Standards_and_Objectives_Morgan_Reid:

Math 7 Cycle 1:

Overview

Multiplication and division facts to 100
Representing integers in multiple ways
Operations with integers
Coordinates and graphing translations, reflections, and rotations
Relationships in patterns

Topic
Continue with operations with integers
Single Step Operations to 3 digits
By any method (Montessori, hand, calc)
Order of Operations
Addition, Subtraction, Multiplication and Division patterns
Addition Rules
Multiplication Rules
Division Rules
Squaring patterns, Cubing patterns
Quiz on Addition, Subtraction, Multiplication and Division
Representing integer patterns on a number line

BC Math 7 Standards
(Source: https://curriculum.gov.bc.ca/curriculum/mathematics/7)

Objectives:
Students are expected to be able to do the following:
Reasoning and analyzing
- *Use logic and patterns*
- *Demonstrate and apply mental math strategies*
  - *extending whole-number strategies to integers*
  - *working toward developing fluent and flexible thinking about number*

  - *Use tools or technology to explore and create patterns and relationships, and test conjectures*
- *Model mathematics in contextualized experiences*
  - *acting it out, using concrete materials (e.g., manipulatives), drawing pictures or diagrams, building, programming*

Understanding and solving
- *Apply multiple strategies to solve problems in both abstract and contextualized situations*
- *Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving*
- *Visualize to explore mathematical concepts*
- *Engage in problem-solving experiences that are connected*
  - *in daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration*

Communicating and representing
- *Use mathematical vocabulary and language to contribute to mathematical discussions*
- *Explain and justify mathematical ideas and decisions*
  - *using mathematical arguments*

- *Communicate mathematical thinking in many ways*
  - *concretely, pictorially, symbolically, and by using spoken or written language to express, describe, explain, justify, and apply mathematical ideas; may use technology such as screencasting apps, digital photos*

- *Represent mathematical ideas in concrete, pictorial, and symbolic forms*

Connecting and reflecting
- *Reflect on mathematical thinking*
  - *sharing the mathematical thinking of self and others, including evaluating strategies and solutions, extending, and posing new problems and questions*

- *Connect mathematical concepts to each other and to other areas and personal interests*
  - *to develop a sense of how mathematics helps us understand ourselves and the world around us (e.g., cross-discipline, daily activities, local and traditional practices, the environment, popular media and news events, and social justice)*

- *Use mathematical arguments to support personal choices*
  - *including anticipating consequences*