

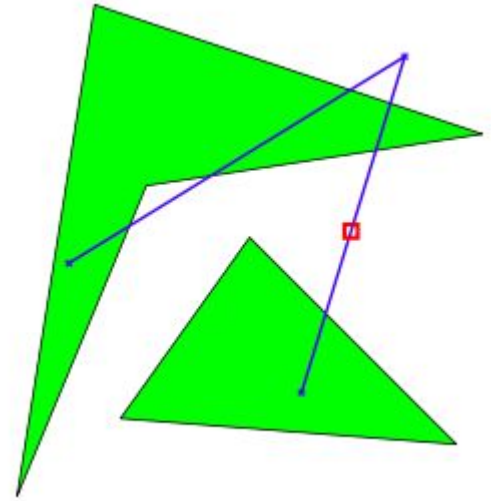
# SOI Davos 2017

Jakub Závodný -- Computational Geometry

Additional Problems

Find a point on a flight path (sequence of segments) that is furthest from land (set of polygons).

Source: NWERC 2007 ([link](#))

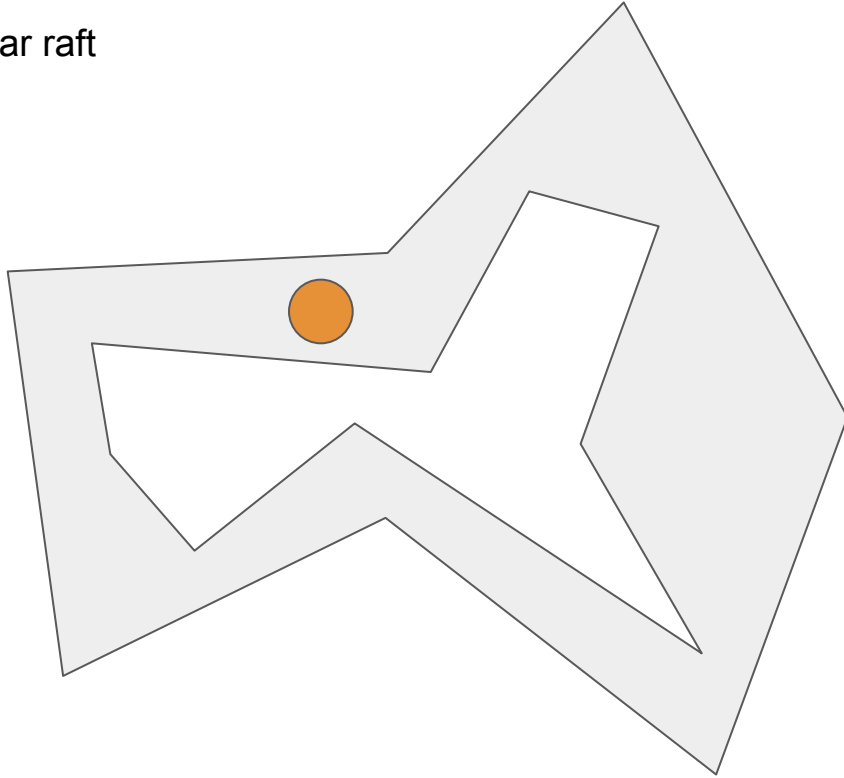


- One line containing two integers  $C$  ( $1 \leq C \leq 20$ ) and  $N$  ( $2 \leq N \leq 20$ ), where  $C$  is the number of continents and  $N$  is the number of key points in the flight route.
- $N$  lines each containing two integers  $X, Y$  giving the coordinates of the key points, from first to last.
- The descriptions of the  $C$  continents. Each continent description starts with a line containing an integer  $M$  ( $3 \leq M \leq 30$ ) giving the number of vertices of this continent. It is followed by  $M$  lines, each containing a pair of integers  $X, Y$  giving the coordinates of the  $M$  vertices, in either clockwise or counter-clockwise order.

Every coordinate in the input is between  $-10\,000$  and  $10\,000$ .

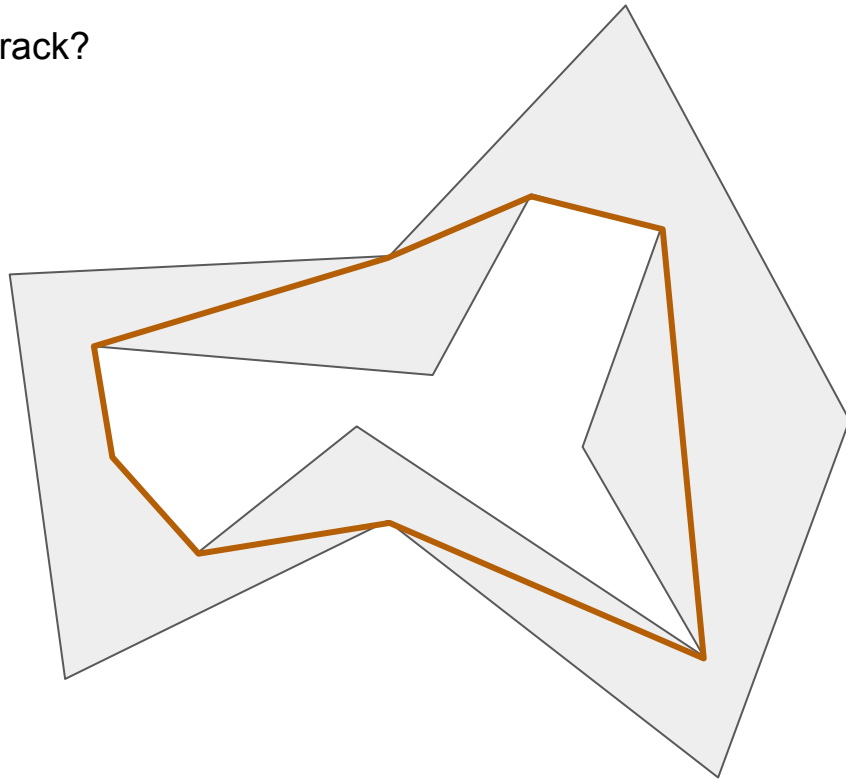
What is the largest diameter of a circular raft  
which can pass through the track?

Source: NWERC 2008 ([link](#))



What is the shortest path through the track?

Source: NWERC 2014 ([link](#))



What is the shortest path through the track?

Source: NWERC 2014 ([link](#))

Always keep in mind:

**INPUTS CAN BE CRAZY**

