

Mathematics 1120H – Calculus II: Integrals and Series

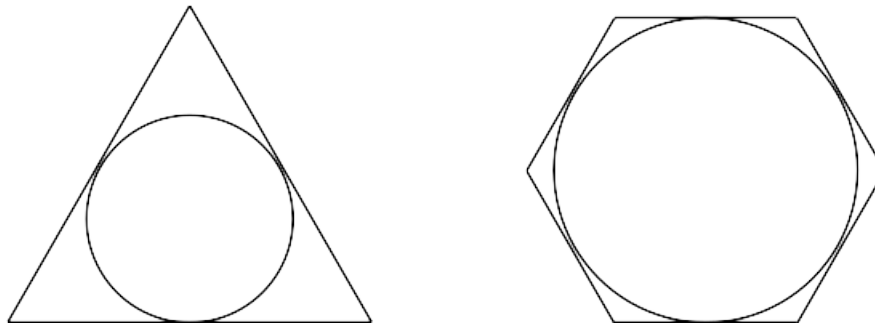
TRENT UNIVERSITY, Summer 2021 (S62)

Assignment # π

Circles Inside

Due on Friday, 30 July.

Given twelve line segments of equal length, six are used to make an equilateral triangle and six are used to make a regular hexagon. Circles are inscribed inside each polygon, touching each side of its respective polygon at the midpoint only.



1. Find the ratio of the area of the circle inscribed in the triangle to the area of the circle inscribed in the hexagon. Explain your reasoning in detail. [10]

This is an extra assignment which has nothing much to do with calculus. Should you do it, it will expand the pool from which your best four assignments are chosen. Enjoy!