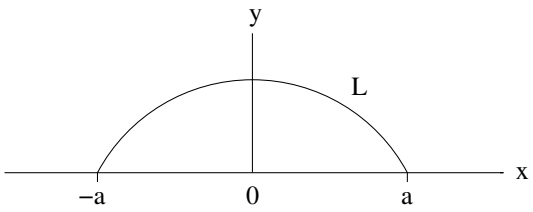
[mex28] Isoperimetric problem

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.
(a) Use the calculus of variation with an auxiliary integral constraint to show that the shape of the fence must be part of a circle.
(b) For the specifications $L = 100$m, $a = 40$m, what is the radius of that circle?
(c) What is the area A between wall and fence?



Solution: