

Free Pizza and Pop

The Isoperimetric Problem Juan Souto

Abstract for 14 January 2010

According to legend, princess Dido founded the city of Carthage around 800 BC. She asked the local inhabitants for a small bit of land for a temporary refuge, only as much land as could be encompassed by an oxhide. They agreed. Dido cut the oxhide into thin strips, made a rope, and with it enclosed a huge piece of land. At its peak, the population of Carthage is estimated at half a million. This talk will describe what is the isoperimetric or Dido problem in the calculus of variations: How much area can be enclosed by a curve of given length? It can serve as an introduction to the Marjorie Lee Browne Colloquium by Rodrigo Banuelos on January 18.

