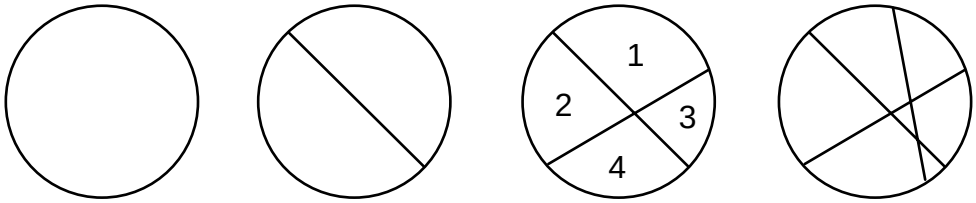
SIRKELGEBIEDE

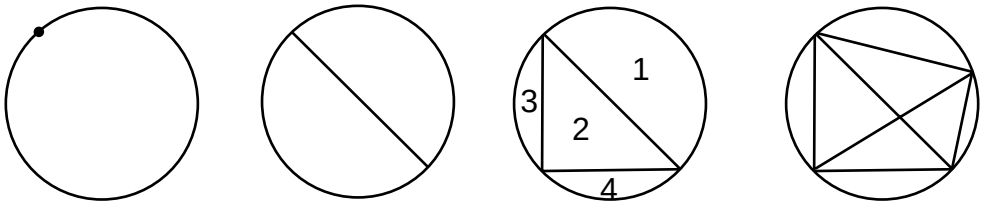
1.



2 koorde verdeel ’n sirkel in 4 gebiede.
Wat is die *maksimum* aantal gebiede waarin 6 koorde ’n sirkel verdeel?
En 20 koorde?

# koorde (*k)*	0	1	2	3	4	5	6	20
# gebiede (*G*)	1	2	4					

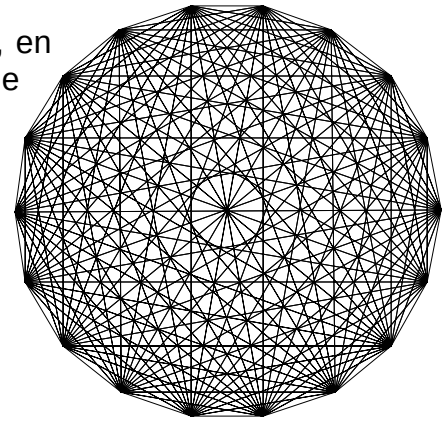
2.



As 3 punte op ’n sirkel verbind word, word 4 gebiede gevorm
Wat is die *maksimum* aantal gebiede waarin 6 punte op ’n sirkel die sirkel verdeel as die punte verbind word?
En 20 punte?

# punte (*p)*	1	2	3	4	5	6	20
# gebiede (*G*)	1	2	4				

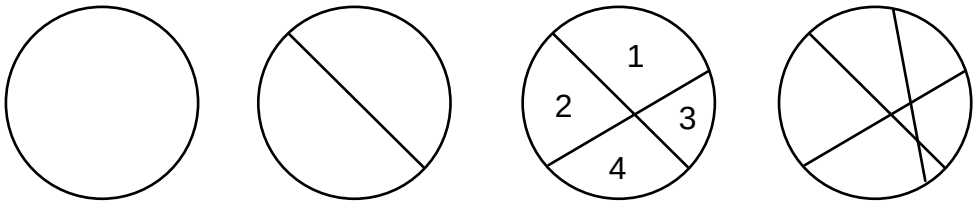
3.(a) In hierdie figuur is daar 18 punte op die sirkel, en elke punt is verbind met elke ander punt op die sirkel.
Hoeveel konnekterende lyne (koorde) is daar altesaam?



(b) In ‘n ander sirkel is daar 465 konnekterende lyne. Hoeveel punte is daar op die sirkel?

CIRCLES, REGIONS AND CORDS

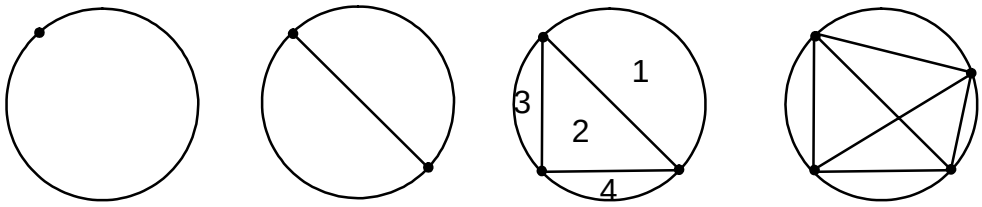
1.



2 chords divide a circle into 4 regions.
What is the *maximum* number of regions into which 6 chords will divide a circle?
And 20 chords?

# chords (*n)*	0	1	2	3	4	5	6	20
# regions (*R*)	1	2	4					

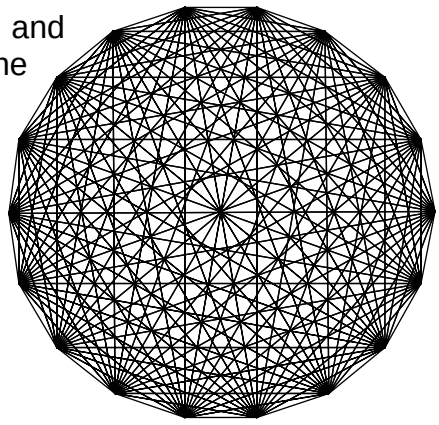
2.



If 3 points on a circle are joined 4 regions are formed.
What is the *maximum* number of regions into which 6 points on a circle will divide the circle if the points are joined?
And 20 points?

# points (*p)*	1	2	3	4	5	6	20
# regions (*R*)	1	2	4				

3.(a) In this figure, there are 18 points on the circle, and every point is connected to every other point on the circle.
How many connecting lines (chords) are there all together?



(b) In another circle there are 465 connecting lines.
How many points are there on the circle?