## Comprehension questions

Problem 40.1. On an octahedron (made out of equilateral triangles), find a geodesic that's periodic.

Problem 40.2. Can a translation surface have positive Euler characteristic?
Problem 40.3. Take a triangle with angles $(\pi / 7,2 \pi / 7,4 \pi / 7)$. How many triangles make up the translation surface? What is its Euler characteristic?

MIT OpenCourseWare
https://ocw.mit.edu

### 18.900 Geometry and Topology in the Plane

Spring 2023

For information about citing these materials or our Terms of Use, visit: https://ocw.mit.edu/terms.

