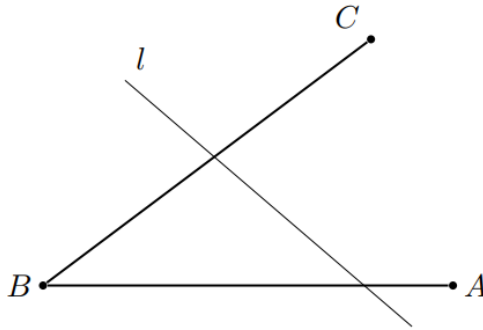


Math 6: Homework 2.6

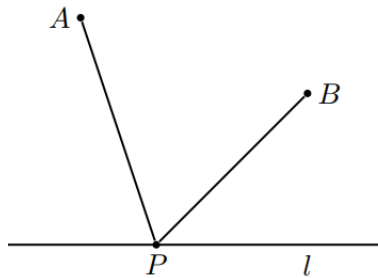
Ruler and compass 3

In the homework, the words “construct” or “find” mean “construct using ruler and compass.” Please make all the constructions on a separate piece of paper.

- Given an angle $\angle ABC$ and a line l intersecting both sides of this angle, find a point P on l which would be at equal distance from the two sides of the angle (i.e., the two perpendiculars dropped from P to the sides of the angle would have the same length).



- Given a triangle $\triangle ABC$, construct inside it a point which would be at equal distance from all three vertices of the triangle.
- The figure below shows two villages A and B . A horseman starts at village A , goes to the river (line l in the figure) to let the horse drink, then goes to village B . How should he choose the point P on the river to make his trip as short as possible?



- The figure below shows a rectangle divided into several pieces. Which of the two rectangles, A or B , has a larger area?

