

1 Problems

Problem X Show that every triangle is isosceles. **Hints:** 3 4 1

Problem Y Show that every triangle is equilateral. **Hints:** 2

2 Hints

2

1. Finally, add the lengths of the segments.
2. This last problem follows from the previous problem.
3. First, intersect the perpendicular bisector with the angle bisector to get a point P ; WLOG it lies inside the triangle.
4. Next, drop the altitudes from P to the two sides.