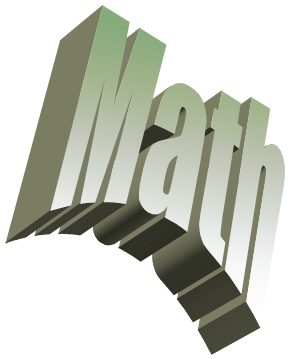
Algebra/Geometry Institute Summer 2005



Lesson Planning I: Fractions and Mixed Numbers

Faculty Name: Delores Curtis
School: Myrtle Hall No. IV
Grade Level: 5

1 Teaching objective(s)

Mississippi Framework- Grade 5

- The students will write fractions as mixed numbers and mixed numbers as fractions.

2 Instructional Activities

- On each side of the gym there are nine seats in a row. When 13 fifth graders were being seated to watch the game, they needed more than one row. How can a fraction represent the rows they needed. $\frac{13}{9}=\frac{9}{9}+\frac{4}{9}=1\frac{4}{9}$
- Teacher explains: A mixed number is a number written as a whole number and a fraction. $1\frac{4}{9}$
- An improper fraction is a fraction in which the numerator is greater than or equal to the denominator. $\frac{13}{9}$
- The teacher will model on the dry erase board an example of a mixed number and an improper fraction.

Example 1:

- Write $\frac{13}{9}$ as a mixed number:

Since $\frac{13}{9}$ means 13 divided by 9, use division to change an improper fraction to a mixed number. Write the remainder as a fraction.

$\frac{13}{9}$ $\quad 9\overline{)13}^{1}$ $\quad -9$ $\quad 4$ $\qquad 9\overline{)13}^{1\frac{4}{9}}$ $\quad -9$ $\quad 4$

Example 2:

Write $1\frac{4}{9}$ as an improper fraction.

- Multiply the denominator by the whole number and add the numerator.
- Write the sum over the denominator.

$$1\frac{4}{9} \rightarrow 1\frac{4}{9} \rightarrow 1\frac{4}{9} \rightarrow 1\frac{4}{9} \rightarrow \frac{13}{9}$$

$9+4=13$

$9\times 1=9$

- The teacher will call students randomly to practice on the dry erase board writing mixed number as improper fractions. The students will then write each proper fraction as a mixed number.

1.) $\frac{7}{3}$ 2.) $\frac{5}{2}$ 3.) $3\frac{2}{3}$

4.) $6\frac{3}{8}$ 5.) $\frac{15}{14}$ 6.) $\frac{23}{5}$

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- The students will work in groups of four to complete the following problems in 10 minutes. The teacher will say write each mixed number as an improper fraction. Write each improper fraction as a mixed number. The teacher will observe and monitor students working in groups.

1.) $1\frac{1}{2}$ 5.) $3\frac{1}{3}$ 9.) $\frac{74}{8}$

2.) $1\frac{2}{3}$ 6.) $6\frac{2}{7}$ 10.) $\frac{48}{5}$

3.) $2\frac{3}{8}$ 7.) $\frac{12}{10}$ 11.) $\frac{29}{2}$

4.) $2\frac{1}{4}$ 8.) $\frac{25}{8}$ 12.) $\frac{13}{10}$

3 Materials and Resources

Textbook: Silver Burdett Ginn Mathematics:
The Path to Math Success. Copyright 2001

Dry eraser
Board
Paper
Pencil

4 Assessment

- Teacher will observe students working problems.
- Teacher will call students randomly to work problems on the board.
- Teacher will give students a worksheet to complete and receive a grade. See Attachment

Write each mixed number as in improper fraction. Write each improper fraction as a mixed number.

1.) $1\frac{3}{4}$

2.) $\frac{9}{2}$

3.) $2\frac{3}{4}$

4.) $2\frac{1}{3}$

5.) $\frac{16}{5}$

6.) $1\frac{9}{12}$

7.) $\frac{5}{3}$

8.) $\frac{19}{18}$

9.) $\frac{9}{4}$

10.) $\frac{10}{9}$

11.) $1\frac{3}{5}$

12.) $2\frac{2}{5}$

13.) $\frac{12}{15}$

14.) $\frac{17}{2}$

15.) $\frac{7}{8}$