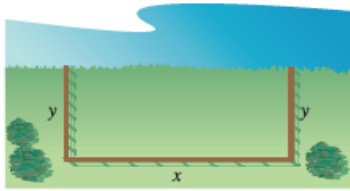


Calculus I Quiz #5

Problem 1 We wish to fence in a rectangular area of 10,000 square meters against a river with a straight-line coast. What dimensions are needed for the least amount of fencing if no fencing is needed along the river?



Problem 2 For the cost function $C(x) = 2x^2 + 5x + 18$, where x is the number of items produced, find the minimum average cost, and show that the marginal cost equals the average cost at that level of production.