

# Math 105 – Math for the Elementary School Teacher

## Why take Math 105?

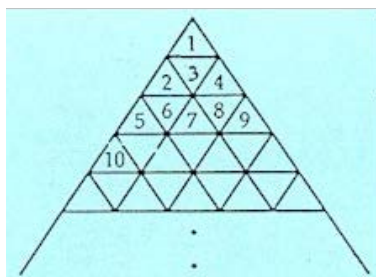
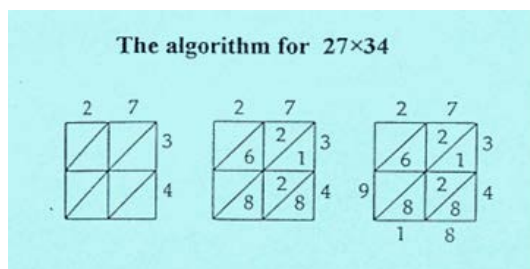
Math 105 is designed to provide opportunities for the student:

- to experience the development of the basic laws of arithmetic and the properties of geometry;
- to develop critical thinking and gain confidence in applying problem solving strategies;
- to explore topics and materials related to the elementary school curriculum.

### Examples:

#### *Lattice multiplication*

Lattice multiplication was passed along from the early Hindus and Chinese to the Arabs to medieval Europe:



#### *Number pattern*

If the pattern continues, where would 126 be located?

### Prerequisites:

One of the following: (C or better in one of Principles of Mathematics 11, Pre-calculus 11, Foundations of Mathematics 12, or MATH 085) or (C+ or better in Applications of Mathematics 12) or (B or better in Foundations of Mathematics 11) or (Pre-calculus 12) or (any UFV MATH course numbered 092 or higher) or (a score of 17/25 or better on Part A of the MSAT).

### Transferability:

SFU, UVic, Open University, TWU, UBC.

### Content:

Pattern analysis, problem solving strategies, sets, Venn diagrams, whole number operations, numerations systems, algorithms for decimal and non-decimal bases, primes, composites, divisibility, operations with fractions and decimals, ratio and proportion, percent, operations with integers and real numbers, geometric shapes and their properties, tessellations, measurement involving length, area and volume, congruence and similarity, transformations, introduction to fractals.