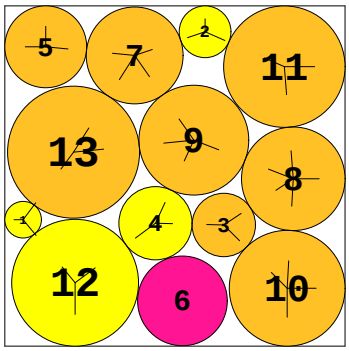
N = 13

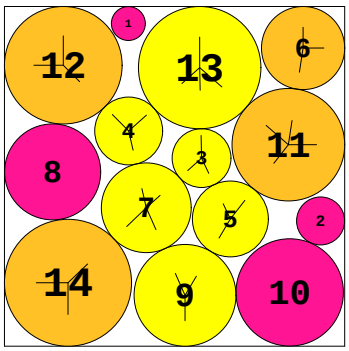
13 circles in a square



radius = 0.193952032257 density = 0.827249630454
ratio = 18.589912327878 contacts = 25

N = 14

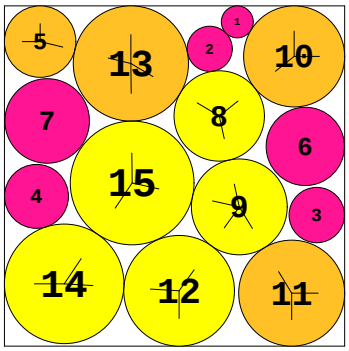
14 circles in a square



radius = 0.186771833775 density = 0.821928238937
ratio = 20.033306474276 contacts = 21

N = 15

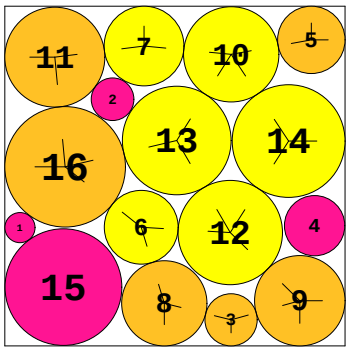
15 circles in a square



radius = 0.181846154442 density = 0.831090087257
ratio = 21.298131698673 contacts = 19

N = 16

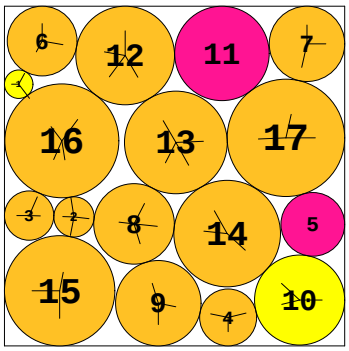
16 circles in a square



radius = 0.177280605606 density = 0.839249810171
ratio = 22.563099817490 contacts = 25

N = 17

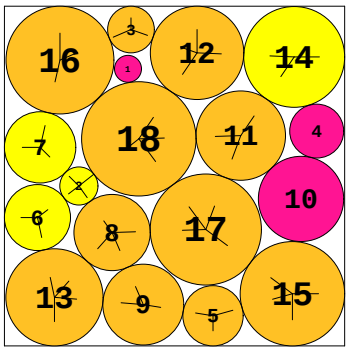
17 circles in a square



radius = 0.172714405736 density = 0.843430899234
ratio = 23.872389845222 contacts = 31

N = 18

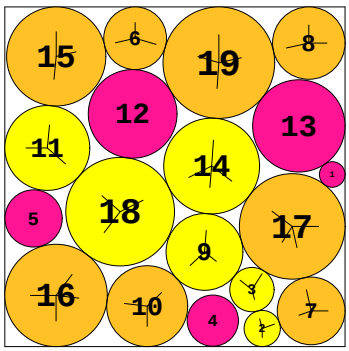
18 circles in a square



radius = 0.168213670493 density = 0.844492997566
ratio = 25.221735395675 contacts = 31

N = 19

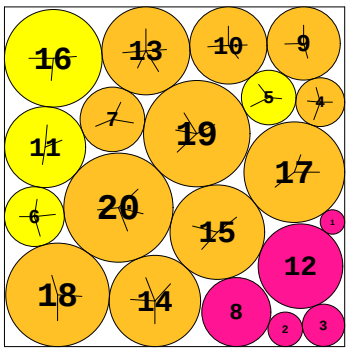
19 circles in a square



radius = 0.164123782850 density = 0.846238752427
ratio = 26.558606363159 contacts = 29

N = 20

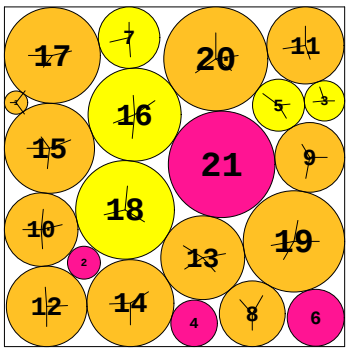
20 circles in a square



radius = 0.160535665987 density = 0.850123927379
ratio = 27.857584964071 contacts = 31

N = 21

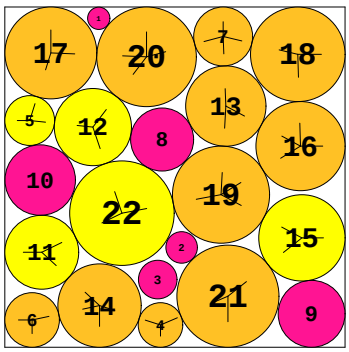
21 circles in a square



radius = 0.156677935603 density = 0.848317134572
ratio = 29.248379341458 contacts = 35

N = 22

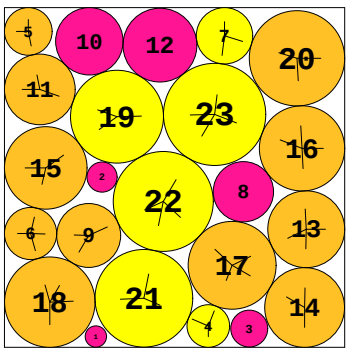
22 circles in a square



radius = 0.153568099022 density = 0.852019882827
ratio = 30.542904351146 contacts = 33

N = 23

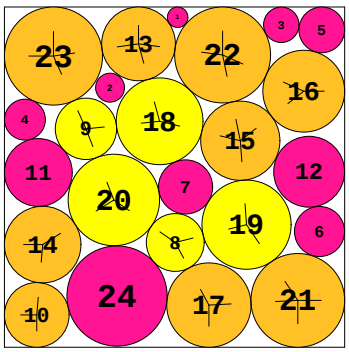
23 circles in a square



radius = 0.150331382514 density = 0.851982004309
ratio = 31.901732313749 contacts = 35

N = 24

24 circles in a square



radius = 0.147236046964 density = 0.851310879214
ratio = 33.272962610624 contacts = 29