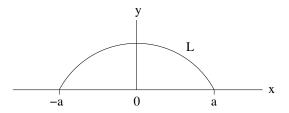
$[{\rm mex}28] \ {\rm Isoperimetric} \ {\rm problem}$

Consider a fence of length L constructed in such a manner as to connect two points of a wall that are a distance 2a apart. Use the calculus of variation with an auxiliary integral constraint to show that the shape of the fence must be part of a circle.



Solution: