

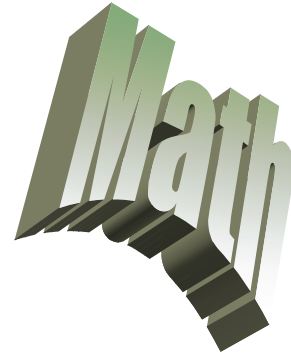
Algebra/Geometry Institute Summer 2005

Lesson Plan 2: Fractions, Decimals, and Percents

Faculty Name: Steven Thompson

School: McEvans Elementary

Grade Level: 6th



1 Teaching objective(s)

The students will demonstrate in writing the ability to convert fractions to decimals to percents.

2 Instructional Activities

A. Introduction/ Motivation

1. Tell students that mathematics can be seen in all aspects of their daily life.
2. Explain to the students that batting averages can be represented as fraction.
3. Remind students that decimals, fractions, and percents are important not only in baseball but cooking, shopping, and etc.
4. Tell the students that at the end of the day that they will be able to convert fraction to decimals to percents.

B. Study Learning

1. Review the words fractions, percents, and decimals.
2. Tell the students that a fraction is a number that names part of a whole. Show The following representation as an example:
 $\frac{4}{5}$ = part of whole/the whole.
-Write the definition of percent on the board. A percent is a fraction whose denominator of 100 is expressed as a percent sign (%). Show the following example on the board. $\frac{99}{100}$ = 99% = 99 percent.
-Write the definition of a decimal number. A decimal number is the number in the base 10 number system, having one or more places to the right of the decimal point. Show the following example on the board: .45
3. Put a few examples on the board and go over them with the students.
-Examples: $\frac{3}{4}$, $\frac{1}{2}$, $\frac{2}{3}$
4. Ask if they have any questions about the definitions of the three terms.
5. Tell the students that in today's lesson they will learn how to convert fractions, decimals, and percents.

Guided Practice

1. Show an example of how to convert from fraction to decimal to percent.
-Examples: $\frac{7}{10}$

2. Place several problems on the board and allow student to come up and explain them.
-Problems: $7/20$, $7/25$, $7/30$
2. Give assessment on the board.
-Write each of the following as a decimal and as a percent.
 - a. the ratio of odd numbers to even numbers in the numbers 1 to 10
 - b. the ratio of numbers divisible by 4 to the numbers that are not divisible by 4 in the numbers 1 to 24-Answer any questions.

Independent Practice

1. Ask student to work with a partners.
2. Tell the students to measure their partner's height (h) in inches.
Then measure arms outstretch/outreach (r) fingertip- to- fingertip.
Compute the ratio r to h for your partner.
Write the ratio as a percent.
3. Have students share their outcome.

C. Culmination/ Closure

1. Review fractions, decimals, and percents.
2. Have each student express 0.09 as a percent. Express each of these percents as a decimal. 62%, 44%, 63%
3. Go over each problem with the students.

D. Follow-up

1. Tell the students to take everything off their desk except for a pencil.
-Pass out a quiz to each student.
-Tell students to complete the quiz and place it in the basket on the desk.

3 **Materials and Resources**

Throughout this lesson I will incorporate the use of chalkboard dry erase markers, and tape measures. The problems and activities are provided by Glenco Division of MacMillan/McGraw-Hill Publishing Company Mathematics Applications and Connection, Course2., 1995.

4 **Assessment**

At the close of the lesson, I will administer a quiz covering the material that was taught in the lesson.

QUIZ

Name _____ Date _____

Express each decimal as a percent.

- | | |
|----------|----------|
| 1. 0.39 | 2. 0.75 |
| 3. 0.875 | 4. 0.325 |
| 5. 0.4 | 6. 0.03 |
| 7. 0.07 | 8. 0.999 |
| 9. 1 | 10. 0.01 |

Express each percent as a decimal.

- | | |
|----------|---------|
| 11. 43% | 12. 89% |
| 13. 7% | 14. 2% |
| 15. 17% | 16. 90% |
| 17. 62% | 18. 45% |
| 19. 100% | 20. 13% |

Problem Solving

21. Tadashi has a batting average of 0.344.
- Write this number as a percent.
 - About how many hits could he expect to have out of his next 100 times at bat?