

Math 1743 - Math Center Worksheet

Section 4.6

Jimmy takes tourists on swamp tours in southern Louisiana. A two-hour tour costs \$25. In order to promote the tours, he offers discounts to groups. Jimmy discounts the price per person by \$1.25 for each person in the group in excess of 10. For example, if a group has 12 people that take the tour, the price per person would be \$22.50 after the group discount.

a. Write a model for the revenue from a tour group. Simplify your model and be sure it's complete.

b. What size group will produce the largest revenue for Jimmy, and what is the largest possible revenue for that tour? Show at least some work (i.e. calculus) to support your answer.