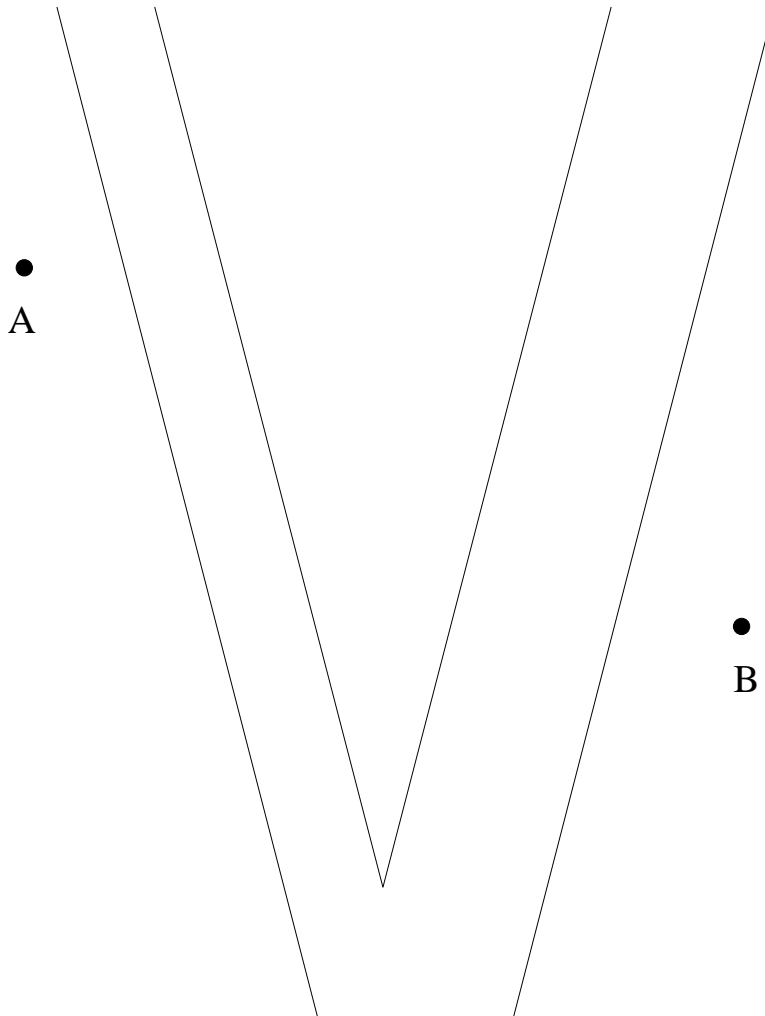


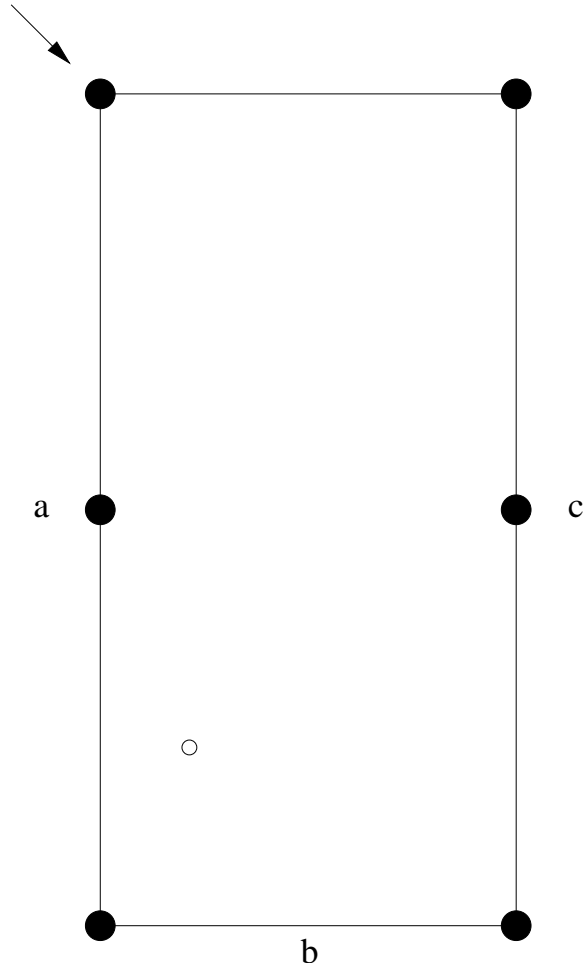
HOMEWORK 4, MATH 174, FALL 2006

DUE DECEMBER 6

Exercise 1. Construct two bridges over the two rivers to minimize the distance from A to B . Bridges should be perpendicular to the rivers (they should go *straight across*). Explain your construction.



Exercise 2. Consider the pool table below. The white ball should hit side a, side b, side c and then go into the upper left pocket. Construct the trajectory of the ball. Explain your construction



Exercise 3. What is the smallest possible area of an n -gon if all the vertices are integral? Draw a hexagon with minimal area.

