



LESSON TITLE: COUNTING WITH A FARE REGISTER

LESSON OBJECTIVE: To subtract two-place numbers with and without regrouping.

To construct and interpret a simple bar graph.

LESSON ACTIVITY: Students will read and solve word problems using subtraction and will graph their results.

PROCEDURE:

- 1) Distribute copies of Activity CFR.
- 2) Read and discuss the *Background Information* at the beginning of Activity CFR with the students. Ask, "How would you find out how many passengers rode on the trolley in one day?"
- 3) Work some problems together. Then have students work on them individually.
- 4) When students are finished, have them check their answers and discuss how they got them.
- 5) Have students use their answers to make a bar graph and to answer items six and seven.





COUNTING WITH A FARE REGISTER WORKSHEET

Background Information:

One of the conductor's jobs was to collect tickets and tokens and to be accountable for those tickets and tokens. One way to do this was by using a fare register. When a passenger paid his fare, the conductor would pull the lever on the register. This keeps a count of the number of fares paid by the passengers. At the end of his shift, the conductor was responsible for turning in the correct amount of tickets and tokens for the number of fares paid by the passengers. A fare log was kept. At the beginning of his shift, the conductor would write down the numbers that were already on the register from the previous conductor. At the end of his shift, he would write down the numbers from the register again. The conductor had to subtract to find out what his total was for the day.

Finding the conductor's answer:

number of fares paid by passengers shown at end of shift
minus *number of fares paid by passengers shown at beginning of shift*

total number of fares paid by passengers for the shift





ACTIVITY - CFR

1. If the register read 26 at the end of Conductor Smith's shift, and 14 at the beginning of his shift, how many fares did Conductor Smith collect? _____
How many passengers rode with Conductor Smith during his shift? _____
2. If the register read 34 at the end of Conductor Baker's shift, and 26 at the beginning of his shift, how many fares did Conductor Baker collect? _____
How many passengers rode with Conductor Baker during his shift? _____
3. If the register read 54 at the end of Conductor Andrews' shift, and 34 at the beginning of his shift, how many fares did Conductor Andrews collect? _____
How many passengers rode with Conductor Baker during his shift? _____
4. If the register read 76 at the end of Conductor Quinn's shift, and his shift began right after Conductor Andrews' shift, how many fares did Conductor Quinn collect?

- How many passengers rode with Conductor Quinn during his shift? _____
5. If the register read 90 at the end of Conductor Edward's shift, and his shift began right after Conductor Quinn's shift, how many passengers rode with Conductor Edwards during his shift? _____





ACTIVITY - CFR

Make a graph of the total number of passengers for each conductor.

Title

Smith Baker Andrews Quinn Edwards

Names of the _____

6. With which conductor did the most passengers ride? _____
7. With which conductor did the fewest passengers ride? _____

