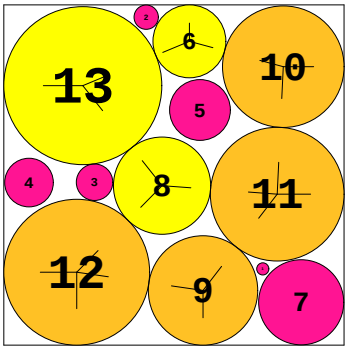
N = 13

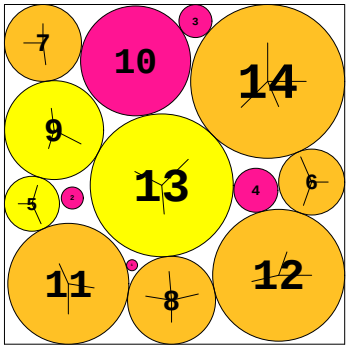
13 circles in a square



radius = 0.232178672614 density = 0.820713765586
ratio = 55.991361539007 contacts = 15

N = 14

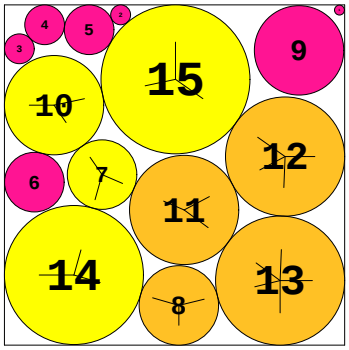
14 circles in a square



radius = 0.226354370430 density = 0.833561431950
ratio = 61.849921313114 contacts = 19

N = 15

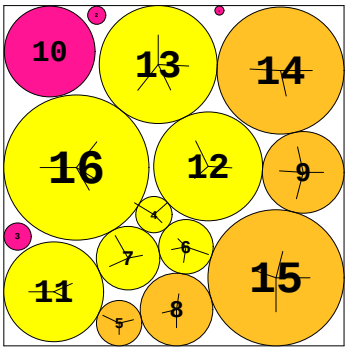
15 circles in a square



radius = 0.218890022409 density = 0.829546950560
ratio = 68.527563910425 contacts = 17

N = 16

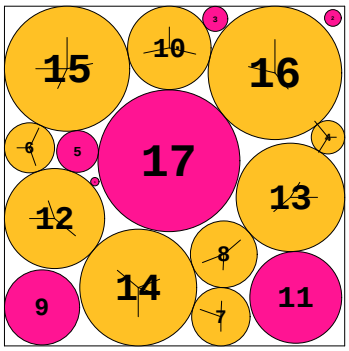
16 circles in a square



radius = 0.213306762250 density = 0.835315900178
ratio = 75.009342560166 contacts = 25

N = 17

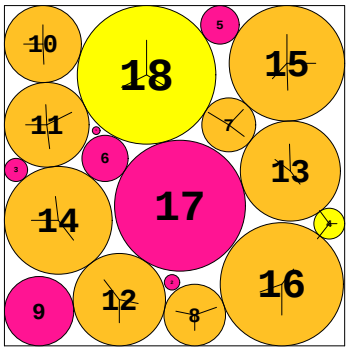
17 circles in a square



radius = 0.208583778822 density = 0.844211594720
ratio = 81.502023292478 contacts = 21

N = 18

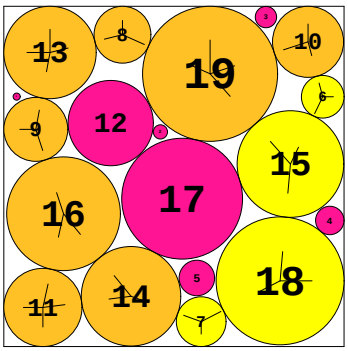
18 circles in a square



radius = 0.203610493383 density = 0.847777243444
ratio = 88.404088124093 contacts = 23

N = 19

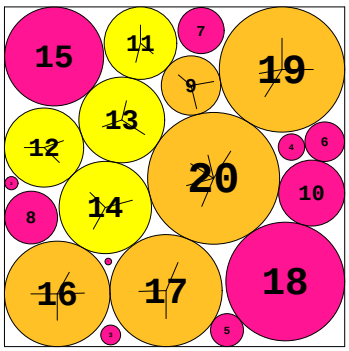
19 circles in a square



radius = 0.198431041374 density = 0.846367244411
ratio = 95.751147947405 contacts = 25

N = 20

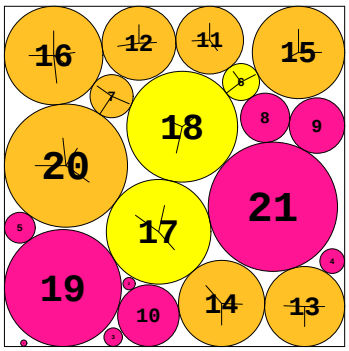
20 circles in a square



radius = 0.193953211391 density = 0.847941181266
ratio = 103.117653255359 contacts = 19

N = 21

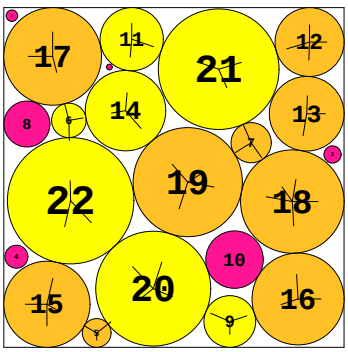
21 circles in a square



radius = 0.189941602299 density = 0.850962963235
ratio = 110.560297195482 contacts = 23

N = 22

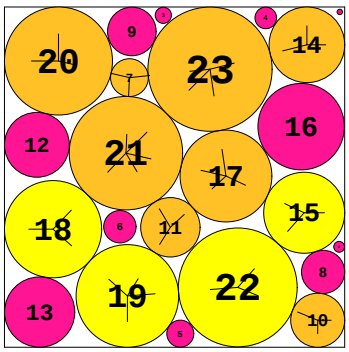
22 circles in a square



radius = 0.185867536223 density = 0.850987881602
ratio = 118.363865186474 contacts = 33

N = 23

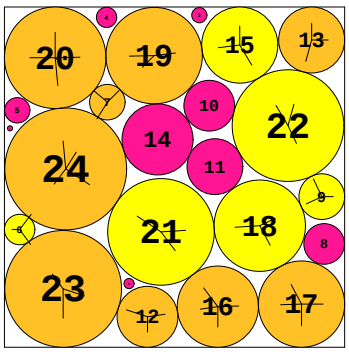
23 circles in a square



radius = 0.182534535157 density = 0.855598420798
ratio = 126.003553137072 contacts = 25

N = 24

24 circles in a square



radius = 0.179007777510 density = 0.856381487320
ratio = 134.072386874981 contacts = 31