## Name: Section 4.4 Math 151

1. The demand for tickets to an amusement park is given by

$$p = 70 - 0.02q$$

where p is the price of a ticket in dollars and q is the number of people attending at that price.

(a) What price generates an attendence of 3000 people? What is the total revenue at that price? What is the total revenue if the price is \$20?

(b) What attendence maximizes revenue?

(c) What price should be charged to maximize revenue?

(d) What is the maximum revenue? Can we determine the corresponding profit?