Lesson 77

Concepts:
Map reading, distributive principle, subtraction, subtraction terms, money, English measure, equal and not equal, fractions, multiplication, decimals, and even and odd

Objectives:
1. The student shall be able to write the distances between two given towns on a map.

2. The student shall be able to write the numbers necessary to illustrate the distributive principle.

3. The student shall be able to write the difference of two four digit numbers expressed in dollars and cents and write the names of the terms.

4. The student shall be able to write the correct word (linear, liquid, or weight) beside a given unit of measure.

5. The student shall be able to write the correct symbol (= or ≠) between two fractions.

6. The student shall be able to write the product of a triple digit number and a single digit number.

7. The student shall be able to write the decimal equivalent and word number corresponding to a given fraction with a denominator of ten.

8. The student shall be able to write the correct word (even or odd) beside the multiplier, multiplicand, and product of a multiplication fact.

Teaching Tips:
1. When doing activity 7, discuss with the student(s) the two different measures called ounces. With liquid measure it is called a fluid ounce and is a measure of volume. An ounce dealing with weight is just called an ounce.

Materials, Supplies, & Equipment:
1. Flash cards for subtraction facts, multiplication facts, division facts, English linear equivalents, English liquid equivalents, and English weight equivalents

2. Multiplication chart

Activities:
1. Drill all *subtraction facts with flash cards*.

2. Using *flash cards for multiplication facts*, drill 3's, 6's, 9's, and 4's as pairs without the answers showing. Drill 8's and 7's as pairs with the answers showing.

3. Use *flash cards for division facts* without the answers showing. Drill the facts that have a divisor of 1 or 10 or a dividend of 0. Be sure to drill the facts as pairs. Drill the facts that have a divisor of 2 or 5 with the answers showing.

4. On the chalk board, draw any shape for a lake with five towns on it. Write distances between the towns and across the lake from one town to another. Have the student(s) tell the shortest distances between two towns. Include some questions on towns that have other towns between them along the road. Compare the distance going across the lake and going around the lake. Allow the student(s) to complete **Student Activity One** alone.

5. Complete the first problem in **Student Activity Two** together. Let the student(s) continue on their own. Encourage them to attempt the last problem, which has no helps, by themselves.

6. The student(s) should be able to complete **Student Activity Three** without assistance.

7. Display the *English equivalents flash cards* in random order on the chalk board rail. Discuss these measures with the student(s): linear measure has to do with how long something is (length), liquid measure has to do with how much something holds (capacity), and weight has to do with how heavy something is. Have the student(s) tell if each measure is linear, liquid, or weight. The student(s) should be able to complete **Student Activity Four** independently.

8. Write two sets of two fractions on the chalk board, one set equivalent and one set not equivalent. Ask the student(s) to use cross multiplication to determine if the fractions are or are not equivalent fractions. Give help where needed as the student(s) complete **Student Activity Five**.

9. On the chalk board, write several sets of a triple digit number times a single digit number. Have the student(s) copy the problems on a sheet of paper and find the product. Allow them to use the *multiplication chart* if needed to complete **Student Activity Six**.

10. Discuss with the student(s) how to write a fraction with a denominator of ten as a decimal. They should be able to complete **Student Activity Seven** and **Eight** once they discuss multiplying even and odd numbers.

Worksheets:
1. *Worksheet 38* – Map reading