

Samasya

Samasya is a mathematics discussion and problem solving club. We discuss a variety of mathematical topics and solve problems as well. We encourage participants to have a look at these problems before the meeting. Discussion, however, will not be limited to these problems. Participants can bring their own problems or mathematical ideas they wish to discuss.

Date: 28th August, 2015

Time: 9:30 p.m.

Venue: OPB LAN Room

Problem 1. Given a quadrilateral with rational area, is it possible to dissect it into finitely many triangles, each of which has a finite area?

Problem 2. Given a polygon of area A , show that one can, using finitely many straight edge cuts and joins, cut up the polygon and reassemble it into any other polygon of area A .

Problem 3. Is a non-empty product of distinct swaps in a permutation group is ever identity? Either prove it's true, or provide a counter example.