

## MONTGOMERY, ALABAMA, BUS BOYCOTT

*"...One particular area of resentment amongst Montgomery blacks of that era was the segregation law of the bus system. Blacks were the majority of the clientele of the buses accounting for 60% of the riders. Yet, they often were forced to adhere to oppressive conditions on buses...."*

*"...From day one, the bus boycott proved to be immediately successful. Leaders had anticipated about 60% of blacks to participate in the movement, but at the end of day one it was predicted that there was nearly 100% cooperation. People had utilized other ways of transportation such as walking; using cabs, getting rides in private cars and some even rode mules to work...."*

*"...Before, black cab companies would charge 10 cents a ride, the same as the bus, but now city law stated that cabs had to charge a minimum of 45 cents a passenger. This was a big blow to the moment because over 17, 500 blacks utilized the bus system at least twice a day...."* <http://home.att.net/~reniqua/what.html>

### **Mathematical Analysis of Historical Data.**

Answer the following questions, showing your equation and all work. Answer each question in a complete sentence.

1. "Over 17, 500 blacks utilized the bus system at least twice a day." Assuming that this required one ticket per ride, how many tickets did this population purchase every day?

Equation	Work	Answer

2. "Blacks were the majority of the clientele of the buses accounting for 60% of the riders." Using the answer from #1, calculate the TOTAL (100%) number of tickets purchased for the bus every day.

Equation	Work	Answer

3. "10 cents a ride." Using the answer from #1, calculate the amount of money that was made from ticket sales to black riders on Montgomery busses.

Equation	Work	Answer

4. "10 cents a ride." Using the answer from #2, calculate the amount of money that was made from ticket sales to all riders on Montgomery busses.

Equation	Work	Answer

5. “Leaders had anticipated about 60% of blacks to participate in the movement.” What would be the **anticipated loss** in profit for the bus company per day? Or, what is 60% of your answer from #3?

Equation	Work	Answer

6. More accurate bus ticket receipts indicated that there was nearly 90% participation. What was the actual **loss in profit** for the bus company **per day**? Or, what is 90% of your answer from #3?

Equation	Work	Answer

7. Before, black cab companies would charge 10 cents a ride, the same as the bus, but now city law stated that cabs had to charge a minimum of 45 cents a passenger. What is the **percent increase** from \$.10 to \$.45?

Equation	Work	Answer

8. While a bus fare in 1955 was \$.10, today’s King County Metro adult two-zone peak time fare is \$2.00. Use your answer from #7 to determine what this rise in cost would look like today.

Equation	Work	Answer

9. “City law stated that cabs had to charge a minimum of 45 cents a passenger.” Calculate the amount of money that might have been collected if every black bus rider (boycotted the busses and they all rode in a cab to and from work (at \$.45 per ride.) Use your answer from #1.

Equation	Work	Answer

10. Using answers from #3 and #9, calculate the increase in profit that might have been generated per day by this raise in fares from \$.10 to \$.45 per ride.

Equation	Work	Answer

11. The bus boycott lasted 381 days. What was the actual loss in profit for the bus company over this entire period? (Use your answer from #6.)

Equation	Work	Answer