

Math Circle Explorations: Session 3

- Problem 2.
1. Can you find a collection of "countable" points on the sphere of radius 1 such that those points lie in any patch you cut out of sphere?
 2. Can you find a way of rotating a unit needle continuously by 180 degrees in plane such that the area covered is small? You are allowed to move the point continuously about which you rotate the needle along with the rotation as well.