How to Teach Factoring Numbers Effectively (Webinar Syllabus)

with Dan Sinclair

This course provides an opportunity to learn the fundamental mathematical progressions underlying students' understanding of factoring numbers as it relates to multiplication and division of whole numbers.

Emphasis will be given on using mathematical models that demonstrate number relationships, mathematical structure, and a student's understanding of the inverse nature of multiplication and division.

Goals/Objectives

The following goals and objectives have been set for this webinar. Specifically, participants will have the opportunity to:

- Understand key academic vocabulary related to multiplication, division, and the area model
- Become knowledgeable about instructional practices using a hands-on methodology to show how factoring numbers is directly related to multiplication and division
- Learn the patterns, methods, and models necessary to teach factoring of numbers
- Become familiar with the methods for teaching prime and composite numbers
- Learn ways to help students self-assess whether a number is prime or composite.
- Gain confidence in their ability to efficiently teach factoring numbers

Specifically, the course will address the following concepts using hands-on methods:

- Multiplication
- Division
- Prime and composite numbers and how to identify them
- Finding the factors of a numbers

Students are expected:

- To be timely in their attendance
- Engage the instructor for clarification or to ask questions through the chat feature
- Take notes on concepts and processes that will increase their effectiveness in teaching factoring