

Lagrange Multipliers



Question

A farmer has 1000 ft of fencing and wants to make an animal pen next to river, where fencing would be needed on only three sides. To find the dimensions of the pen with maximum area by the method of Lagrange Multipliers, what would you use for f and g ?



- A. $f(x, y) = xy$ and $g(x, y) = 2x + y$
- B. $f(x, y) = 2x + 2y$ and $g(x, y) = xy$
- C. $f(x, y) = xy$ and $g(x, y) = x + y$
- D. $f(x, y) = x + y$ and $g(x, y) = xy$