Republic of the Philippines

**Department of Education**

Region V (Bicol)

DIVISION OF CATANDUANES

Virac, Catanduanes

**Lesson Plan in Mathematics 5**

**FIRST GRADING PERIOD**

**Lesson 24**: Showing that Multiplying a Fraction by Its Reciprocal is Equal to 1.

**Week** 8

**Objective:**Shows that multiplying a fraction by its reciprocal is equal to 1.

Value Focus: Being Helpful

**Prerequisite Concepts and Skills**

* Basic Multiplication Facts
* Multiplication of Fraction

**Materials**:Multiplication Window Cards

**References**: K to 12 Mathematics Grade 5 Curriculum (M5NS-Ih-94); Mathematics in Everyday Life 6 pp. 98-99

**Instructional Procedure**:

1. **Preliminary Activities**
2. **Drill**

Game: Name 1 as a Fraction:

1.Form 4 groups with equal number of members.

2. The teacher says,” Name 1 as a fraction.”

3. This is a relay. Each pupil is allowed to give only one fraction.

4. At the “Go” signal, pupil who goes to eh board to writ his/her answertaps the next pupil who goes to the board to write his/her answer. This goes on until every member has written his/her answer.

5. The group who finishes

1. **Review**

Multiplying fraction and mixed numbers

1. **Motivation**

Do you love to exchange gifts?

Do you believe in give and take? Why?

1. **Developmental Activities**
2. **Presentation**

Study the multiplication equations.

What do you notice?

Set A 3 x4 = 12 5 x 6 = 30

 4 3 12 6 5 30

Set A 2 x1 = 1 52 x 1 = 1

 2 52

Ask: What do you notice?

 In each multiplication equation, what is the product of two numbers?

 What do you call these two numbers?

1. **Performing the Activities**

Lead the pupils to give the reciprocal of the following fractions.

What is the reciprocal of the following fractions?

Find the product of two numbers.

3 4 9

9 7 15

5 11 13

10 7 9

1. **Processing the Activities**

How did you get the reciprocal of each fraction?

What is the product of the reciprocals?

Remember: If the product of two number is 1, each number is the multiplicative inverse or reciprocal of the other.

* For each number or fraction there is only one reciprocal. A number cannot have two or more reciprocals.
1. **Reinforcing the Concept and Skill**

Give the reciprocal of the following numbers then multiply.

1. 21 2) 3 3) 5 4) 8 5) 11

 6 20

1. **Summarizing the Lesson**

**What is the product of multiplying a fraction and its reciprocal?**

1. **Applying to New and Other Situations**

Make the sentence true.

6 x \_\_\_\_\_\_ = 1 8 *1*x \_\_\_\_\_\_=1

 10

1. **Assessment**

Use flash cards.

Look at the number pairs, say “Yes” if they are reciprocals and “No” if they are not. If they are reciprocal, find its product.

1. 3 , 4 2) 1 , 5 3) 3 , 9 4) 7 , 10 5) 5 , 7

4 5 9 3 10 7 6

1. **Home Activity**

**Remediation**

 Give the reciprocals of the following fractions then multiply.

1. 17 2) 5 3) 11 4) 7 5) 21

 19 20 13 21 30

**Enrichment**

Copy the number pairs. If each number in the pair is the multiplicative inverse of the other, multiply. If they are not, find the reciprocal of each number then multiply..

1. 1 , 6 2) 18, 17 3) 4 , 5 4) 7 , 7 5) 21 , 21

 6 18 5 1

6) 1 , 8 7) 4 , 5 8) 12 , 1 9) 4 , 5 10) 12 , 1

 8 7 7 1 5 1 1