

MATH 122 – Number Concepts for Elementary School Teachers (3 Credits)

DESCRIPTION:

Mathematics needed by those teaching the new-content curriculum at the elementary school level, emphasizing number concepts. This course DOES NOT satisfy the General Education Core requirements.

Prerequisite: MATH 096 or MATH 097 with a Grade of C or Better; or a Satisfactory ACT/SAT/Placement Test Score

OUTCOMES:

- a. Understand the mathematics that he/she will be expected to teach.
- b. Express that understanding to a student or teacher.
- c. Structure the learning of another, specifically a student, in a way that is logical but also learnable.
- d. Develop some facility to think about mathematics and mathematical ideas.
- e. Become autonomous (self-governing, able to undertake or carry out without outside control) in both mathematical work and evaluation of that work.
- f. Work with manipulatives on topics taught in elementary school.
- g. Become an accomplished problem solver and critical thinker.
- h. Have an ability to apply and extend these concepts.

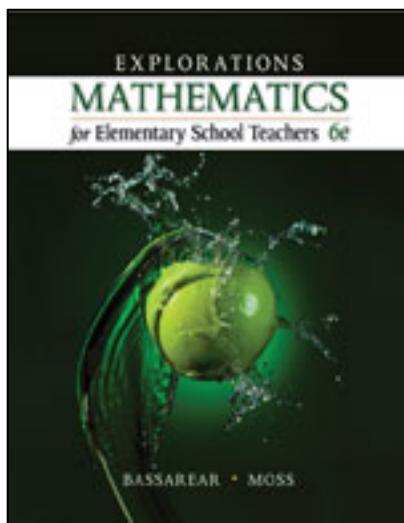
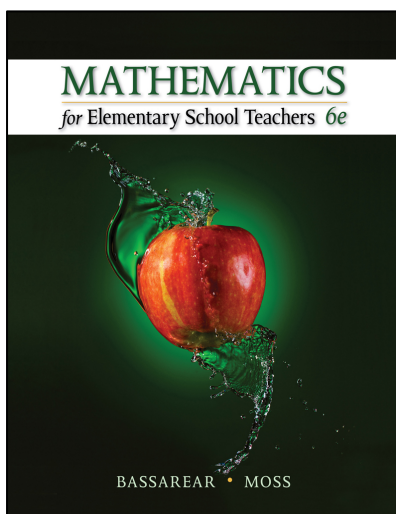
TEXTS:

Titles: *Mathematics for Elementary School Teachers, 6th edition (required); *Explorations, Mathematics for Elementary School Teachers, 6th edition (optional);

Authors: Bassarear and Moss;

Publisher: Cengage;

ISBN-13: Textbook - 9781305071360, Explorations Manual - 9781305112834



*Note: Full-time instructors have the right to use no text or a different text.

OUTLINE:

- **Problem Solving:** Process, Practice, and Content Standards (Bassarear/Moss, Chapter 1)
- **Sets and Numeration:** Bassarear/Moss, Chapter 2)
- **Fundamental Operations of Arithmetic:** (Bassarear/Moss, Chapter 3)
- **Integers, Fractions and Rational Numbers:** (Bassarear/Moss, Chapter 4)
- **Algebraic Thinking:** Understanding Patterns, Relations, Functions, Representation and Analysis of Math Situations, Algebraic Symbols, Mathematical Models, Analyzing Change (Bassarear/Moss, Chapter 6)

EVALUATION:

Grades may be determined by student performance in one or more of the following areas: in-class tests, take-home tests, homework assignments, quizzes, special projects, papers, attendance, and class participation. Degree of importance and types of assessment used will depend on the instructor.

This course DOES NOT satisfy the math requirement in the General Education Core component for degree and certificate programs at CSN. It is only applicable for degrees and certificates in Elementary Education.