Math 16A (Summer 2007)
Kouba
Quiz 9

PRINT Name : _____

Exam ID # : _____

1.) (15 pts.) The area A of a rectangle is increasing at the rate of 4 ft.^{2}/sec. and its length y is decreasing at the rate of 5 ft./sec. At what rate is the rectangle's width x changing when $x = 3$ feet and $y = 6$ feet ?

2.) (15 pts.) A rectangular pen is formed against a building by using the building as one side of the pen and constructing the remaining three sides from 100 feet of fencing. What dimensions of the pen will result in a pen of maximum area ? List values for all variables used.