228 circles in a 1x0.60000 rectangle
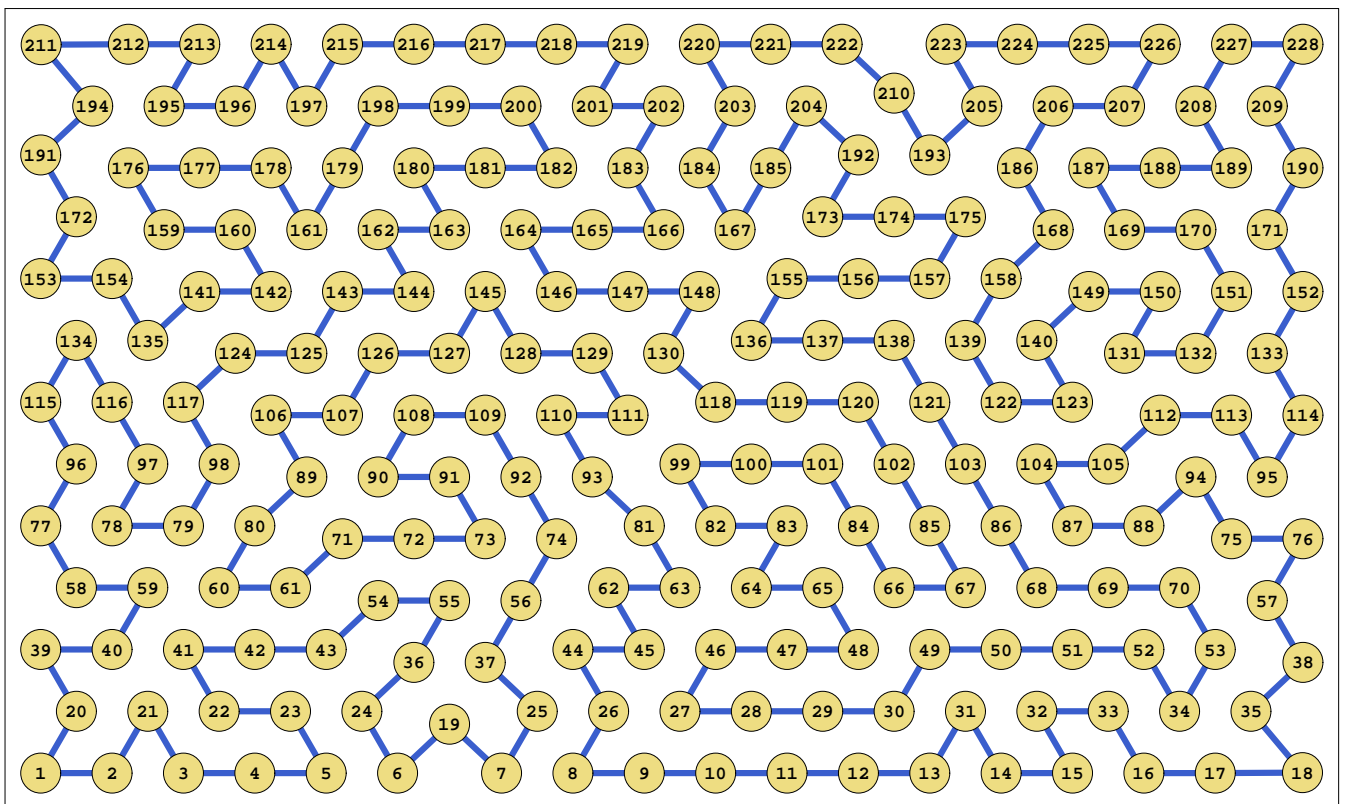

radius =   0.026758678779   density   = 0.854796630584
ratio   = 22.422631736186   length   = 12.238792