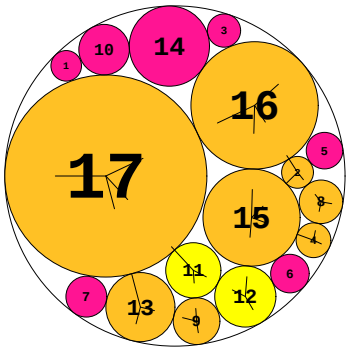
## N = 17

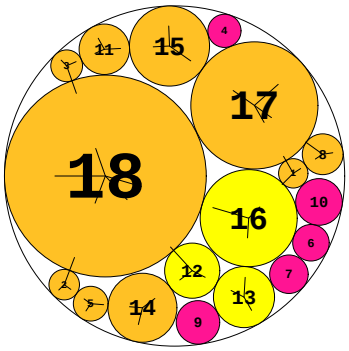
17 circles in a circle



radius = 0.593880310526 density = 0.862510452140
ratio = 1.683840973131 contacts = 20

## N = 18

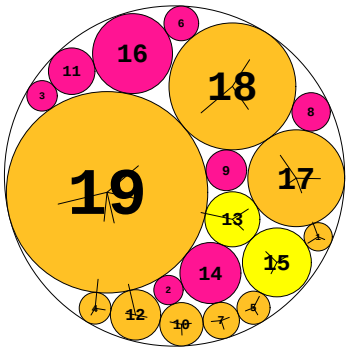
18 circles in a circle



radius = 0.593110930355 density = 0.867734300797
ratio = 1.686025242196 contacts = 26

## N = 19

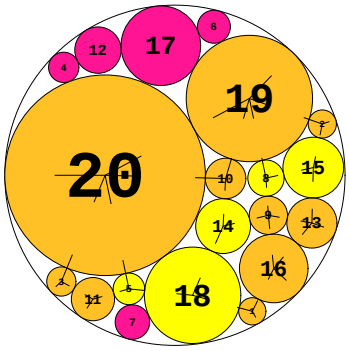
19 circles in a circle



radius = 0.591879670735 density = 0.871045066045
ratio = 1.689532601718 contacts = 22

## N = 20

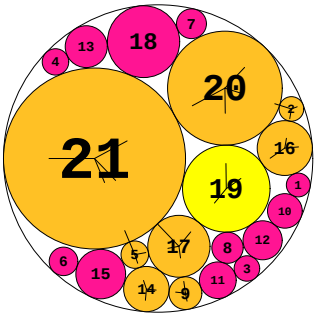
20 circles in a circle



radius = 0.589467028757 density = 0.870358843847
ratio = 1.696447725175 contacts = 30

## N = 21

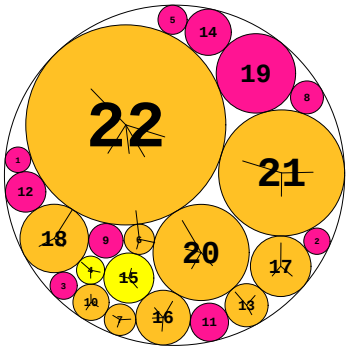
21 circles in a circle



radius = 0.588601256046 density = 0.873783816790
ratio = 1.698943027608 contacts = 18

## N = 22

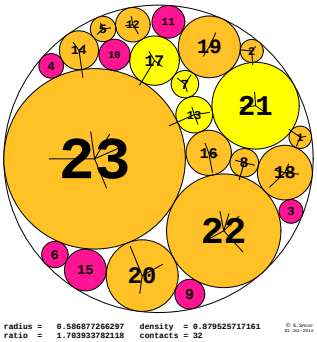
22 circles in a circle



radius = 0.588004231334 density = 0.877620861776
ratio = 1.700668033853 contacts = 24

## N = 23

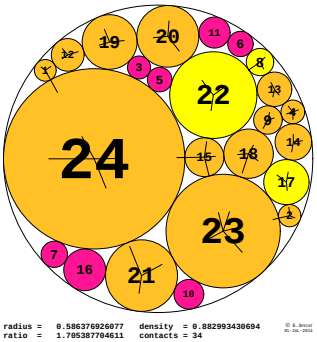
23 circles in a circle



radius = 0.586877266297 density = 0.879525717161
ratio = 1.703933782118 contacts = 32

## N = 24

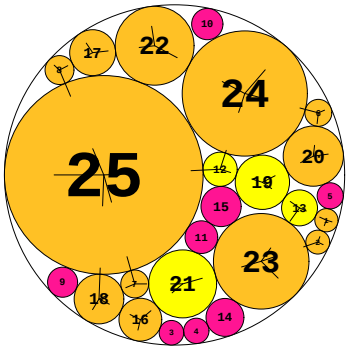
24 circles in a circle



radius = 0.586376926077 density = 0.882993430694
ratio = 1.705387704611 contacts = 34

## N = 25

25 circles in a circle



radius = 0.583999434875 density = 0.880513246036
ratio = 1.712330424111 contacts = 34