# Mathematics $2260 H$ - Geometry I: Euclidean Geometry Trent University, Winter 2021 

## Assignment \#2e

## Inscribed Circles

Due on Friday, 26 February.
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. [10]

This is an extra assignment which, should you do it, will expand the pool from which your best ten assignments are chosen. Enjoy your Reading Week!

