

Maths Circle Explorations: Session 4

TIFR, Mumbai

December 2021

Problem 3

Suppose you have drawn 3 lines on a circle. What is the maximum number of regions that you can form? Suppose you have drawn n lines on a circle. Can you find the maximum number of regions that can be formed?

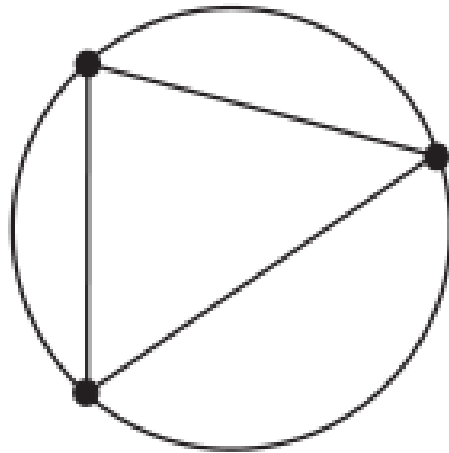


Figure 1: The case for $n = 3$ with 4 regions