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| ***Addition and Subtraction of Fractions with Positives***  **Handout-KEY** | **Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

**Objective: To practice adding and subtracting fractions.**

**Segment 1**: Definition of a fraction.

Everyday objects are often divided into sections. A cake is good example because it has to be cut into pieces to be served to guests.

The simple definition of a fraction is that it represents part of a whole unit. There are two important terms to know when studying fractions: numerator and denominator. In fractions the top number is counting, i.e. numerating; so it is called the numerator; and the bottom number is identifying the type of piece that is being counted, i.e. denominating, so it is called the denominator.

Special property of 1

The number 1 can be written as a fraction where the numerator and denominator are the same.

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The **lowest common denominator (LCD)** is the smallest integer that you can use to make the denominators the same. It is the smallest number both denominators divide into evenly.

Practice: Find the LCD and rewrite fractions to its equivalent form.

1. (b) (c)

Ans: 20 Ans: 45 Ans: 60

**Segment 2**: Adding and subtracting fractions.

To add or subtract fractions, first rewrite each fraction as an equivalent fraction with a common denominator, using the least common multiple (LCM) of the denominators as the common denominator. Then add/subtract the numerators, and place it over the common denominator. Write the answer in simplest form.

Practice: Add or subtract.

1. (b)

Ans: Ans:

(c) (d)

Ans: Ans:

**Segment 3**: Add and subtract mixed numerals.

Mixed numbers are numbers that have two parts: a whole number and a fraction.

Adding mixed numbers is like adding whole numbers and fractions.

**To add mixed numbers:**

-Write the fractions so they have a common denominator

-Add the whole numbers.

-Add the fractions

Note: When you add mixed numerals, you may get an improper fraction which you can get rid of.

**To subtract mixed numbers:**

-Write the fractions so they have a common denominator

-Rewrite the smaller fraction if you are subtracting a larger fraction from a smaller one

-Subtract the whole numbers

-Then subtract the fractional parts

Practice: Add or subtract mixed numbers:

1. (b)

Ans: Ans:

(c) (d)

Ans: Ans:

(e) (f)

Ans: Ans:

**SELF-REFLECTION ACTIVITY**

- Which segment of the adding and subtracting fractions was most challenging for you?

- What steps are you going to take to learn this subject?