obj: 8.492e-01; abs: 2.909e-03; rel: 3.414e-03; norm: 1.778e-01
## It: 121; obj: 8.466e-01; abs: 2.564e-03; rel: 3.019e-03; norm: 1.770e-01
## It: 122; obj: 8.444e-01; abs: 2.260e-03; rel: 2.670e-03; norm: 1.763e-01
## It: 123; obj: 8.424e-01; abs: 2.002e-03; rel: 2.371e-03; norm: 1.756e-01
## It: 124; obj: 8.406e-01; abs: 1.782e-03; rel: 2.115e-03; norm: 1.749e-01
## It: 125; obj: 8.390e-01; abs: 1.589e-03; rel: 1.890e-03; norm: 1.742e-01
## It: 126; obj: 8.376e-01; abs: 1.419e-03; rel: 1.692e-03; norm: 1.736e-01
## It: 127; obj: 8.363e-01; abs: 1.271e-03; rel: 1.517e-03; norm: 1.730e-01
## It: 128; obj: 8.352e-01; abs: 1.141e-03; rel: 1.364e-03; norm: 1.724e-01
## It: 129; obj: 8.341e-01; abs: 1.027e-03; rel: 1.230e-03; norm: 1.719e-01
## It: 130; obj: 8.332e-01; abs: 9.258e-04; rel: 1.110e-03; norm: 1.713e-01
## It: 131; obj: 8.324e-01; abs: 8.357e-04; rel: 1.003e-03; norm: 1.709e-01
## It: 132; obj: 8.316e-01; abs: 7.553e-04; rel: 9.074e-04; norm: 1.704e-01
## It: 133; obj: 8.309e-01; abs: 6.836e-04; rel: 8.220e-04; norm: 1.700e-01
## It: 134; obj: 8.303e-01; abs: 6.197e-04; rel: 7.458e-04; norm: 1.696e-01
## It: 135; obj: 8.298e-01; abs: 5.628e-04; rel: 6.779e-04; norm: 1.692e-01
## It: 136; obj: 8.292e-01; abs: 5.122e-04; rel: 6.173e-04; norm: 1.688e-01
```

```
## It: 137; obj: 8.288e-01; abs: 4.671e-04; rel: 5.632e-04; norm: 1.685e-01
## It: 138; obj: 8.283e-01; abs: 4.269e-04; rel: 5.151e-04; norm: 1.682e-01
## It: 139; obj: 8.280e-01; abs: 3.912e-04; rel: 4.723e-04; norm: 1.679e-01
## It: 140; obj: 8.276e-01; abs: 3.596e-04; rel: 4.343e-04; norm: 1.676e-01
## It: 141; obj: 8.273e-01; abs: 3.318e-04; rel: 4.009e-04; norm: 1.673e-01
## It: 142; obj: 8.270e-01; abs: 3.076e-04; rel: 3.718e-04; norm: 1.671e-01
## It: 143; obj: 8.267e-01; abs: 2.868e-04; rel: 3.468e-04; norm: 1.669e-01
## It: 144; obj: 8.264e-01; abs: 2.693e-04; rel: 3.258e-04; norm: 1.667e-01
## It: 145; obj: 8.261e-01; abs: 2.551e-04; rel: 3.087e-04; norm: 1.665e-01
## It: 146; obj: 8.259e-01; abs: 2.440e-04; rel: 2.954e-04; norm: 1.663e-01
## It: 147; obj: 8.257e-01; abs: 2.362e-04; rel: 2.859e-04; norm: 1.662e-01
## It: 148; obj: 8.254e-01; abs: 2.314e-04; rel: 2.802e-04; norm: 1.661e-01
## It: 149; obj: 8.252e-01; abs: 2.295e-04; rel: 2.781e-04; norm: 1.659e-01
## It: 150; obj: 8.250e-01; abs: 2.302e-04; rel: 2.790e-04; norm: 1.658e-01
## It: 151; obj: 8.247e-01; abs: 2.326e-04; rel: 2.820e-04; norm: 1.657e-01
## It: 152; obj: 8.245e-01; abs: 2.351e-04; rel: 2.850e-04; norm: 1.657e-01
## It: 153; obj: 8.243e-01; abs: 2.356e-04; rel: 2.858e-04; norm: 1.656e-01
## It: 154; obj: 8.240e-01; abs: 2.329e-04; rel: 2.825e-04; norm: 1.656e-01
## It: 155; obj: 8.238e-01; abs: 2.267e-04; rel: 2.752e-04; norm: 1.655e-01
## It: 156; obj: 8.236e-01; abs: 2.186e-04; rel: 2.654e-04; norm: 1.655e-01
## It: 157; obj: 8.234e-01; abs: 2.103e-04; rel: 2.554e-04; norm: 1.655e-01
## It: 158; obj: 8.232e-01; abs: 2.030e-04; rel: 2.465e-04; norm: 1.656e-01
## It: 159; obj: 8.230e-01; abs: 1.970e-04; rel: 2.393e-04; norm: 1.656e-01
## It: 160; obj: 8.228e-01; abs: 1.924e-04; rel: 2.338e-04; norm: 1.656e-01
## It: 161; obj: 8.226e-01; abs: 1.892e-04; rel: 2.299e-04; norm: 1.656e-01
## It: 162; obj: 8.224e-01; abs: 1.871e-04; rel: 2.275e-04; norm: 1.656e-01
## It: 163; obj: 8.222e-01; abs: 1.862e-04; rel: 2.264e-04; norm: 1.656e-01
## It: 164; obj: 8.220e-01; abs: 1.862e-04; rel: 2.264e-04; norm: 1.656e-01
## It: 165; obj: 8.219e-01; abs: 1.869e-04; rel: 2.273e-04; norm: 1.656e-01
## It: 166; obj: 8.217e-01; abs: 1.879e-04; rel: 2.287e-04; norm: 1.656e-01
## It: 167; obj: 8.215e-01; abs: 1.888e-04; rel: 2.298e-04; norm: 1.656e-01
## It: 168; obj: 8.213e-01; abs: 1.888e-04; rel: 2.298e-04; norm: 1.655e-01
## It: 169; obj: 8.211e-01; abs: 1.869e-04; rel: 2.275e-04; norm: 1.655e-01
## It: 170; obj: 8.209e-01; abs: 1.823e-04; rel: 2.220e-04; norm: 1.654e-01
## It: 171; obj: 8.207e-01; abs: 1.745e-04; rel: 2.126e-04; norm: 1.654e-01
## It: 172; obj: 8.206e-01; abs: 1.641e-04; rel: 1.999e-04; norm: 1.653e-01
## It: 173; obj: 8.204e-01; abs: 1.519e-04; rel: 1.851e-04; norm: 1.653e-01
## It: 174; obj: 8.203e-01; abs: 1.394e-04; rel: 1.699e-04; norm: 1.652e-01
## It: 175; obj: 8.202e-01; abs: 1.276e-04; rel: 1.555e-04; norm: 1.652e-01
## It: 176; obj: 8.200e-01; abs: 1.171e-04; rel: 1.428e-04; norm: 1.651e-01
## It: 177; obj: 8.199e-01; abs: 1.081e-04; rel: 1.318e-04; norm: 1.651e-01
## It: 178; obj: 8.198e-01; abs: 1.004e-04; rel: 1.224e-04; norm: 1.650e-01
## It: 179; obj: 8.197e-01; abs: 9.394e-05; rel: 1.146e-04; norm: 1.650e-01
## It: 180; obj: 8.197e-01; abs: 8.859e-05; rel: 1.081e-04; norm: 1.649e-01
## It: 181; obj: 8.196e-01; abs: 8.424e-05; rel: 1.028e-04; norm: 1.649e-01
## It: 182; obj: 8.195e-01; abs: 8.080e-05; rel: 9.859e-05; norm: 1.648e-01
## It: 183; obj: 8.194e-01; abs: 7.817e-05; rel: 9.539e-05; norm: 1.647e-01
## It: 184; obj: 8.193e-01; abs: 7.625e-05; rel: 9.305e-05; norm: 1.647e-01
## It: 185; obj: 8.193e-01; abs: 7.487e-05; rel: 9.138e-05; norm: 1.646e-01
## It: 186; obj: 8.192e-01; abs: 7.381e-05; rel: 9.010e-05; norm: 1.646e-01
## It: 187; obj: 8.191e-01; abs: 7.282e-05; rel: 8.889e-05; norm: 1.645e-01
## It: 188; obj: 8.190e-01; abs: 7.160e-05; rel: 8.742e-05; norm: 1.645e-01
## It: 189; obj: 8.190e-01; abs: 6.999e-05; rel: 8.545e-05; norm: 1.644e-01
## It: 190; obj: 8.189e-01; abs: 6.793e-05; rel: 8.295e-05; norm: 1.644e-01
```

```
## It: 191; obj: 8.188e-01; abs: 6.556e-05; rel: 8.006e-05; norm: 1.643e-01
## It: 192; obj: 8.188e-01; abs: 6.309e-05; rel: 7.705e-05; norm: 1.642e-01
## It: 193; obj: 8.187e-01; abs: 6.074e-05; rel: 7.419e-05; norm: 1.642e-01
## It: 194; obj: 8.187e-01; abs: 5.865e-05; rel: 7.164e-05; norm: 1.641e-01
## It: 195; obj: 8.186e-01; abs: 5.687e-05; rel: 6.947e-05; norm: 1.641e-01
## It: 196; obj: 8.185e-01; abs: 5.541e-05; rel: 6.769e-05; norm: 1.640e-01
## It: 197; obj: 8.185e-01; abs: 5.428e-05; rel: 6.631e-05; norm: 1.639e-01
## It: 198; obj: 8.184e-01; abs: 5.347e-05; rel: 6.533e-05; norm: 1.639e-01
## It: 199; obj: 8.184e-01; abs: 5.300e-05; rel: 6.476e-05; norm: 1.638e-01
## It: 200; obj: 8.183e-01; abs: 5.291e-05; rel: 6.465e-05; norm: 1.637e-01
## It: 201; obj: 8.183e-01; abs: 5.320e-05; rel: 6.501e-05; norm: 1.637e-01
## It: 202; obj: 8.182e-01; abs: 5.390e-05; rel: 6.587e-05; norm: 1.636e-01
## It: 203; obj: 8.182e-01; abs: 5.498e-05; rel: 6.719e-05; norm: 1.635e-01
## It: 204; obj: 8.181e-01; abs: 5.632e-05; rel: 6.883e-05; norm: 1.635e-01
## It: 205; obj: 8.181e-01; abs: 5.769e-05; rel: 7.051e-05; norm: 1.634e-01
## It: 206; obj: 8.180e-01; abs: 5.872e-05; rel: 7.178e-05; norm: 1.633e-01
## It: 207; obj: 8.179e-01; abs: 5.895e-05; rel: 7.206e-05; norm: 1.633e-01
## It: 208; obj: 8.179e-01; abs: 5.790e-05; rel: 7.079e-05; norm: 1.632e-01
## It: 209; obj: 8.178e-01; abs: 5.534e-05; rel: 6.766e-05; norm: 1.631e-01
## It: 210; obj: 8.178e-01; abs: 5.135e-05; rel: 6.278e-05; norm: 1.631e-01
## It: 211; obj: 8.177e-01; abs: 4.641e-05; rel: 5.675e-05; norm: 1.630e-01
## It: 212; obj: 8.177e-01; abs: 4.123e-05; rel: 5.043e-05; norm: 1.629e-01
## It: 213; obj: 8.176e-01; abs: 3.646e-05; rel: 4.459e-05; norm: 1.629e-01
## It: 214; obj: 8.176e-01; abs: 3.248e-05; rel: 3.973e-05; norm: 1.628e-01
## It: 215; obj: 8.176e-01; abs: 2.937e-05; rel: 3.592e-05; norm: 1.627e-01
## It: 216; obj: 8.176e-01; abs: 2.697e-05; rel: 3.299e-05; norm: 1.627e-01
## It: 217; obj: 8.175e-01; abs: 2.509e-05; rel: 3.069e-05; norm: 1.626e-01
## It: 218; obj: 8.175e-01; abs: 2.353e-05; rel: 2.878e-05; norm: 1.626e-01
## It: 219; obj: 8.175e-01; abs: 2.215e-05; rel: 2.709e-05; norm: 1.625e-01
## It: 220; obj: 8.175e-01; abs: 2.087e-05; rel: 2.553e-05; norm: 1.625e-01
## It: 221; obj: 8.174e-01; abs: 1.963e-05; rel: 2.402e-05; norm: 1.624e-01
## It: 222; obj: 8.174e-01; abs: 1.842e-05; rel: 2.253e-05; norm: 1.624e-01
## It: 223; obj: 8.174e-01; abs: 1.719e-05; rel: 2.104e-05; norm: 1.623e-01
## It: 224; obj: 8.174e-01; abs: 1.596e-05; rel: 1.953e-05; norm: 1.623e-01
## It: 225; obj: 8.174e-01; abs: 1.473e-05; rel: 1.802e-05; norm: 1.622e-01
## It: 226; obj: 8.174e-01; abs: 1.350e-05; rel: 1.652e-05; norm: 1.622e-01
## It: 227; obj: 8.174e-01; abs: 1.230e-05; rel: 1.505e-05; norm: 1.622e-01
## It: 228; obj: 8.173e-01; abs: 1.116e-05; rel: 1.365e-05; norm: 1.621e-01
## It: 229; obj: 8.173e-01; abs: 1.008e-05; rel: 1.233e-05; norm: 1.621e-01
## It: 230; obj: 8.173e-01; abs: 9.075e-06; rel: 1.110e-05; norm: 1.620e-01
## It: 231; obj: 8.173e-01; abs: 8.160e-06; rel: 9.984e-06; norm: 1.620e-01
## It: 232; obj: 8.173e-01; abs: 7.334e-06; rel: 8.973e-06; norm: 1.620e-01
## It: 233; obj: 8.173e-01; abs: 6.594e-06; rel: 8.069e-06; norm: 1.619e-01
## It: 234; obj: 8.173e-01; abs: 5.938e-06; rel: 7.265e-06; norm: 1.619e-01
## It: 235; obj: 8.173e-01; abs: 5.357e-06; rel: 6.554e-06; norm: 1.618e-01
## It: 236; obj: 8.173e-01; abs: 4.845e-06; rel: 5.928e-06; norm: 1.618e-01
## It: 237; obj: 8.173e-01; abs: 4.394e-06; rel: 5.376e-06; norm: 1.618e-01
## It: 238; obj: 8.173e-01; abs: 3.996e-06; rel: 4.890e-06; norm: 1.617e-01
## It: 239; obj: 8.173e-01; abs: 3.645e-06; rel: 4.460e-06; norm: 1.617e-01
## It: 240; obj: 8.173e-01; abs: 3.335e-06; rel: 4.080e-06; norm: 1.617e-01
## It: 241; obj: 8.173e-01; abs: 3.059e-06; rel: 3.743e-06; norm: 1.617e-01
## It: 242; obj: 8.173e-01; abs: 2.813e-06; rel: 3.442e-06; norm: 1.616e-01
## It: 243; obj: 8.173e-01; abs: 2.593e-06; rel: 3.173e-06; norm: 1.616e-01
## It: 244; obj: 8.173e-01; abs: 2.396e-06; rel: 2.932e-06; norm: 1.616e-01
```

```
## It: 245; obj: 8.173e-01; abs: 2.218e-06; rel: 2.714e-06; norm: 1.616e-01
## It: 246; obj: 8.173e-01; abs: 2.057e-06; rel: 2.517e-06; norm: 1.615e-01
## It: 247; obj: 8.173e-01; abs: 1.911e-06; rel: 2.338e-06; norm: 1.615e-01
## It: 248; obj: 8.173e-01; abs: 2.289e-06; rel: 2.801e-06; norm: 1.615e-01
## It: 249; obj: 8.172e-01; abs: 2.470e-06; rel: 3.023e-06; norm: 1.615e-01
## It: 250; obj: 8.172e-01; abs: 2.503e-06; rel: 3.062e-06; norm: 1.614e-01
## It: 251; obj: 8.172e-01; abs: 2.430e-06; rel: 2.973e-06; norm: 1.614e-01
## It: 252; obj: 8.172e-01; abs: 2.290e-06; rel: 2.802e-06; norm: 1.614e-01
## It: 253; obj: 8.172e-01; abs: 2.112e-06; rel: 2.584e-06; norm: 1.613e-01
## It: 254; obj: 8.172e-01; abs: 1.919e-06; rel: 2.349e-06; norm: 1.613e-01
## It: 255; obj: 8.172e-01; abs: 1.729e-06; rel: 2.115e-06; norm: 1.613e-01
## It: 256; obj: 8.172e-01; abs: 1.550e-06; rel: 1.896e-06; norm: 1.612e-01
## It: 257; obj: 8.172e-01; abs: 1.388e-06; rel: 1.698e-06; norm: 1.612e-01
## It: 258; obj: 8.172e-01; abs: 1.246e-06; rel: 1.524e-06; norm: 1.612e-01
## It: 259; obj: 8.172e-01; abs: 1.123e-06; rel: 1.374e-06; norm: 1.612e-01
## It: 260; obj: 8.172e-01; abs: 1.018e-06; rel: 1.245e-06; norm: 1.611e-01
## It: 261; obj: 8.172e-01; abs: 9.278e-07; rel: 1.135e-06; norm: 1.611e-01
## It: 262; obj: 8.172e-01; abs: 8.498e-07; rel: 1.040e-06; norm: 1.611e-01
## It: 263; obj: 8.172e-01; abs: 7.793e-07; rel: 9.536e-07; norm: 1.611e-01
## It: 264; obj: 8.172e-01; abs: 7.118e-07; rel: 8.710e-07; norm: 1.611e-01
## It: 265; obj: 8.172e-01; abs: 6.437e-07; rel: 7.877e-07; norm: 1.611e-01
## It: 266; obj: 8.172e-01; abs: 5.732e-07; rel: 7.015e-07; norm: 1.610e-01
## It: 267; obj: 8.172e-01; abs: 5.009e-07; rel: 6.130e-07; norm: 1.610e-01
## It: 268; obj: 8.172e-01; abs: 4.294e-07; rel: 5.254e-07; norm: 1.610e-01
## It: 269; obj: 8.172e-01; abs: 3.626e-07; rel: 4.437e-07; norm: 1.610e-01
## It: 270; obj: 8.172e-01; abs: 3.053e-07; rel: 3.736e-07; norm: 1.610e-01
## It: 271; obj: 8.172e-01; abs: 2.616e-07; rel: 3.201e-07; norm: 1.610e-01
## It: 272; obj: 8.172e-01; abs: 2.343e-07; rel: 2.867e-07; norm: 1.610e-01
## It: 273; obj: 8.172e-01; abs: 2.241e-07; rel: 2.743e-07; norm: 1.610e-01
## It: 274; obj: 8.172e-01; abs: 2.293e-07; rel: 2.806e-07; norm: 1.610e-01
## It: 275; obj: 8.172e-01; abs: 2.459e-07; rel: 3.009e-07; norm: 1.610e-01
## It: 276; obj: 8.172e-01; abs: 2.683e-07; rel: 3.283e-07; norm: 1.610e-01
## It: 277; obj: 8.172e-01; abs: 2.904e-07; rel: 3.553e-07; norm: 1.610e-01
## It: 278; obj: 8.172e-01; abs: 3.063e-07; rel: 3.747e-07; norm: 1.610e-01
## It: 279; obj: 8.172e-01; abs: 3.115e-07; rel: 3.812e-07; norm: 1.610e-01
## It: 280; obj: 8.172e-01; abs: 3.036e-07; rel: 3.715e-07; norm: 1.610e-01
## It: 281; obj: 8.172e-01; abs: 2.824e-07; rel: 3.455e-07; norm: 1.610e-01
## It: 282; obj: 8.172e-01; abs: 2.499e-07; rel: 3.058e-07; norm: 1.610e-01
## It: 283; obj: 8.172e-01; abs: 2.101e-07; rel: 2.571e-07; norm: 1.610e-01
## It: 284; obj: 8.172e-01; abs: 1.682e-07; rel: 2.058e-07; norm: 1.610e-01
## It: 285; obj: 8.172e-01; abs: 1.299e-07; rel: 1.589e-07; norm: 1.610e-01
## It: 286; obj: 8.172e-01; abs: 1.005e-07; rel: 1.230e-07; norm: 1.610e-01
## It: 287; obj: 8.172e-01; abs: 8.422e-08; rel: 1.031e-07; norm: 1.610e-01
## It: 288; obj: 8.172e-01; abs: 8.324e-08; rel: 1.019e-07; norm: 1.609e-01
## It: 289; obj: 8.172e-01; abs: 9.744e-08; rel: 1.192e-07; norm: 1.609e-01
## It: 290; obj: 8.172e-01; abs: 1.243e-07; rel: 1.521e-07; norm: 1.609e-01
## It: 291; obj: 8.172e-01; abs: 1.592e-07; rel: 1.948e-07; norm: 1.609e-01
## It: 292; obj: 8.172e-01; abs: 1.964e-07; rel: 2.403e-07; norm: 1.609e-01
## It: 293; obj: 8.172e-01; abs: 2.295e-07; rel: 2.808e-07; norm: 1.609e-01
## It: 294; obj: 8.172e-01; abs: 2.528e-07; rel: 3.093e-07; norm: 1.609e-01
## It: 295; obj: 8.172e-01; abs: 2.622e-07; rel: 3.209e-07; norm: 1.609e-01
## It: 296; obj: 8.172e-01; abs: 2.559e-07; rel: 3.131e-07; norm: 1.609e-01
## It: 297; obj: 8.172e-01; abs: 2.344e-07; rel: 2.868e-07; norm: 1.609e-01
## It: 298; obj: 8.172e-01; abs: 2.010e-07; rel: 2.460e-07; norm: 1.609e-01
```

```
## It: 299; obj: 8.172e-01; abs: 1.613e-07; rel: 1.973e-07; norm: 1.609e-01
## It: 300; obj: 8.172e-01; abs: 1.218e-07; rel: 1.490e-07; norm: 1.609e-01
## It: 301; obj: 8.172e-01; abs: 8.957e-08; rel: 1.096e-07; norm: 1.609e-01
## It: 302; obj: 8.172e-01; abs: 7.049e-08; rel: 8.626e-08; norm: 1.609e-01
## It: 303; obj: 8.172e-01; abs: 6.846e-08; rel: 8.378e-08; norm: 1.609e-01
## It: 304; obj: 8.172e-01; abs: 8.453e-08; rel: 1.034e-07; norm: 1.609e-01
## It: 305; obj: 8.172e-01; abs: 1.166e-07; rel: 1.427e-07; norm: 1.609e-01
## It: 306; obj: 8.172e-01; abs: 1.600e-07; rel: 1.957e-07; norm: 1.609e-01
## It: 307; obj: 8.172e-01; abs: 2.077e-07; rel: 2.541e-07; norm: 1.609e-01
## It: 308; obj: 8.172e-01; abs: 2.523e-07; rel: 3.087e-07; norm: 1.609e-01
## It: 309; obj: 8.172e-01; abs: 2.867e-07; rel: 3.508e-07; norm: 1.609e-01
## It: 310; obj: 8.172e-01; abs: 3.058e-07; rel: 3.741e-07; norm: 1.609e-01
## It: 311; obj: 8.172e-01; abs: 3.068e-07; rel: 3.754e-07; norm: 1.609e-01
## It: 312; obj: 8.172e-01; abs: 2.902e-07; rel: 3.551e-07; norm: 1.609e-01
## It: 313; obj: 8.172e-01; abs: 2.590e-07; rel: 3.169e-07; norm: 1.609e-01
## It: 314; obj: 8.172e-01; abs: 2.185e-07; rel: 2.674e-07; norm: 1.609e-01
## It: 315; obj: 8.172e-01; abs: 1.755e-07; rel: 2.148e-07; norm: 1.609e-01
## It: 316; obj: 8.172e-01; abs: 1.371e-07; rel: 1.678e-07; norm: 1.608e-01
## It: 317; obj: 8.172e-01; abs: 1.099e-07; rel: 1.344e-07; norm: 1.608e-01
## It: 318; obj: 8.172e-01; abs: 9.848e-08; rel: 1.205e-07; norm: 1.608e-01
## It: 319; obj: 8.172e-01; abs: 1.054e-07; rel: 1.290e-07; norm: 1.608e-01
## It: 320; obj: 8.172e-01; abs: 1.300e-07; rel: 1.591e-07; norm: 1.608e-01
## It: 321; obj: 8.172e-01; abs: 1.689e-07; rel: 2.067e-07; norm: 1.608e-01
## It: 322; obj: 8.172e-01; abs: 2.161e-07; rel: 2.645e-07; norm: 1.608e-01
## It: 323; obj: 8.172e-01; abs: 2.641e-07; rel: 3.232e-07; norm: 1.608e-01
## It: 324; obj: 8.172e-01; abs: 3.050e-07; rel: 3.732e-07; norm: 1.608e-01
## It: 325; obj: 8.172e-01; abs: 3.319e-07; rel: 4.061e-07; norm: 1.608e-01
## It: 326; obj: 8.172e-01; abs: 3.401e-07; rel: 4.161e-07; norm: 1.608e-01
## It: 327; obj: 8.172e-01; abs: 3.277e-07; rel: 4.010e-07; norm: 1.608e-01
## It: 328; obj: 8.172e-01; abs: 2.965e-07; rel: 3.628e-07; norm: 1.608e-01
## It: 329; obj: 8.172e-01; abs: 2.514e-07; rel: 3.076e-07; norm: 1.608e-01
## It: 330; obj: 8.172e-01; abs: 1.999e-07; rel: 2.446e-07; norm: 1.608e-01
## It: 331; obj: 8.172e-01; abs: 1.508e-07; rel: 1.846e-07; norm: 1.608e-01
## It: 332; obj: 8.172e-01; abs: 1.130e-07; rel: 1.382e-07; norm: 1.608e-01
## It: 333; obj: 8.172e-01; abs: 9.315e-08; rel: 1.140e-07; norm: 1.608e-01
## It: 334; obj: 8.172e-01; abs: 9.511e-08; rel: 1.164e-07; norm: 1.607e-01
## It: 335; obj: 8.172e-01; abs: 1.186e-07; rel: 1.451e-07; norm: 1.607e-01
## It: 336; obj: 8.172e-01; abs: 1.594e-07; rel: 1.951e-07; norm: 1.607e-01
## It: 337; obj: 8.172e-01; abs: 2.102e-07; rel: 2.573e-07; norm: 1.607e-01
## It: 338; obj: 8.172e-01; abs: 2.621e-07; rel: 3.207e-07; norm: 1.607e-01
## It: 339; obj: 8.172e-01; abs: 3.057e-07; rel: 3.741e-07; norm: 1.607e-01
## It: 340; obj: 8.172e-01; abs: 3.338e-07; rel: 4.084e-07; norm: 1.607e-01
## It: 341; obj: 8.172e-01; abs: 3.412e-07; rel: 4.176e-07; norm: 1.607e-01
## It: 342; obj: 8.172e-01; abs: 3.266e-07; rel: 3.997e-07; norm: 1.607e-01
## It: 343; obj: 8.172e-01; abs: 2.917e-07; rel: 3.570e-07; norm: 1.607e-01
## It: 344; obj: 8.172e-01; abs: 2.414e-07; rel: 2.954e-07; norm: 1.607e-01
## It: 345; obj: 8.172e-01; abs: 1.830e-07; rel: 2.239e-07; norm: 1.607e-01
## It: 346; obj: 8.172e-01; abs: 1.249e-07; rel: 1.529e-07; norm: 1.607e-01
## It: 347; obj: 8.172e-01; abs: 7.584e-08; rel: 9.281e-08; norm: 1.607e-01
## It: 348; obj: 8.172e-01; abs: 4.302e-08; rel: 5.264e-08; norm: 1.607e-01
## It: 349; obj: 8.172e-01; abs: 3.127e-08; rel: 3.827e-08; norm: 1.607e-01
## It: 350; obj: 8.172e-01; abs: 4.200e-08; rel: 5.140e-08; norm: 1.607e-01
## It: 351; obj: 8.172e-01; abs: 7.284e-08; rel: 8.913e-08; norm: 1.607e-01
## It: 352; obj: 8.172e-01; abs: 1.179e-07; rel: 1.443e-07; norm: 1.607e-01
```

```
## It: 353; obj: 8.172e-01; abs: 1.687e-07; rel: 2.064e-07; norm: 1.607e-01
## It: 354; obj: 8.172e-01; abs: 2.156e-07; rel: 2.638e-07; norm: 1.607e-01
## It: 355; obj: 8.172e-01; abs: 2.495e-07; rel: 3.053e-07; norm: 1.607e-01
## It: 356; obj: 8.172e-01; abs: 2.633e-07; rel: 3.222e-07; norm: 1.607e-01
## It: 357; obj: 8.172e-01; abs: 2.536e-07; rel: 3.103e-07; norm: 1.607e-01
## It: 358; obj: 8.172e-01; abs: 2.207e-07; rel: 2.700e-07; norm: 1.607e-01
## It: 359; obj: 8.172e-01; abs: 1.691e-07; rel: 2.070e-07; norm: 1.607e-01
## It: 360; obj: 8.172e-01; abs: 1.068e-07; rel: 1.307e-07; norm: 1.607e-01
## It: 361; obj: 8.172e-01; abs: 4.380e-08; rel: 5.359e-08; norm: 1.607e-01
## It: 362; obj: 8.172e-01; abs: 9.564e-09; rel: 1.170e-08; norm: 1.607e-01
## It: 363; obj: 8.172e-01; abs: 4.417e-08; rel: 5.405e-08; norm: 1.607e-01
## It: 364; obj: 8.172e-01; abs: 5.402e-08; rel: 6.611e-08; norm: 1.607e-01
## It: 365; obj: 8.172e-01; abs: 3.742e-08; rel: 4.579e-08; norm: 1.607e-01
## It: 366; obj: 8.172e-01; abs: 2.628e-09; rel: 3.215e-09; norm: 1.607e-01
## It: 367; obj: 8.172e-01; abs: 5.889e-08; rel: 7.206e-08; norm: 1.607e-01
## It: 368; obj: 8.172e-01; abs: 1.213e-07; rel: 1.484e-07; norm: 1.607e-01
## It: 369; obj: 8.172e-01; abs: 1.787e-07; rel: 2.187e-07; norm: 1.607e-01
## It: 370; obj: 8.172e-01; abs: 2.212e-07; rel: 2.707e-07; norm: 1.607e-01
## It: 371; obj: 8.172e-01; abs: 2.416e-07; rel: 2.957e-07; norm: 1.607e-01
## It: 372; obj: 8.172e-01; abs: 2.368e-07; rel: 2.897e-07; norm: 1.607e-01
## It: 373; obj: 8.172e-01; abs: 2.077e-07; rel: 2.541e-07; norm: 1.607e-01
## It: 374; obj: 8.172e-01; abs: 1.593e-07; rel: 1.949e-07; norm: 1.607e-01
## It: 375; obj: 8.172e-01; abs: 9.963e-08; rel: 1.219e-07; norm: 1.607e-01
## It: 376; obj: 8.172e-01; abs: 3.863e-08; rel: 4.727e-08; norm: 1.607e-01
## It: 377; obj: 8.172e-01; abs: 1.355e-08; rel: 1.658e-08; norm: 1.607e-01
## It: 378; obj: 8.172e-01; abs: 4.788e-08; rel: 5.859e-08; norm: 1.607e-01
## It: 379; obj: 8.172e-01; abs: 5.796e-08; rel: 7.092e-08; norm: 1.607e-01
## It: 380; obj: 8.172e-01; abs: 4.113e-08; rel: 5.033e-08; norm: 1.606e-01
## It: 381; obj: 8.172e-01; abs: 9.248e-10; rel: 1.132e-09; norm: 1.606e-01
## It: 382; obj: 8.172e-01; abs: 6.227e-08; rel: 7.620e-08; norm: 1.606e-01
## It: 383; obj: 8.172e-01; abs: 1.336e-07; rel: 1.635e-07; norm: 1.606e-01
## It: 384; obj: 8.172e-01; abs: 2.039e-07; rel: 2.496e-07; norm: 1.606e-01
## It: 385; obj: 8.172e-01; abs: 2.622e-07; rel: 3.209e-07; norm: 1.606e-01
## It: 386; obj: 8.172e-01; abs: 2.997e-07; rel: 3.667e-07; norm: 1.606e-01
## It: 387; obj: 8.172e-01; abs: 3.110e-07; rel: 3.806e-07; norm: 1.606e-01
## It: 388; obj: 8.172e-01; abs: 2.957e-07; rel: 3.619e-07; norm: 1.606e-01
## It: 389; obj: 8.172e-01; abs: 2.582e-07; rel: 3.159e-07; norm: 1.606e-01
## It: 390; obj: 8.172e-01; abs: 2.069e-07; rel: 2.532e-07; norm: 1.606e-01
## It: 391; obj: 8.172e-01; abs: 1.537e-07; rel: 1.880e-07; norm: 1.606e-01
## It: 392; obj: 8.172e-01; abs: 1.110e-07; rel: 1.358e-07; norm: 1.606e-01
## It: 393; obj: 8.172e-01; abs: 9.041e-08; rel: 1.106e-07; norm: 1.606e-01
## It: 394; obj: 8.172e-01; abs: 1.000e-07; rel: 1.224e-07; norm: 1.606e-01
## It: 395; obj: 8.172e-01; abs: 1.430e-07; rel: 1.749e-07; norm: 1.606e-01
## It: 396; obj: 8.172e-01; abs: 2.168e-07; rel: 2.653e-07; norm: 1.606e-01
## It: 397; obj: 8.172e-01; abs: 3.142e-07; rel: 3.845e-07; norm: 1.606e-01
## It: 398; obj: 8.172e-01; abs: 4.241e-07; rel: 5.190e-07; norm: 1.606e-01
## It: 399; obj: 8.172e-01; abs: 5.346e-07; rel: 6.541e-07; norm: 1.606e-01
## It: 400; obj: 8.172e-01; abs: 6.346e-07; rel: 7.766e-07; norm: 1.606e-01
## It: 401; obj: 8.172e-01; abs: 7.164e-07; rel: 8.767e-07; norm: 1.606e-01
## It: 402; obj: 8.172e-01; abs: 7.767e-07; rel: 9.504e-07; norm: 1.606e-01
## It: 403; obj: 8.172e-01; abs: 8.167e-07; rel: 9.994e-07; norm: 1.606e-01
## It: 404; obj: 8.172e-01; abs: 8.426e-07; rel: 1.031e-06; norm: 1.606e-01
## It: 405; obj: 8.172e-01; abs: 8.642e-07; rel: 1.057e-06; norm: 1.606e-01
## It: 406; obj: 8.172e-01; abs: 8.938e-07; rel: 1.094e-06; norm: 1.606e-01
```

```
## It: 407; obj: 8.172e-01; abs: 9.446e-07; rel: 1.156e-06; norm: 1.606e-01
## It: 408; obj: 8.172e-01; abs: 1.029e-06; rel: 1.259e-06; norm: 1.606e-01
## It: 409; obj: 8.172e-01; abs: 1.157e-06; rel: 1.416e-06; norm: 1.606e-01
## It: 410; obj: 8.172e-01; abs: 1.333e-06; rel: 1.631e-06; norm: 1.606e-01
## It: 411; obj: 8.172e-01; abs: 1.559e-06; rel: 1.907e-06; norm: 1.606e-01
## It: 412; obj: 8.172e-01; abs: 1.829e-06; rel: 2.238e-06; norm: 1.606e-01
## It: 413; obj: 8.172e-01; abs: 2.136e-06; rel: 2.613e-06; norm: 1.606e-01
## It: 414; obj: 8.172e-01; abs: 2.469e-06; rel: 3.021e-06; norm: 1.606e-01
## It: 415; obj: 8.172e-01; abs: 2.818e-06; rel: 3.448e-06; norm: 1.606e-01
## It: 416; obj: 8.172e-01; abs: 3.174e-06; rel: 3.885e-06; norm: 1.606e-01
## It: 417; obj: 8.172e-01; abs: 3.536e-06; rel: 4.327e-06; norm: 1.606e-01
## It: 418; obj: 8.172e-01; abs: 3.902e-06; rel: 4.775e-06; norm: 1.606e-01
## It: 419; obj: 8.172e-01; abs: 4.281e-06; rel: 5.239e-06; norm: 1.606e-01
## It: 420; obj: 8.172e-01; abs: 4.684e-06; rel: 5.732e-06; norm: 1.606e-01
## It: 421; obj: 8.172e-01; abs: 5.125e-06; rel: 6.272e-06; norm: 1.606e-01
## It: 422; obj: 8.171e-01; abs: 5.620e-06; rel: 6.877e-06; norm: 1.606e-01
## It: 423; obj: 8.171e-01; abs: 6.183e-06; rel: 7.566e-06; norm: 1.606e-01
## It: 424; obj: 8.171e-01; abs: 6.825e-06; rel: 8.352e-06; norm: 1.606e-01
## It: 425; obj: 8.171e-01; abs: 7.552e-06; rel: 9.241e-06; norm: 1.606e-01
## It: 426; obj: 8.171e-01; abs: 8.363e-06; rel: 1.023e-05; norm: 1.606e-01
## It: 427; obj: 8.171e-01; abs: 9.252e-06; rel: 1.132e-05; norm: 1.606e-01
## It: 428; obj: 8.171e-01; abs: 1.021e-05; rel: 1.250e-05; norm: 1.606e-01
## It: 429; obj: 8.171e-01; abs: 1.123e-05; rel: 1.374e-05; norm: 1.607e-01
## It: 430; obj: 8.171e-01; abs: 1.229e-05; rel: 1.504e-05; norm: 1.607e-01
## It: 431; obj: 8.171e-01; abs: 1.340e-05; rel: 1.640e-05; norm: 1.607e-01
## It: 432; obj: 8.170e-01; abs: 1.455e-05; rel: 1.781e-05; norm: 1.607e-01
## It: 433; obj: 8.170e-01; abs: 1.576e-05; rel: 1.929e-05; norm: 1.607e-01
## It: 434; obj: 8.170e-01; abs: 1.704e-05; rel: 2.086e-05; norm: 1.607e-01
## It: 435; obj: 8.170e-01; abs: 1.841e-05; rel: 2.253e-05; norm: 1.607e-01
## It: 436; obj: 8.170e-01; abs: 1.990e-05; rel: 2.436e-05; norm: 1.607e-01
## It: 437; obj: 8.170e-01; abs: 2.153e-05; rel: 2.636e-05; norm: 1.607e-01
## It: 438; obj: 8.169e-01; abs: 2.333e-05; rel: 2.856e-05; norm: 1.607e-01
## It: 439; obj: 8.169e-01; abs: 2.533e-05; rel: 3.101e-05; norm: 1.607e-01
## It: 440; obj: 8.169e-01; abs: 2.753e-05; rel: 3.371e-05; norm: 1.607e-01
## It: 441; obj: 8.169e-01; abs: 2.996e-05; rel: 3.668e-05; norm: 1.607e-01
## It: 442; obj: 8.168e-01; abs: 3.261e-05; rel: 3.992e-05; norm: 1.607e-01
## It: 443; obj: 8.168e-01; abs: 3.548e-05; rel: 4.343e-05; norm: 1.607e-01
## It: 444; obj: 8.167e-01; abs: 3.855e-05; rel: 4.719e-05; norm: 1.607e-01
## It: 445; obj: 8.167e-01; abs: 4.181e-05; rel: 5.119e-05; norm: 1.607e-01
## It: 446; obj: 8.167e-01; abs: 4.523e-05; rel: 5.538e-05; norm: 1.607e-01
## It: 447; obj: 8.166e-01; abs: 4.879e-05; rel: 5.975e-05; norm: 1.607e-01
## It: 448; obj: 8.166e-01; abs: 5.247e-05; rel: 6.425e-05; norm: 1.607e-01
## It: 449; obj: 8.165e-01; abs: 5.623e-05; rel: 6.887e-05; norm: 1.607e-01
## It: 450; obj: 8.164e-01; abs: 6.007e-05; rel: 7.357e-05; norm: 1.606e-01
## It: 451; obj: 8.164e-01; abs: 6.397e-05; rel: 7.835e-05; norm: 1.606e-01
## It: 452; obj: 8.163e-01; abs: 6.793e-05; rel: 8.320e-05; norm: 1.606e-01
## It: 453; obj: 8.162e-01; abs: 7.196e-05; rel: 8.816e-05; norm: 1.606e-01
## It: 454; obj: 8.162e-01; abs: 7.609e-05; rel: 9.322e-05; norm: 1.606e-01
## It: 455; obj: 8.161e-01; abs: 8.033e-05; rel: 9.843e-05; norm: 1.606e-01
## It: 456; obj: 8.160e-01; abs: 8.467e-05; rel: 1.037e-04; norm: 1.606e-01
## It: 457; obj: 8.159e-01; abs: 8.901e-05; rel: 1.091e-04; norm: 1.606e-01
## It: 458; obj: 8.158e-01; abs: 9.318e-05; rel: 1.142e-04; norm: 1.607e-01
## It: 459; obj: 8.157e-01; abs: 9.688e-05; rel: 1.187e-04; norm: 1.607e-01
## It: 460; obj: 8.156e-01; abs: 9.971e-05; rel: 1.222e-04; norm: 1.607e-01
```

```
## It: 461; obj: 8.155e-01; abs: 1.013e-04; rel: 1.242e-04; norm: 1.607e-01
## It: 462; obj: 8.154e-01; abs: 1.015e-04; rel: 1.244e-04; norm: 1.607e-01
## It: 463; obj: 8.153e-01; abs: 1.002e-04; rel: 1.229e-04; norm: 1.607e-01
## It: 464; obj: 8.152e-01; abs: 9.772e-05; rel: 1.199e-04; norm: 1.607e-01
## It: 465; obj: 8.151e-01; abs: 9.431e-05; rel: 1.157e-04; norm: 1.606e-01
## It: 466; obj: 8.150e-01; abs: 9.047e-05; rel: 1.110e-04; norm: 1.605e-01
## It: 467; obj: 8.149e-01; abs: 8.702e-05; rel: 1.068e-04; norm: 1.605e-01
## It: 468; obj: 8.149e-01; abs: 8.492e-05; rel: 1.042e-04; norm: 1.604e-01
## It: 469; obj: 8.148e-01; abs: 8.470e-05; rel: 1.039e-04; norm: 1.604e-01
## It: 470; obj: 8.147e-01; abs: 8.594e-05; rel: 1.055e-04; norm: 1.603e-01
## It: 471; obj: 8.146e-01; abs: 8.737e-05; rel: 1.072e-04; norm: 1.603e-01
## It: 472; obj: 8.145e-01; abs: 8.769e-05; rel: 1.076e-04; norm: 1.603e-01
## It: 473; obj: 8.144e-01; abs: 8.641e-05; rel: 1.061e-04; norm: 1.602e-01
## It: 474; obj: 8.143e-01; abs: 8.416e-05; rel: 1.033e-04; norm: 1.602e-01
## It: 475; obj: 8.143e-01; abs: 8.229e-05; rel: 1.010e-04; norm: 1.602e-01
## It: 476; obj: 8.142e-01; abs: 8.227e-05; rel: 1.010e-04; norm: 1.602e-01
## It: 477; obj: 8.141e-01; abs: 8.524e-05; rel: 1.047e-04; norm: 1.602e-01
## It: 478; obj: 8.140e-01; abs: 9.183e-05; rel: 1.128e-04; norm: 1.602e-01
## It: 479; obj: 8.139e-01; abs: 1.022e-04; rel: 1.256e-04; norm: 1.602e-01
## It: 480; obj: 8.138e-01; abs: 1.164e-04; rel: 1.430e-04; norm: 1.602e-01
## It: 481; obj: 8.136e-01; abs: 1.336e-04; rel: 1.642e-04; norm: 1.603e-01
## It: 482; obj: 8.135e-01; abs: 1.517e-04; rel: 1.864e-04; norm: 1.604e-01
## It: 483; obj: 8.133e-01; abs: 1.638e-04; rel: 2.013e-04; norm: 1.604e-01
## It: 484; obj: 8.132e-01; abs: 1.593e-04; rel: 1.959e-04; norm: 1.603e-01
## It: 485; obj: 8.130e-01; abs: 1.349e-04; rel: 1.659e-04; norm: 1.601e-01
## It: 486; obj: 8.129e-01; abs: 1.039e-04; rel: 1.278e-04; norm: 1.597e-01
## It: 487; obj: 8.128e-01; abs: 8.510e-05; rel: 1.047e-04; norm: 1.593e-01
## It: 488; obj: 8.128e-01; abs: 8.563e-05; rel: 1.053e-04; norm: 1.589e-01
## It: 489; obj: 8.127e-01; abs: 9.458e-05; rel: 1.164e-04; norm: 1.586e-01
## It: 490; obj: 8.126e-01; abs: 9.419e-05; rel: 1.159e-04; norm: 1.584e-01
## It: 491; obj: 8.125e-01; abs: 8.647e-05; rel: 1.064e-04; norm: 1.582e-01
## It: 492; obj: 8.124e-01; abs: 9.149e-05; rel: 1.126e-04; norm: 1.580e-01
## It: 493; obj: 8.123e-01; abs: 1.140e-04; rel: 1.404e-04; norm: 1.578e-01
## It: 494; obj: 8.121e-01; abs: 1.347e-04; rel: 1.658e-04; norm: 1.576e-01
## It: 495; obj: 8.120e-01; abs: 1.350e-04; rel: 1.662e-04; norm: 1.574e-01
## It: 496; obj: 8.119e-01; abs: 1.170e-04; rel: 1.441e-04; norm: 1.572e-01
## It: 497; obj: 8.118e-01; abs: 9.895e-05; rel: 1.219e-04; norm: 1.571e-01
## It: 498; obj: 8.117e-01; abs: 9.999e-05; rel: 1.232e-04; norm: 1.570e-01
## It: 499; obj: 8.116e-01; abs: 1.287e-04; rel: 1.586e-04; norm: 1.569e-01
## It: 500; obj: 8.114e-01; abs: 1.780e-04; rel: 2.193e-04; norm: 1.569e-01
## It: 501; obj: 8.112e-01; abs: 2.232e-04; rel: 2.751e-04; norm: 1.568e-01
## It: 502; obj: 8.109e-01; abs: 2.296e-04; rel: 2.830e-04; norm: 1.567e-01
## It: 503; obj: 8.107e-01; abs: 1.994e-04; rel: 2.458e-04; norm: 1.566e-01
## It: 504; obj: 8.105e-01; abs: 1.944e-04; rel: 2.397e-04; norm: 1.564e-01
## It: 505; obj: 8.103e-01; abs: 2.285e-04; rel: 2.819e-04; norm: 1.563e-01
## It: 506; obj: 8.101e-01; abs: 2.280e-04; rel: 2.814e-04; norm: 1.562e-01
## It: 507; obj: 8.099e-01; abs: 1.548e-04; rel: 1.911e-04; norm: 1.561e-01
## It: 508; obj: 8.099e-01; abs: 7.038e-05; rel: 8.690e-05; norm: 1.560e-01
## It: 509; obj: 8.098e-01; abs: 4.729e-05; rel: 5.839e-05; norm: 1.559e-01
## It: 510; obj: 8.097e-01; abs: 8.869e-05; rel: 1.095e-04; norm: 1.558e-01
## It: 511; obj: 8.096e-01; abs: 1.474e-04; rel: 1.820e-04; norm: 1.557e-01
## It: 512; obj: 8.094e-01; abs: 1.787e-04; rel: 2.208e-04; norm: 1.556e-01
## It: 513; obj: 8.092e-01; abs: 1.737e-04; rel: 2.146e-04; norm: 1.556e-01
## It: 514; obj: 8.091e-01; abs: 1.549e-04; rel: 1.915e-04; norm: 1.555e-01
```

```
## It: 515; obj: 8.089e-01; abs: 1.435e-04; rel: 1.774e-04; norm: 1.554e-01
## It: 516; obj: 8.088e-01; abs: 1.396e-04; rel: 1.726e-04; norm: 1.553e-01
## It: 517; obj: 8.087e-01; abs: 1.349e-04; rel: 1.668e-04; norm: 1.552e-01
## It: 518; obj: 8.085e-01; abs: 1.277e-04; rel: 1.579e-04; norm: 1.550e-01
## It: 519; obj: 8.084e-01; abs: 1.233e-04; rel: 1.526e-04; norm: 1.549e-01
## It: 520; obj: 8.083e-01; abs: 1.249e-04; rel: 1.546e-04; norm: 1.547e-01
## It: 521; obj: 8.081e-01; abs: 1.285e-04; rel: 1.590e-04; norm: 1.546e-01
## It: 522; obj: 8.080e-01; abs: 1.272e-04; rel: 1.574e-04; norm: 1.545e-01
## It: 523; obj: 8.079e-01; abs: 1.176e-04; rel: 1.456e-04; norm: 1.544e-01
## It: 524; obj: 8.078e-01; abs: 1.024e-04; rel: 1.268e-04; norm: 1.543e-01
## It: 525; obj: 8.077e-01; abs: 8.726e-05; rel: 1.080e-04; norm: 1.543e-01
## It: 526; obj: 8.076e-01; abs: 7.660e-05; rel: 9.484e-05; norm: 1.543e-01
## It: 527; obj: 8.076e-01; abs: 7.175e-05; rel: 8.885e-05; norm: 1.543e-01
## It: 528; obj: 8.075e-01; abs: 7.130e-05; rel: 8.829e-05; norm: 1.543e-01
## It: 529; obj: 8.074e-01; abs: 7.222e-05; rel: 8.944e-05; norm: 1.544e-01
## It: 530; obj: 8.074e-01; abs: 7.004e-05; rel: 8.674e-05; norm: 1.544e-01
## It: 531; obj: 8.073e-01; abs: 5.951e-05; rel: 7.370e-05; norm: 1.544e-01
## It: 532; obj: 8.073e-01; abs: 3.956e-05; rel: 4.900e-05; norm: 1.544e-01
## It: 533; obj: 8.072e-01; abs: 1.916e-05; rel: 2.374e-05; norm: 1.544e-01
## It: 534; obj: 8.072e-01; abs: 1.319e-05; rel: 1.634e-05; norm: 1.544e-01
## It: 535; obj: 8.072e-01; abs: 2.805e-05; rel: 3.474e-05; norm: 1.544e-01
## It: 536; obj: 8.071e-01; abs: 5.389e-05; rel: 6.676e-05; norm: 1.544e-01
## It: 537; obj: 8.071e-01; abs: 7.398e-05; rel: 9.165e-05; norm: 1.544e-01
## It: 538; obj: 8.070e-01; abs: 7.998e-05; rel: 9.910e-05; norm: 1.544e-01
## It: 539; obj: 8.069e-01; abs: 7.515e-05; rel: 9.312e-05; norm: 1.544e-01
## It: 540; obj: 8.068e-01; abs: 6.515e-05; rel: 8.074e-05; norm: 1.545e-01
## It: 541; obj: 8.068e-01; abs: 5.217e-05; rel: 6.466e-05; norm: 1.546e-01
## It: 542; obj: 8.068e-01; abs: 3.841e-05; rel: 4.761e-05; norm: 1.546e-01
## It: 543; obj: 8.067e-01; abs: 3.010e-05; rel: 3.731e-05; norm: 1.547e-01
## It: 544; obj: 8.067e-01; abs: 3.393e-05; rel: 4.205e-05; norm: 1.547e-01
## It: 545; obj: 8.066e-01; abs: 5.058e-05; rel: 6.271e-05; norm: 1.548e-01
## It: 546; obj: 8.066e-01; abs: 7.443e-05; rel: 9.227e-05; norm: 1.549e-01
## It: 547; obj: 8.065e-01; abs: 9.884e-05; rel: 1.225e-04; norm: 1.549e-01
## It: 548; obj: 8.063e-01; abs: 1.205e-04; rel: 1.494e-04; norm: 1.550e-01
## It: 549; obj: 8.062e-01; abs: 1.386e-04; rel: 1.719e-04; norm: 1.550e-01
## It: 550; obj: 8.061e-01; abs: 1.503e-04; rel: 1.864e-04; norm: 1.550e-01
## It: 551; obj: 8.059e-01; abs: 1.496e-04; rel: 1.856e-04; norm: 1.551e-01
## It: 552; obj: 8.058e-01; abs: 1.378e-04; rel: 1.710e-04; norm: 1.551e-01
## It: 553; obj: 8.056e-01; abs: 1.304e-04; rel: 1.619e-04; norm: 1.552e-01
## It: 554; obj: 8.055e-01; abs: 1.452e-04; rel: 1.803e-04; norm: 1.552e-01
## It: 555; obj: 8.053e-01; abs: 1.834e-04; rel: 2.277e-04; norm: 1.553e-01
## It: 556; obj: 8.051e-01; abs: 2.308e-04; rel: 2.866e-04; norm: 1.553e-01
## It: 557; obj: 8.048e-01; abs: 2.718e-04; rel: 3.376e-04; norm: 1.554e-01
## It: 558; obj: 8.045e-01; abs: 2.975e-04; rel: 3.697e-04; norm: 1.555e-01
## It: 559; obj: 8.042e-01; abs: 3.042e-04; rel: 3.782e-04; norm: 1.556e-01
## It: 560; obj: 8.039e-01; abs: 2.900e-04; rel: 3.606e-04; norm: 1.557e-01
## It: 561; obj: 8.037e-01; abs: 2.588e-04; rel: 3.220e-04; norm: 1.559e-01
## It: 562; obj: 8.034e-01; abs: 2.254e-04; rel: 2.805e-04; norm: 1.561e-01
## It: 563; obj: 8.032e-01; abs: 2.067e-04; rel: 2.573e-04; norm: 1.563e-01
## It: 564; obj: 8.030e-01; abs: 2.081e-04; rel: 2.591e-04; norm: 1.565e-01
## It: 565; obj: 8.028e-01; abs: 2.199e-04; rel: 2.738e-04; norm: 1.567e-01
## It: 566; obj: 8.026e-01; abs: 2.198e-04; rel: 2.738e-04; norm: 1.568e-01
## It: 567; obj: 8.024e-01; abs: 1.787e-04; rel: 2.226e-04; norm: 1.569e-01
## It: 568; obj: 8.023e-01; abs: 1.005e-04; rel: 1.252e-04; norm: 1.568e-01
```

```
## It: 569; obj: 8.022e-01; abs: 5.581e-05; rel: 6.956e-05; norm: 1.567e-01
## It: 570; obj: 8.021e-01; abs: 9.376e-05; rel: 1.169e-04; norm: 1.566e-01
## It: 571; obj: 8.020e-01; abs: 1.685e-04; rel: 2.100e-04; norm: 1.565e-01
## It: 572; obj: 8.018e-01; abs: 2.084e-04; rel: 2.599e-04; norm: 1.565e-01
## It: 573; obj: 8.016e-01; abs: 2.022e-04; rel: 2.522e-04; norm: 1.564e-01
## It: 574; obj: 8.014e-01; abs: 1.917e-04; rel: 2.391e-04; norm: 1.564e-01
## It: 575; obj: 8.012e-01; abs: 2.103e-04; rel: 2.624e-04; norm: 1.564e-01
## It: 576; obj: 8.009e-01; abs: 2.589e-04; rel: 3.232e-04; norm: 1.563e-01
## It: 577; obj: 8.006e-01; abs: 3.239e-04; rel: 4.044e-04; norm: 1.562e-01
## It: 578; obj: 8.002e-01; abs: 3.937e-04; rel: 4.917e-04; norm: 1.560e-01
## It: 579; obj: 7.997e-01; abs: 4.688e-04; rel: 5.859e-04; norm: 1.559e-01
## It: 580; obj: 7.992e-01; abs: 5.666e-04; rel: 7.085e-04; norm: 1.557e-01
## It: 581; obj: 7.984e-01; abs: 7.148e-04; rel: 8.944e-04; norm: 1.555e-01
## It: 582; obj: 7.975e-01; abs: 9.161e-04; rel: 1.147e-03; norm: 1.553e-01
## It: 583; obj: 7.964e-01; abs: 1.112e-03; rel: 1.395e-03; norm: 1.552e-01
## It: 584; obj: 7.951e-01; abs: 1.332e-03; rel: 1.673e-03; norm: 1.550e-01
## It: 585; obj: 7.931e-01; abs: 1.991e-03; rel: 2.505e-03; norm: 1.549e-01
## It: 586; obj: 7.893e-01; abs: 3.793e-03; rel: 4.782e-03; norm: 1.548e-01
## It: 587; obj: 7.842e-01; abs: 5.065e-03; rel: 6.417e-03; norm: 1.539e-01
## It: 588; obj: 7.794e-01; abs: 4.847e-03; rel: 6.180e-03; norm: 1.532e-01
## It: 589; obj: 7.752e-01; abs: 4.222e-03; rel: 5.417e-03; norm: 1.527e-01
## It: 590; obj: 7.731e-01; abs: 2.074e-03; rel: 2.676e-03; norm: 1.521e-01
## It: 591; obj: 7.725e-01; abs: 6.284e-04; rel: 8.129e-04; norm: 1.516e-01
## It: 592; obj: 7.719e-01; abs: 5.613e-04; rel: 7.267e-04; norm: 1.512e-01
## It: 593; obj: 7.709e-01; abs: 1.030e-03; rel: 1.334e-03; norm: 1.509e-01
## It: 594; obj: 7.699e-01; abs: 9.376e-04; rel: 1.216e-03; norm: 1.508e-01
## It: 595; obj: 7.697e-01; abs: 2.744e-04; rel: 3.563e-04; norm: 1.508e-01
## It: 596; obj: 7.696e-01; abs: 4.771e-05; rel: 6.199e-05; norm: 1.510e-01
## It: 597; obj: 7.692e-01; abs: 4.148e-04; rel: 5.390e-04; norm: 1.512e-01
## It: 598; obj: 7.685e-01; abs: 6.718e-04; rel: 8.734e-04; norm: 1.512e-01
## It: 599; obj: 7.681e-01; abs: 4.238e-04; rel: 5.515e-04; norm: 1.509e-01
## It: 600; obj: 7.680e-01; abs: 6.154e-05; rel: 8.012e-05; norm: 1.506e-01
## It: 601; obj: 7.680e-01; abs: 3.303e-05; rel: 4.300e-05; norm: 1.504e-01
## It: 602; obj: 7.678e-01; abs: 2.496e-04; rel: 3.249e-04; norm: 1.504e-01
## It: 603; obj: 7.674e-01; abs: 3.256e-04; rel: 4.241e-04; norm: 1.504e-01
## It: 604; obj: 7.673e-01; abs: 1.571e-04; rel: 2.047e-04; norm: 1.503e-01
## It: 605; obj: 7.673e-01; abs: 1.739e-05; rel: 2.266e-05; norm: 1.503e-01
## It: 606; obj: 7.673e-01; abs: 4.549e-05; rel: 5.929e-05; norm: 1.503e-01
## It: 607; obj: 7.673e-01; abs: 2.982e-05; rel: 3.887e-05; norm: 1.503e-01
## It: 608; obj: 7.672e-01; abs: 1.147e-04; rel: 1.495e-04; norm: 1.504e-01
## It: 609; obj: 7.670e-01; abs: 1.510e-04; rel: 1.969e-04; norm: 1.504e-01
## It: 610; obj: 7.669e-01; abs: 1.283e-04; rel: 1.672e-04; norm: 1.505e-01
## It: 611; obj: 7.668e-01; abs: 7.389e-05; rel: 9.634e-05; norm: 1.505e-01
## It: 612; obj: 7.668e-01; abs: 1.905e-05; rel: 2.485e-05; norm: 1.506e-01
## It: 613; obj: 7.668e-01; abs: 2.131e-05; rel: 2.779e-05; norm: 1.506e-01
## It: 614; obj: 7.669e-01; abs: 2.888e-05; rel: 3.766e-05; norm: 1.506e-01
## It: 615; obj: 7.669e-01; abs: 9.747e-06; rel: 1.271e-05; norm: 1.505e-01
## It: 616; obj: 7.668e-01; abs: 6.523e-05; rel: 8.507e-05; norm: 1.505e-01
## It: 617; obj: 7.667e-01; abs: 8.790e-05; rel: 1.146e-04; norm: 1.504e-01
## It: 618; obj: 7.666e-01; abs: 6.160e-05; rel: 8.034e-05; norm: 1.504e-01
## It: 619; obj: 7.666e-01; abs: 9.427e-06; rel: 1.230e-05; norm: 1.503e-01
## It: 620; obj: 7.667e-01; abs: 3.098e-05; rel: 4.041e-05; norm: 1.503e-01
## It: 621; obj: 7.667e-01; abs: 3.202e-05; rel: 4.177e-05; norm: 1.503e-01
## It: 622; obj: 7.667e-01; abs: 2.090e-06; rel: 2.726e-06; norm: 1.504e-01
```

```
## It: 623; obj: 7.667e-01; abs: 3.895e-05; rel: 5.080e-05; norm: 1.504e-01
## It: 624; obj: 7.666e-01; abs: 4.954e-05; rel: 6.462e-05; norm: 1.504e-01
## It: 625; obj: 7.666e-01; abs: 3.167e-05; rel: 4.132e-05; norm: 1.505e-01
## It: 626; obj: 7.666e-01; abs: 3.670e-06; rel: 4.787e-06; norm: 1.505e-01
## It: 627; obj: 7.666e-01; abs: 1.511e-05; rel: 1.971e-05; norm: 1.505e-01
## It: 628; obj: 7.666e-01; abs: 1.607e-05; rel: 2.096e-05; norm: 1.505e-01
## It: 629; obj: 7.666e-01; abs: 3.016e-06; rel: 3.934e-06; norm: 1.505e-01
## It: 630; obj: 7.666e-01; abs: 1.260e-05; rel: 1.644e-05; norm: 1.505e-01
## It: 631; obj: 7.666e-01; abs: 2.006e-05; rel: 2.616e-05; norm: 1.504e-01
## It: 632; obj: 7.666e-01; abs: 1.620e-05; rel: 2.114e-05; norm: 1.504e-01
## It: 633; obj: 7.666e-01; abs: 5.964e-06; rel: 7.780e-06; norm: 1.504e-01
## It: 634; obj: 7.666e-01; abs: 2.846e-06; rel: 3.712e-06; norm: 1.504e-01
## It: 635; obj: 7.666e-01; abs: 5.298e-06; rel: 6.912e-06; norm: 1.504e-01
## It: 636; obj: 7.666e-01; abs: 1.688e-06; rel: 2.202e-06; norm: 1.504e-01
## It: 637; obj: 7.666e-01; abs: 3.910e-06; rel: 5.100e-06; norm: 1.504e-01
## It: 638; obj: 7.666e-01; abs: 7.029e-06; rel: 9.169e-06; norm: 1.504e-01
## It: 639; obj: 7.665e-01; abs: 5.894e-06; rel: 7.689e-06; norm: 1.504e-01
## It: 640; obj: 7.665e-01; abs: 2.242e-06; rel: 2.925e-06; norm: 1.504e-01
## It: 641; obj: 7.665e-01; abs: 5.979e-07; rel: 7.800e-07; norm: 1.505e-01
## It: 642; obj: 7.665e-01; abs: 6.650e-07; rel: 8.676e-07; norm: 1.505e-01
## It: 643; obj: 7.665e-01; abs: 1.250e-06; rel: 1.630e-06; norm: 1.505e-01
## It: 644; obj: 7.665e-01; abs: 2.840e-06; rel: 3.705e-06; norm: 1.505e-01
## It: 645; obj: 7.665e-01; abs: 2.644e-06; rel: 3.449e-06; norm: 1.505e-01
## It: 646; obj: 7.665e-01; abs: 1.135e-06; rel: 1.481e-06; norm: 1.505e-01
## It: 647; obj: 7.665e-01; abs: 1.964e-07; rel: 2.562e-07; norm: 1.504e-01
## It: 648; obj: 7.665e-01; abs: 3.884e-07; rel: 5.067e-07; norm: 1.504e-01
## It: 649; obj: 7.665e-01; abs: 3.946e-07; rel: 5.148e-07; norm: 1.504e-01
## It: 650; obj: 7.665e-01; abs: 1.360e-06; rel: 1.774e-06; norm: 1.504e-01
## It: 651; obj: 7.665e-01; abs: 1.831e-06; rel: 2.389e-06; norm: 1.504e-01
## It: 652; obj: 7.665e-01; abs: 1.603e-06; rel: 2.091e-06; norm: 1.504e-01
## It: 653; obj: 7.665e-01; abs: 8.752e-07; rel: 1.142e-06; norm: 1.504e-01
## It: 654; obj: 7.665e-01; abs: 3.093e-08; rel: 4.035e-08; norm: 1.504e-01
## It: 655; obj: 7.665e-01; abs: 5.436e-07; rel: 7.092e-07; norm: 1.504e-01
## It: 656; obj: 7.665e-01; abs: 5.824e-07; rel: 7.599e-07; norm: 1.505e-01
## It: 657; obj: 7.665e-01; abs: 5.650e-08; rel: 7.371e-08; norm: 1.505e-01
## It: 658; obj: 7.665e-01; abs: 7.562e-07; rel: 9.866e-07; norm: 1.505e-01
## It: 659; obj: 7.665e-01; abs: 1.370e-06; rel: 1.787e-06; norm: 1.505e-01
## It: 660; obj: 7.665e-01; abs: 1.378e-06; rel: 1.798e-06; norm: 1.505e-01
## It: 661; obj: 7.665e-01; abs: 7.402e-07; rel: 9.657e-07; norm: 1.505e-01
## It: 662; obj: 7.665e-01; abs: 1.716e-07; rel: 2.238e-07; norm: 1.505e-01
## It: 663; obj: 7.665e-01; abs: 8.133e-07; rel: 1.061e-06; norm: 1.504e-01
## It: 664; obj: 7.665e-01; abs: 8.203e-07; rel: 1.070e-06; norm: 1.504e-01
## It: 665; obj: 7.665e-01; abs: 2.246e-07; rel: 2.931e-07; norm: 1.504e-01
## It: 666; obj: 7.665e-01; abs: 5.847e-07; rel: 7.628e-07; norm: 1.504e-01
## It: 667; obj: 7.665e-01; abs: 1.111e-06; rel: 1.449e-06; norm: 1.504e-01
## It: 668; obj: 7.665e-01; abs: 1.050e-06; rel: 1.369e-06; norm: 1.504e-01
## It: 669; obj: 7.665e-01; abs: 4.670e-07; rel: 6.093e-07; norm: 1.504e-01
## It: 670; obj: 7.665e-01; abs: 2.569e-07; rel: 3.351e-07; norm: 1.504e-01
## It: 671; obj: 7.665e-01; abs: 6.792e-07; rel: 8.860e-07; norm: 1.504e-01
## It: 672; obj: 7.665e-01; abs: 5.848e-07; rel: 7.629e-07; norm: 1.505e-01
## It: 673; obj: 7.665e-01; abs: 1.095e-07; rel: 1.428e-07; norm: 1.505e-01
## It: 674; obj: 7.665e-01; abs: 3.942e-07; rel: 5.142e-07; norm: 1.505e-01
## It: 675; obj: 7.665e-01; abs: 6.298e-07; rel: 8.216e-07; norm: 1.505e-01
## It: 676; obj: 7.665e-01; abs: 5.376e-07; rel: 7.013e-07; norm: 1.505e-01
```

```
## It: 677; obj: 7.665e-01; abs: 2.606e-07; rel: 3.400e-07; norm: 1.505e-01
## It: 678; obj: 7.665e-01; abs: 2.071e-08; rel: 2.702e-08; norm: 1.505e-01
## It: 679; obj: 7.665e-01; abs: 2.100e-07; rel: 2.739e-07; norm: 1.504e-01
## It: 680; obj: 7.665e-01; abs: 2.896e-07; rel: 3.778e-07; norm: 1.504e-01
## It: 681; obj: 7.665e-01; abs: 2.539e-07; rel: 3.312e-07; norm: 1.504e-01
## It: 682; obj: 7.665e-01; abs: 8.939e-08; rel: 1.166e-07; norm: 1.504e-01
## It: 683; obj: 7.665e-01; abs: 1.738e-07; rel: 2.268e-07; norm: 1.504e-01
## It: 684; obj: 7.665e-01; abs: 4.186e-07; rel: 5.461e-07; norm: 1.504e-01
## It: 685; obj: 7.665e-01; abs: 4.856e-07; rel: 6.335e-07; norm: 1.504e-01
## It: 686; obj: 7.665e-01; abs: 2.930e-07; rel: 3.822e-07; norm: 1.504e-01
## It: 687; obj: 7.665e-01; abs: 7.301e-08; rel: 9.525e-08; norm: 1.504e-01
## It: 688; obj: 7.665e-01; abs: 3.910e-07; rel: 5.101e-07; norm: 1.504e-01
## It: 689; obj: 7.665e-01; abs: 4.525e-07; rel: 5.903e-07; norm: 1.505e-01
## It: 690; obj: 7.665e-01; abs: 2.142e-07; rel: 2.795e-07; norm: 1.505e-01
## It: 691; obj: 7.665e-01; abs: 1.668e-07; rel: 2.176e-07; norm: 1.505e-01
## It: 692; obj: 7.665e-01; abs: 4.448e-07; rel: 5.803e-07; norm: 1.505e-01
## It: 693; obj: 7.665e-01; abs: 4.545e-07; rel: 5.930e-07; norm: 1.505e-01
## It: 694; obj: 7.665e-01; abs: 2.136e-07; rel: 2.786e-07; norm: 1.505e-01
## It: 695; obj: 7.665e-01; abs: 1.076e-07; rel: 1.404e-07; norm: 1.504e-01
## It: 696; obj: 7.665e-01; abs: 3.124e-07; rel: 4.075e-07; norm: 1.504e-01
## It: 697; obj: 7.665e-01; abs: 3.042e-07; rel: 3.968e-07; norm: 1.504e-01
## It: 698; obj: 7.665e-01; abs: 1.270e-07; rel: 1.657e-07; norm: 1.504e-01
## It: 699; obj: 7.665e-01; abs: 9.100e-08; rel: 1.187e-07; norm: 1.504e-01
## It: 700; obj: 7.665e-01; abs: 2.339e-07; rel: 3.052e-07; norm: 1.504e-01
## It: 701; obj: 7.665e-01; abs: 2.567e-07; rel: 3.349e-07; norm: 1.504e-01
## It: 702; obj: 7.665e-01; abs: 1.799e-07; rel: 2.347e-07; norm: 1.504e-01
## It: 703; obj: 7.665e-01; abs: 4.952e-08; rel: 6.460e-08; norm: 1.504e-01
## It: 704; obj: 7.665e-01; abs: 8.823e-08; rel: 1.151e-07; norm: 1.504e-01
## It: 705; obj: 7.665e-01; abs: 1.866e-07; rel: 2.434e-07; norm: 1.504e-01
## It: 706; obj: 7.665e-01; abs: 1.979e-07; rel: 2.582e-07; norm: 1.504e-01
## It: 707; obj: 7.665e-01; abs: 9.881e-08; rel: 1.289e-07; norm: 1.505e-01
## It: 708; obj: 7.665e-01; abs: 7.602e-08; rel: 9.917e-08; norm: 1.505e-01
## It: 709; obj: 7.665e-01; abs: 2.331e-07; rel: 3.041e-07; norm: 1.505e-01
## It: 710; obj: 7.665e-01; abs: 2.723e-07; rel: 3.552e-07; norm: 1.505e-01
## It: 711; obj: 7.665e-01; abs: 1.588e-07; rel: 2.071e-07; norm: 1.505e-01
## It: 712; obj: 7.665e-01; abs: 4.430e-08; rel: 5.780e-08; norm: 1.505e-01
## It: 713; obj: 7.665e-01; abs: 2.124e-07; rel: 2.771e-07; norm: 1.504e-01
## It: 714; obj: 7.665e-01; abs: 2.421e-07; rel: 3.158e-07; norm: 1.504e-01
## It: 715; obj: 7.665e-01; abs: 1.192e-07; rel: 1.556e-07; norm: 1.504e-01
## It: 716; obj: 7.665e-01; abs: 7.387e-08; rel: 9.637e-08; norm: 1.504e-01
## It: 717; obj: 7.665e-01; abs: 2.166e-07; rel: 2.826e-07; norm: 1.504e-01
## It: 718; obj: 7.665e-01; abs: 2.292e-07; rel: 2.991e-07; norm: 1.504e-01
## It: 719; obj: 7.665e-01; abs: 1.184e-07; rel: 1.545e-07; norm: 1.504e-01
## It: 720; obj: 7.665e-01; abs: 3.703e-08; rel: 4.831e-08; norm: 1.504e-01
## It: 721; obj: 7.665e-01; abs: 1.445e-07; rel: 1.885e-07; norm: 1.504e-01
## It: 722; obj: 7.665e-01; abs: 1.547e-07; rel: 2.018e-07; norm: 1.504e-01
## It: 723; obj: 7.665e-01; abs: 8.149e-08; rel: 1.063e-07; norm: 1.505e-01
## It: 724; obj: 7.665e-01; abs: 2.181e-08; rel: 2.845e-08; norm: 1.505e-01
## It: 725; obj: 7.665e-01; abs: 1.021e-07; rel: 1.331e-07; norm: 1.505e-01
## It: 726; obj: 7.665e-01; abs: 1.316e-07; rel: 1.716e-07; norm: 1.505e-01
## It: 727; obj: 7.665e-01; abs: 1.083e-07; rel: 1.413e-07; norm: 1.505e-01
## It: 728; obj: 7.665e-01; abs: 4.518e-08; rel: 5.894e-08; norm: 1.504e-01
## It: 729; obj: 7.665e-01; abs: 3.533e-08; rel: 4.609e-08; norm: 1.504e-01
## It: 730; obj: 7.665e-01; abs: 1.012e-07; rel: 1.320e-07; norm: 1.504e-01
```

```
## It: 731; obj: 7.665e-01; abs: 1.178e-07; rel: 1.537e-07; norm: 1.504e-01
## It: 732; obj: 7.665e-01; abs: 6.770e-08; rel: 8.832e-08; norm: 1.504e-01
## It: 733; obj: 7.665e-01; abs: 2.978e-08; rel: 3.884e-08; norm: 1.504e-01
## It: 734; obj: 7.665e-01; abs: 1.209e-07; rel: 1.577e-07; norm: 1.504e-01
## It: 735; obj: 7.665e-01; abs: 1.482e-07; rel: 1.934e-07; norm: 1.504e-01
## It: 736; obj: 7.665e-01; abs: 9.102e-08; rel: 1.187e-07; norm: 1.504e-01
## It: 737; obj: 7.665e-01; abs: 1.710e-08; rel: 2.231e-08; norm: 1.504e-01
## It: 738; obj: 7.665e-01; abs: 1.086e-07; rel: 1.416e-07; norm: 1.504e-01
## It: 739; obj: 7.665e-01; abs: 1.275e-07; rel: 1.663e-07; norm: 1.504e-01
## It: 740; obj: 7.665e-01; abs: 6.657e-08; rel: 8.685e-08; norm: 1.504e-01
## It: 741; obj: 7.665e-01; abs: 3.102e-08; rel: 4.047e-08; norm: 1.504e-01
## It: 742; obj: 7.665e-01; abs: 1.040e-07; rel: 1.357e-07; norm: 1.504e-01
## It: 743; obj: 7.665e-01; abs: 1.136e-07; rel: 1.482e-07; norm: 1.505e-01
## It: 744; obj: 7.665e-01; abs: 6.365e-08; rel: 8.304e-08; norm: 1.504e-01
## It: 745; obj: 7.665e-01; abs: 8.977e-09; rel: 1.171e-08; norm: 1.504e-01
## It: 746; obj: 7.665e-01; abs: 6.254e-08; rel: 8.159e-08; norm: 1.504e-01
## It: 747; obj: 7.665e-01; abs: 7.465e-08; rel: 9.739e-08; norm: 1.504e-01
## It: 748; obj: 7.665e-01; abs: 4.854e-08; rel: 6.332e-08; norm: 1.504e-01
## It: 749; obj: 7.665e-01; abs: 3.232e-09; rel: 4.216e-09; norm: 1.504e-01
## It: 750; obj: 7.665e-01; abs: 4.019e-08; rel: 5.243e-08; norm: 1.504e-01
## It: 751; obj: 7.665e-01; abs: 6.611e-08; rel: 8.625e-08; norm: 1.504e-01
## It: 752; obj: 7.665e-01; abs: 6.560e-08; rel: 8.558e-08; norm: 1.504e-01
## It: 753; obj: 7.665e-01; abs: 3.726e-08; rel: 4.861e-08; norm: 1.504e-01
## It: 754; obj: 7.665e-01; abs: 9.359e-09; rel: 1.221e-08; norm: 1.504e-01
## It: 755; obj: 7.665e-01; abs: 5.288e-08; rel: 6.899e-08; norm: 1.504e-01
## It: 756; obj: 7.665e-01; abs: 6.833e-08; rel: 8.915e-08; norm: 1.504e-01
## It: 757; obj: 7.665e-01; abs: 4.304e-08; rel: 5.615e-08; norm: 1.504e-01
## It: 758; obj: 7.665e-01; abs: 1.136e-08; rel: 1.483e-08; norm: 1.504e-01
## It: 759; obj: 7.665e-01; abs: 6.295e-08; rel: 8.212e-08; norm: 1.505e-01
## It: 760; obj: 7.665e-01; abs: 7.949e-08; rel: 1.037e-07; norm: 1.505e-01
## It: 761; obj: 7.665e-01; abs: 5.057e-08; rel: 6.597e-08; norm: 1.504e-01
## It: 762; obj: 7.665e-01; abs: 5.107e-09; rel: 6.662e-09; norm: 1.504e-01
## It: 763; obj: 7.665e-01; abs: 5.263e-08; rel: 6.866e-08; norm: 1.504e-01
## It: 764; obj: 7.665e-01; abs: 6.434e-08; rel: 8.394e-08; norm: 1.504e-01
## It: 765; obj: 7.665e-01; abs: 3.672e-08; rel: 4.790e-08; norm: 1.504e-01
## It: 766; obj: 7.665e-01; abs: 1.003e-08; rel: 1.308e-08; norm: 1.504e-01
## It: 767; obj: 7.665e-01; abs: 4.727e-08; rel: 6.167e-08; norm: 1.504e-01
## It: 768; obj: 7.665e-01; abs: 5.617e-08; rel: 7.328e-08; norm: 1.504e-01
## It: 769; obj: 7.665e-01; abs: 3.661e-08; rel: 4.776e-08; norm: 1.504e-01
## It: 770; obj: 7.665e-01; abs: 3.292e-09; rel: 4.295e-09; norm: 1.504e-01
## It: 771; obj: 7.665e-01; abs: 2.539e-08; rel: 3.313e-08; norm: 1.504e-01
## It: 772; obj: 7.665e-01; abs: 3.734e-08; rel: 4.871e-08; norm: 1.504e-01
## It: 773; obj: 7.665e-01; abs: 3.023e-08; rel: 3.943e-08; norm: 1.504e-01
## It: 774; obj: 7.665e-01; abs: 9.490e-09; rel: 1.238e-08; norm: 1.504e-01
## It: 775; obj: 7.665e-01; abs: 1.545e-08; rel: 2.016e-08; norm: 1.504e-01
## It: 776; obj: 7.665e-01; abs: 3.425e-08; rel: 4.468e-08; norm: 1.504e-01
## It: 777; obj: 7.665e-01; abs: 3.832e-08; rel: 5.000e-08; norm: 1.504e-01
## It: 778; obj: 7.665e-01; abs: 2.443e-08; rel: 3.188e-08; norm: 1.504e-01
## It: 779; obj: 7.665e-01; abs: 2.103e-09; rel: 2.743e-09; norm: 1.504e-01
## It: 780; obj: 7.665e-01; abs: 2.796e-08; rel: 3.647e-08; norm: 1.504e-01
## It: 781; obj: 7.665e-01; abs: 3.814e-08; rel: 4.976e-08; norm: 1.504e-01
## It: 782; obj: 7.665e-01; abs: 2.548e-08; rel: 3.324e-08; norm: 1.504e-01
## It: 783; obj: 7.665e-01; abs: 3.486e-09; rel: 4.548e-09; norm: 1.504e-01
## It: 784; obj: 7.665e-01; abs: 3.150e-08; rel: 4.110e-08; norm: 1.504e-01
```

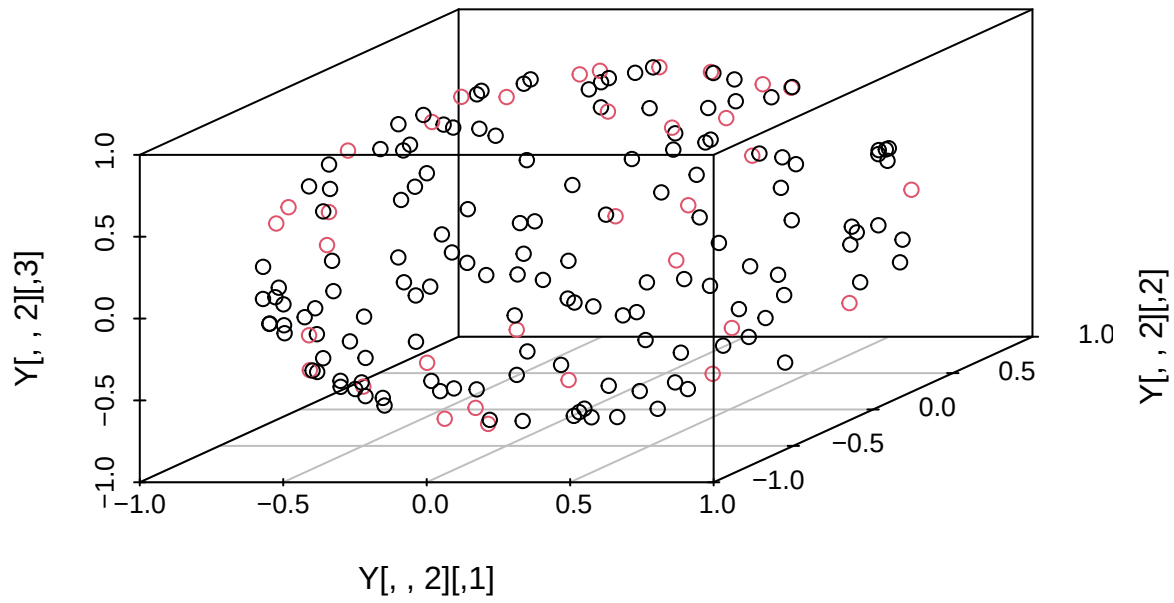
```
## It: 785; obj: 7.665e-01; abs: 4.149e-08; rel: 5.412e-08; norm: 1.504e-01
## It: 786; obj: 7.665e-01; abs: 2.780e-08; rel: 3.627e-08; norm: 1.504e-01
## It: 787; obj: 7.665e-01; abs: 2.144e-10; rel: 2.796e-10; norm: 1.504e-01
## It: 788; obj: 7.665e-01; abs: 2.497e-08; rel: 3.257e-08; norm: 1.504e-01
## It: 789; obj: 7.665e-01; abs: 3.237e-08; rel: 4.223e-08; norm: 1.504e-01
## It: 790; obj: 7.665e-01; abs: 2.021e-08; rel: 2.636e-08; norm: 1.504e-01
## It: 791; obj: 7.665e-01; abs: 2.154e-09; rel: 2.811e-09; norm: 1.504e-01
## It: 792; obj: 7.665e-01; abs: 2.114e-08; rel: 2.758e-08; norm: 1.504e-01
## It: 793; obj: 7.665e-01; abs: 2.749e-08; rel: 3.586e-08; norm: 1.504e-01
## It: 794; obj: 7.665e-01; abs: 2.026e-08; rel: 2.643e-08; norm: 1.504e-01
## It: 795; obj: 7.665e-01; abs: 5.275e-09; rel: 6.882e-09; norm: 1.504e-01
## It: 796; obj: 7.665e-01; abs: 9.517e-09; rel: 1.242e-08; norm: 1.504e-01
## It: 797; obj: 7.665e-01; abs: 1.796e-08; rel: 2.343e-08; norm: 1.504e-01
## It: 798; obj: 7.665e-01; abs: 1.736e-08; rel: 2.265e-08; norm: 1.504e-01
## It: 799; obj: 7.665e-01; abs: 8.460e-09; rel: 1.104e-08; norm: 1.504e-01
## It: 800; obj: 7.665e-01; abs: 5.007e-09; rel: 6.532e-09; norm: 1.504e-01
## It: 801; obj: 7.665e-01; abs: 1.712e-08; rel: 2.234e-08; norm: 1.504e-01
## It: 802; obj: 7.665e-01; abs: 2.173e-08; rel: 2.835e-08; norm: 1.504e-01
## It: 803; obj: 7.665e-01; abs: 1.560e-08; rel: 2.036e-08; norm: 1.504e-01
## It: 804; obj: 7.665e-01; abs: 1.126e-09; rel: 1.469e-09; norm: 1.504e-01
## It: 805; obj: 7.665e-01; abs: 1.395e-08; rel: 1.820e-08; norm: 1.504e-01
## It: 806; obj: 7.665e-01; abs: 2.070e-08; rel: 2.700e-08; norm: 1.504e-01
## It: 807; obj: 7.665e-01; abs: 1.474e-08; rel: 1.923e-08; norm: 1.504e-01
## It: 808; obj: 7.665e-01; abs: 4.379e-10; rel: 5.712e-10; norm: 1.504e-01
## It: 809; obj: 7.665e-01; abs: 1.551e-08; rel: 2.024e-08; norm: 1.504e-01
## It: 810; obj: 7.665e-01; abs: 2.142e-08; rel: 2.794e-08; norm: 1.504e-01
## It: 811; obj: 7.665e-01; abs: 1.517e-08; rel: 1.979e-08; norm: 1.504e-01
## It: 812; obj: 7.665e-01; abs: 1.385e-09; rel: 1.807e-09; norm: 1.504e-01
## It: 813; obj: 7.665e-01; abs: 1.129e-08; rel: 1.473e-08; norm: 1.504e-01
## It: 814; obj: 7.665e-01; abs: 1.593e-08; rel: 2.078e-08; norm: 1.504e-01
## It: 815; obj: 7.665e-01; abs: 1.113e-08; rel: 1.452e-08; norm: 1.504e-01
## It: 816; obj: 7.665e-01; abs: 8.478e-10; rel: 1.106e-09; norm: 1.504e-01
## It: 817; obj: 7.665e-01; abs: 8.840e-09; rel: 1.153e-08; norm: 1.504e-01
## It: 818; obj: 7.665e-01; abs: 1.335e-08; rel: 1.742e-08; norm: 1.504e-01
## It: 819; obj: 7.665e-01; abs: 1.144e-08; rel: 1.493e-08; norm: 1.504e-01
## It: 820; obj: 7.665e-01; abs: 4.870e-09; rel: 6.354e-09; norm: 1.504e-01
## It: 821; obj: 7.665e-01; abs: 3.048e-09; rel: 3.976e-09; norm: 1.504e-01
## It: 822; obj: 7.665e-01; abs: 8.882e-09; rel: 1.159e-08; norm: 1.504e-01
## It: 823; obj: 7.665e-01; abs: 1.017e-08; rel: 1.327e-08; norm: 1.504e-01
## It: 824; obj: 7.665e-01; abs: 6.250e-09; rel: 8.153e-09; norm: 1.504e-01
## It: 825; obj: 7.665e-01; abs: 1.241e-09; rel: 1.619e-09; norm: 1.504e-01
## It: 826; obj: 7.665e-01; abs: 8.683e-09; rel: 1.133e-08; norm: 1.504e-01
## It: 827; obj: 7.665e-01; abs: 1.204e-08; rel: 1.570e-08; norm: 1.504e-01
## It: 828; obj: 7.665e-01; abs: 9.136e-09; rel: 1.192e-08; norm: 1.504e-01
## It: 829; obj: 7.665e-01; abs: 1.312e-09; rel: 1.712e-09; norm: 1.504e-01
## It: 830; obj: 7.665e-01; abs: 7.031e-09; rel: 9.173e-09; norm: 1.504e-01
## It: 831; obj: 7.665e-01; abs: 1.097e-08; rel: 1.431e-08; norm: 1.504e-01
## It: 832; obj: 7.665e-01; abs: 8.177e-09; rel: 1.067e-08; norm: 1.504e-01
## It: 833; obj: 7.665e-01; abs: 4.786e-10; rel: 6.244e-10; norm: 1.504e-01
## It: 834; obj: 7.665e-01; abs: 7.366e-09; rel: 9.609e-09; norm: 1.504e-01
## It: 835; obj: 7.665e-01; abs: 1.076e-08; rel: 1.404e-08; norm: 1.504e-01
## It: 836; obj: 7.665e-01; abs: 8.120e-09; rel: 1.059e-08; norm: 1.504e-01
## It: 837; obj: 7.665e-01; abs: 1.547e-09; rel: 2.018e-09; norm: 1.504e-01
## It: 838; obj: 7.665e-01; abs: 4.868e-09; rel: 6.350e-09; norm: 1.504e-01
```

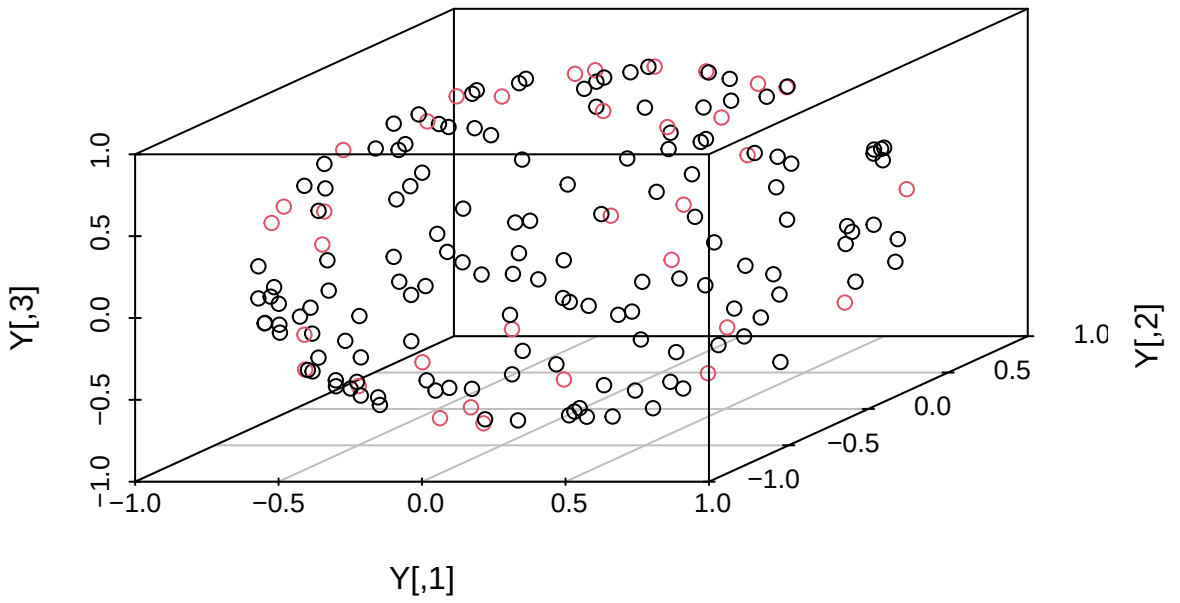
```
## It: 839; obj: 7.665e-01; abs: 7.712e-09; rel: 1.006e-08; norm: 1.504e-01
## It: 840; obj: 7.665e-01; abs: 6.047e-09; rel: 7.888e-09; norm: 1.504e-01
## It: 841; obj: 7.665e-01; abs: 1.410e-09; rel: 1.840e-09; norm: 1.504e-01
## It: 842; obj: 7.665e-01; abs: 3.511e-09; rel: 4.580e-09; norm: 1.504e-01
## It: 843; obj: 7.665e-01; abs: 6.424e-09; rel: 8.380e-09; norm: 1.504e-01
## It: 844; obj: 7.665e-01; abs: 6.309e-09; rel: 8.231e-09; norm: 1.504e-01
## It: 845; obj: 7.665e-01; abs: 3.514e-09; rel: 4.584e-09; norm: 1.504e-01
## It: 846; obj: 7.665e-01; abs: 6.079e-10; rel: 7.931e-10; norm: 1.504e-01
## It: 847; obj: 7.665e-01; abs: 4.216e-09; rel: 5.501e-09; norm: 1.504e-01
## It: 848; obj: 7.665e-01; abs: 5.622e-09; rel: 7.335e-09; norm: 1.504e-01
## It: 849; obj: 7.665e-01; abs: 4.023e-09; rel: 5.249e-09; norm: 1.504e-01
## It: 850; obj: 7.665e-01; abs: 6.556e-11; rel: 8.552e-11; norm: 1.504e-01
## It: 851; obj: 7.665e-01; abs: 4.244e-09; rel: 5.537e-09; norm: 1.504e-01
## It: 852; obj: 7.665e-01; abs: 6.494e-09; rel: 8.472e-09; norm: 1.504e-01
## It: 853; obj: 7.665e-01; abs: 5.290e-09; rel: 6.901e-09; norm: 1.504e-01
## It: 854; obj: 7.665e-01; abs: 1.233e-09; rel: 1.609e-09; norm: 1.504e-01
## It: 855; obj: 7.665e-01; abs: 3.315e-09; rel: 4.324e-09; norm: 1.504e-01
## It: 856; obj: 7.665e-01; abs: 5.666e-09; rel: 7.391e-09; norm: 1.504e-01
## It: 857; obj: 7.665e-01; abs: 4.505e-09; rel: 5.877e-09; norm: 1.504e-01
## It: 858; obj: 7.665e-01; abs: 6.917e-10; rel: 9.024e-10; norm: 1.504e-01
## It: 859; obj: 7.665e-01; abs: 3.378e-09; rel: 4.407e-09; norm: 1.504e-01
## It: 860; obj: 7.665e-01; abs: 5.360e-09; rel: 6.993e-09; norm: 1.504e-01
## It: 861; obj: 7.665e-01; abs: 4.365e-09; rel: 5.695e-09; norm: 1.504e-01
## It: 862; obj: 7.665e-01; abs: 1.294e-09; rel: 1.688e-09; norm: 1.504e-01
## It: 863; obj: 7.665e-01; abs: 1.954e-09; rel: 2.550e-09; norm: 1.504e-01
## It: 864; obj: 7.665e-01; abs: 3.699e-09; rel: 4.826e-09; norm: 1.504e-01
## It: 865; obj: 7.665e-01; abs: 3.313e-09; rel: 4.322e-09; norm: 1.504e-01
## It: 866; obj: 7.665e-01; abs: 1.293e-09; rel: 1.687e-09; norm: 1.504e-01
## It: 867; obj: 7.665e-01; abs: 1.222e-09; rel: 1.594e-09; norm: 1.504e-01
## It: 868; obj: 7.665e-01; abs: 3.065e-09; rel: 3.999e-09; norm: 1.504e-01
## It: 869; obj: 7.665e-01; abs: 3.479e-09; rel: 4.539e-09; norm: 1.504e-01
## It: 870; obj: 7.665e-01; abs: 2.332e-09; rel: 3.043e-09; norm: 1.504e-01
## It: 871; obj: 7.665e-01; abs: 1.509e-10; rel: 1.969e-10; norm: 1.504e-01
## It: 872; obj: 7.665e-01; abs: 2.040e-09; rel: 2.661e-09; norm: 1.504e-01
## It: 873; obj: 7.665e-01; abs: 3.127e-09; rel: 4.080e-09; norm: 1.504e-01
## It: 874; obj: 7.665e-01; abs: 2.477e-09; rel: 3.232e-09; norm: 1.504e-01
## It: 875; obj: 7.665e-01; abs: 3.645e-10; rel: 4.755e-10; norm: 1.504e-01
## It: 876; obj: 7.665e-01; abs: 2.072e-09; rel: 2.703e-09; norm: 1.504e-01
## It: 877; obj: 7.665e-01; abs: 3.438e-09; rel: 4.485e-09; norm: 1.504e-01
## It: 878; obj: 7.665e-01; abs: 2.925e-09; rel: 3.816e-09; norm: 1.504e-01
## It: 879; obj: 7.665e-01; abs: 8.441e-10; rel: 1.101e-09; norm: 1.504e-01
## It: 880; obj: 7.665e-01; abs: 1.557e-09; rel: 2.031e-09; norm: 1.504e-01
## It: 881; obj: 7.665e-01; abs: 2.873e-09; rel: 3.747e-09; norm: 1.504e-01
## It: 882; obj: 7.665e-01; abs: 2.412e-09; rel: 3.146e-09; norm: 1.504e-01
## It: 883; obj: 7.665e-01; abs: 5.740e-10; rel: 7.488e-10; norm: 1.504e-01
## It: 884; obj: 7.665e-01; abs: 1.482e-09; rel: 1.934e-09; norm: 1.504e-01
## It: 885; obj: 7.665e-01; abs: 2.604e-09; rel: 3.398e-09; norm: 1.504e-01
## It: 886; obj: 7.665e-01; abs: 2.304e-09; rel: 3.006e-09; norm: 1.504e-01
## It: 887; obj: 7.665e-01; abs: 9.241e-10; rel: 1.206e-09; norm: 1.504e-01
## It: 888; obj: 7.665e-01; abs: 6.913e-10; rel: 9.018e-10; norm: 1.504e-01
## It: 889; obj: 7.665e-01; abs: 1.726e-09; rel: 2.252e-09; norm: 1.504e-01
## It: 890; obj: 7.665e-01; abs: 1.774e-09; rel: 2.315e-09; norm: 1.504e-01
## It: 891; obj: 7.665e-01; abs: 9.336e-10; rel: 1.218e-09; norm: 1.504e-01
## It: 892; obj: 7.665e-01; abs: 3.365e-10; rel: 4.390e-10; norm: 1.504e-01
```

```
## It: 893; obj: 7.665e-01; abs: 1.442e-09; rel: 1.881e-09; norm: 1.504e-01
## It: 894; obj: 7.665e-01; abs: 1.882e-09; rel: 2.455e-09; norm: 1.504e-01
## It: 895; obj: 7.665e-01; abs: 1.445e-09; rel: 1.885e-09; norm: 1.504e-01
## It: 896; obj: 7.665e-01; abs: 3.221e-10; rel: 4.202e-10; norm: 1.504e-01
## It: 897; obj: 7.665e-01; abs: 9.364e-10; rel: 1.222e-09; norm: 1.504e-01
## It: 898; obj: 7.665e-01; abs: 1.663e-09; rel: 2.170e-09; norm: 1.504e-01
## It: 899; obj: 7.665e-01; abs: 1.438e-09; rel: 1.876e-09; norm: 1.504e-01
## It: 900; obj: 7.665e-01; abs: 3.594e-10; rel: 4.689e-10; norm: 1.504e-01
## It: 901; obj: 7.665e-01; abs: 9.685e-10; rel: 1.263e-09; norm: 1.504e-01
## It: 902; obj: 7.665e-01; abs: 1.779e-09; rel: 2.321e-09; norm: 1.504e-01
## It: 903; obj: 7.665e-01; abs: 1.608e-09; rel: 2.097e-09; norm: 1.504e-01
## It: 904; obj: 7.665e-01; abs: 5.816e-10; rel: 7.587e-10; norm: 1.504e-01
## It: 905; obj: 7.665e-01; abs: 6.707e-10; rel: 8.750e-10; norm: 1.504e-01
## It: 906; obj: 7.665e-01; abs: 1.422e-09; rel: 1.855e-09; norm: 1.504e-01
## It: 907; obj: 7.665e-01; abs: 1.290e-09; rel: 1.683e-09; norm: 1.504e-01
## It: 908; obj: 7.665e-01; abs: 4.323e-10; rel: 5.640e-10; norm: 1.504e-01
## It: 909; obj: 7.665e-01; abs: 6.064e-10; rel: 7.911e-10; norm: 1.504e-01
## It: 910; obj: 7.665e-01; abs: 1.253e-09; rel: 1.634e-09; norm: 1.504e-01
## It: 911; obj: 7.665e-01; abs: 1.223e-09; rel: 1.595e-09; norm: 1.504e-01
## It: 912; obj: 7.665e-01; abs: 6.205e-10; rel: 8.095e-10; norm: 1.504e-01
## It: 913; obj: 7.665e-01; abs: 1.893e-10; rel: 2.469e-10; norm: 1.504e-01
## It: 914; obj: 7.665e-01; abs: 8.023e-10; rel: 1.047e-09; norm: 1.504e-01
## It: 915; obj: 7.665e-01; abs: 9.594e-10; rel: 1.252e-09; norm: 1.504e-01
## It: 916; obj: 7.665e-01; abs: 6.266e-10; rel: 8.174e-10; norm: 1.504e-01
## It: 917; obj: 7.665e-01; abs: 1.948e-11; rel: 2.541e-11; norm: 1.504e-01
## It: 918; obj: 7.665e-01; abs: 6.700e-10; rel: 8.741e-10; norm: 1.504e-01
## It: 919; obj: 7.665e-01; abs: 1.009e-09; rel: 1.317e-09; norm: 1.504e-01
## It: 920; obj: 7.665e-01; abs: 8.577e-10; rel: 1.119e-09; norm: 1.504e-01
## It: 921; obj: 7.665e-01; abs: 2.774e-10; rel: 3.618e-10; norm: 1.504e-01
## It: 922; obj: 7.665e-01; abs: 4.330e-10; rel: 5.649e-10; norm: 1.504e-01
## It: 923; obj: 7.665e-01; abs: 8.837e-10; rel: 1.153e-09; norm: 1.504e-01
## It: 924; obj: 7.665e-01; abs: 8.161e-10; rel: 1.065e-09; norm: 1.504e-01
## It: 925; obj: 7.665e-01; abs: 2.665e-10; rel: 3.476e-10; norm: 1.504e-01
## It: 926; obj: 7.665e-01; abs: 4.446e-10; rel: 5.800e-10; norm: 1.504e-01
## It: 927; obj: 7.665e-01; abs: 9.039e-10; rel: 1.179e-09; norm: 1.504e-01
## It: 928; obj: 7.665e-01; abs: 8.579e-10; rel: 1.119e-09; norm: 1.504e-01
## It: 929; obj: 7.665e-01; abs: 3.600e-10; rel: 4.697e-10; norm: 1.504e-01
## It: 930; obj: 7.665e-01; abs: 2.778e-10; rel: 3.625e-10; norm: 1.504e-01
## It: 931; obj: 7.665e-01; abs: 6.901e-10; rel: 9.003e-10; norm: 1.504e-01
## It: 932; obj: 7.665e-01; abs: 6.744e-10; rel: 8.798e-10; norm: 1.504e-01
## It: 933; obj: 7.665e-01; abs: 2.866e-10; rel: 3.739e-10; norm: 1.504e-01
## It: 934; obj: 7.665e-01; abs: 2.262e-10; rel: 2.951e-10; norm: 1.504e-01
## It: 935; obj: 7.665e-01; abs: 5.877e-10; rel: 7.667e-10; norm: 1.504e-01
## It: 936; obj: 7.665e-01; abs: 6.382e-10; rel: 8.325e-10; norm: 1.504e-01
## It: 937; obj: 7.665e-01; abs: 3.909e-10; rel: 5.100e-10; norm: 1.504e-01
## It: 938; obj: 7.665e-01; abs: 6.149e-12; rel: 8.021e-12; norm: 1.504e-01
## It: 939; obj: 7.665e-01; abs: 3.571e-10; rel: 4.658e-10; norm: 1.504e-01
## It: 940; obj: 7.665e-01; abs: 5.042e-10; rel: 6.578e-10; norm: 1.504e-01
## It: 941; obj: 7.665e-01; abs: 3.872e-10; rel: 5.051e-10; norm: 1.504e-01
## It: 942; obj: 7.665e-01; abs: 6.552e-11; rel: 8.548e-11; norm: 1.504e-01
## It: 943; obj: 7.665e-01; abs: 3.035e-10; rel: 3.959e-10; norm: 1.504e-01
## It: 944; obj: 7.665e-01; abs: 5.314e-10; rel: 6.932e-10; norm: 1.504e-01
## It: 945; obj: 7.665e-01; abs: 4.934e-10; rel: 6.436e-10; norm: 1.504e-01
## It: 946; obj: 7.665e-01; abs: 2.027e-10; rel: 2.644e-10; norm: 1.504e-01
```

```
## It: 947; obj: 7.665e-01; abs: 1.847e-10; rel: 2.410e-10; norm: 1.504e-01
## It: 948; obj: 7.665e-01; abs: 4.521e-10; rel: 5.898e-10; norm: 1.504e-01
## It: 949; obj: 7.665e-01; abs: 4.482e-10; rel: 5.847e-10; norm: 1.504e-01
## It: 950; obj: 7.665e-01; abs: 1.801e-10; rel: 2.349e-10; norm: 1.504e-01
## It: 951; obj: 7.665e-01; abs: 1.911e-10; rel: 2.492e-10; norm: 1.504e-01
## It: 952; obj: 7.665e-01; abs: 4.495e-10; rel: 5.864e-10; norm: 1.504e-01
## It: 953; obj: 7.665e-01; abs: 4.559e-10; rel: 5.947e-10; norm: 1.504e-01
## It: 954; obj: 7.665e-01; abs: 2.246e-10; rel: 2.930e-10; norm: 1.504e-01
## It: 955; obj: 7.665e-01; abs: 9.721e-11; rel: 1.268e-10; norm: 1.504e-01
## It: 956; obj: 7.665e-01; abs: 3.271e-10; rel: 4.268e-10; norm: 1.504e-01
## It: 957; obj: 7.665e-01; abs: 3.535e-10; rel: 4.612e-10; norm: 1.504e-01
## It: 958; obj: 7.665e-01; abs: 1.863e-10; rel: 2.430e-10; norm: 1.504e-01
## It: 959; obj: 7.665e-01; abs: 6.706e-11; rel: 8.748e-11; norm: 1.504e-01
## It: 960; obj: 7.665e-01; abs: 2.715e-10; rel: 3.542e-10; norm: 1.504e-01
## It: 961; obj: 7.665e-01; abs: 3.341e-10; rel: 4.358e-10; norm: 1.504e-01
## It: 962; obj: 7.665e-01; abs: 2.387e-10; rel: 3.114e-10; norm: 1.504e-01
## It: 963; obj: 7.665e-01; abs: 4.218e-11; rel: 5.503e-11; norm: 1.504e-01
## It: 964; obj: 7.665e-01; abs: 1.580e-10; rel: 2.061e-10; norm: 1.504e-01
## It: 965; obj: 7.665e-01; abs: 2.669e-10; rel: 3.482e-10; norm: 1.504e-01
## It: 966; obj: 7.665e-01; abs: 2.326e-10; rel: 3.035e-10; norm: 1.504e-01
## It: 967; obj: 7.665e-01; abs: 7.169e-11; rel: 9.352e-11; norm: 1.504e-01
## It: 968; obj: 7.665e-01; abs: 1.343e-10; rel: 1.753e-10; norm: 1.504e-01
## It: 969; obj: 7.665e-01; abs: 2.763e-10; rel: 3.605e-10; norm: 1.504e-01
## It: 970; obj: 7.665e-01; abs: 2.755e-10; rel: 3.594e-10; norm: 1.504e-01
## It: 971; obj: 7.665e-01; abs: 1.306e-10; rel: 1.704e-10; norm: 1.504e-01
## It: 972; obj: 7.665e-01; abs: 7.712e-11; rel: 1.006e-10; norm: 1.504e-01
## It: 973; obj: 7.665e-01; abs: 2.297e-10; rel: 2.996e-10; norm: 1.504e-01
## It: 974; obj: 7.665e-01; abs: 2.420e-10; rel: 3.157e-10; norm: 1.504e-01
## It: 975; obj: 7.665e-01; abs: 1.128e-10; rel: 1.472e-10; norm: 1.504e-01
## It: 976; obj: 7.665e-01; abs: 7.783e-11; rel: 1.015e-10; norm: 1.504e-01
## It: 977; obj: 7.665e-01; abs: 2.192e-10; rel: 2.860e-10; norm: 1.504e-01
## It: 978; obj: 7.665e-01; abs: 2.371e-10; rel: 3.093e-10; norm: 1.504e-01
## It: 979; obj: 7.665e-01; abs: 1.326e-10; rel: 1.730e-10; norm: 1.504e-01
## It: 980; obj: 7.665e-01; abs: 2.628e-11; rel: 3.428e-11; norm: 1.504e-01
## It: 981; obj: 7.665e-01; abs: 1.508e-10; rel: 1.967e-10; norm: 1.504e-01
## It: 982; obj: 7.665e-01; abs: 1.812e-10; rel: 2.364e-10; norm: 1.504e-01
## It: 983; obj: 7.665e-01; abs: 1.131e-10; rel: 1.476e-10; norm: 1.504e-01
## It: 984; obj: 7.665e-01; abs: 9.189e-12; rel: 1.199e-11; norm: 1.504e-01
## It: 985; obj: 7.665e-01; abs: 1.217e-10; rel: 1.587e-10; norm: 1.504e-01
## It: 986; obj: 7.665e-01; abs: 1.719e-10; rel: 2.243e-10; norm: 1.504e-01
## It: 987; obj: 7.665e-01; abs: 1.405e-10; rel: 1.833e-10; norm: 1.504e-01
## It: 988; obj: 7.665e-01; abs: 4.585e-11; rel: 5.982e-11; norm: 1.504e-01
## It: 989; obj: 7.665e-01; abs: 6.483e-11; rel: 8.458e-11; norm: 1.504e-01
## It: 990; obj: 7.665e-01; abs: 1.368e-10; rel: 1.785e-10; norm: 1.504e-01
## It: 991; obj: 7.665e-01; abs: 1.333e-10; rel: 1.739e-10; norm: 1.504e-01
## It: 992; obj: 7.665e-01; abs: 5.527e-11; rel: 7.210e-11; norm: 1.504e-01
## It: 993; obj: 7.665e-01; abs: 5.640e-11; rel: 7.358e-11; norm: 1.504e-01
## It: 994; obj: 7.665e-01; abs: 1.409e-10; rel: 1.838e-10; norm: 1.504e-01
## It: 995; obj: 7.665e-01; abs: 1.510e-10; rel: 1.970e-10; norm: 1.504e-01
## It: 996; obj: 7.665e-01; abs: 8.155e-11; rel: 1.064e-10; norm: 1.504e-01
## It: 997; obj: 7.665e-01; abs: 2.711e-11; rel: 3.537e-11; norm: 1.504e-01
## It: 998; obj: 7.665e-01; abs: 1.126e-10; rel: 1.470e-10; norm: 1.504e-01
## It: 999; obj: 7.665e-01; abs: 1.281e-10; rel: 1.671e-10; norm: 1.504e-01
## It: 1000; obj: 7.665e-01; abs: 6.886e-11; rel: 8.984e-11; norm: 1.504e-01
```

Iteration 1000




```
rgl::plot3d(0, 0, 0, xlim = c(-1, 1), ylim = c(-1, 1), zlim = c(-1, 1),
            radius = 1, type = "s", col = "lightgray",
            lit = FALSE)
rgl::points3d(Y, col = ifelse(ids_labs, 2, 1))
scatterplot3d::scatterplot3d(Y,xlim = c(-1, 1), ylim = c(-1, 1), zlim = c(-1, 1),
                             color = ifelse(ids_labs, 2, 1))
```