Math 4990 Problem Set 6

Due Tuesday, Oct 20, 2015 in class

Please refer to previous problem sets for instructions, including but not limited to the collaboration policy.

Erratum

p.65, Unsolved Problem 11, "exponential number of triangles triangulations"

Assignment

Liberally peruse pages 59–65 of [DO].

[DO] Exercises 3.2, 3.3, 3.4, and 3.7.

Problem 5. Let $S \subset \mathbb{R}^2$ be a finite set of points in the plane such that every three of them can be covered by a circular disc of radius r. Show that S can be covered by a circular disc of radius r.

Problem 6. Prove that a polygon of perimeter p can be covered by a circular disc of diameter p/2.