

Cheenta - Filix Math Olympiad Program

Starter Module

Day 5 - Homework problems

(Try these before coming to **next** class)

Problem 1

Draw a disk (circle with interior filled in). Delete one small disk from the interior. Triangulate i (put vertices, edges such that all sections are triangles). Now compute the Euler Number.

Problem 2

Draw a disk (circle with interior filled in). Delete two small disks from the interior. Triangulate i (put vertices, edges such that all sections are triangles). Now compute the Euler Number.

Problem 3

If you keep on removing small disks and compute the Euler number each time, do you see any pattern in the change of Euler number?