

**THE FOLLOWING STATE CURRICULUM STANDARDS ARE ADDRESSED BY
THE QUARTER MILE MATH SOFTWARE
FOR THE STATE OF MAINE**

Subject: MATH
Standard: B. Computation
Strand: B. Computation

Substrand Titles that Address the Substrand

(Gr. PreK-2) 1. Use and apply estimation with quantities, measurements, computations, and problem-solving.

Quarter Mile Math Level 1

(Gr. PreK-2) 2. Use multiple strategies in solving problems involving addition and subtraction of whole numbers.

Quarter Mile Math Level 1

(Gr. PreK-2) 3. Show understanding of addition and subtraction by using a variety of materials, strategies, and symbols.

Quarter Mile Math Level 1

Subject: MATH
Standard: K. Mathematical Communication
Strand: K. Mathematical Communication

Substrand Titles that Address the Substrand

(Gr. PreK-2) 1. Use numerals and symbols ($>$, $<$, $=$, $+$, $-$) to report numerical data and relationships.

Quarter Mile Math Level 1

Grades 3 - 4

Subject: MATH
Standard: A. Numbers And Number Sense
Strand: A. Numbers And Number Sense

Substrand Titles that Address the Substrand

(Gr. 3-4) 1. Read, compare, order, classify, and explain whole numbers up to one million.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 3-4) 2. Read, compare, order, classify, and explain simple fractions through tenths.

Quarter Mile Math Level 2

(Gr. 3-4) 3. Demonstrate knowledge of the meaning of decimals and integers and an understanding of how they may be used.

Quarter Mile Math Level 2

Subject: MATH
Standard: B. Computation
Strand: B. Computation

Substrand **Titles that Address the Substrand**

(Gr. 3-4) 1. Solve multi-step, real-life problems using the four operations with whole numbers.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. 3-4) 2. Solve real-life problems involving addition and subtraction of simple fractions.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. 3-4) 4. Develop proficiency with the facts and algorithms of the four operations on whole numbers using mental math and a variety of materials, strategies, and technologies.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

Subject: MATH

Standard: H. Algebra Concepts

Strand: H. Algebra Concepts

Substrand **Titles that Address the Substrand**

(Gr. 3-4) 1. Develop and evaluate simple formulas in problem-solving contexts.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. 3-4) 2. Find replacements for variables that make simple number sentences true.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

Grades 5 - 8

Subject: MATH

Standard: A. Numbers And Number Sense

Strand: A. Numbers And Number Sense

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 1. Use numbers in a variety of equivalent and interchangeable forms (e.g., integer, fraction, decimal, percent, exponential, and scientific notation) in problem-solving.

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 5-8) 2. Demonstrate understanding of the relationships among the basic arithmetic operations on different types of numbers.

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 5-8) 3. Apply concepts of ratios, proportions, percents, and number theory (e.g., primes, factors, and multiples) in practical and other mathematical situations.

Quarter Mile Math Level 2
Quarter Mile Math Level 3

Subject: MATH

Standard: B. Computation

Strand: B. Computation

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 1. Compute and model all four operations with whole numbers, fractions, decimals, sets of numbers, and percents, applying the proper order of operations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: G. Patterns, Relations, Functions

Strand: G. Patterns, Relations, Functions

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 2. Analyze relationships to explain how a change in one quantity can result in a change in another.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) 3. Use patterns and multiple representations to solve problems.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: H. Algebra Concepts

Strand: H. Algebra Concepts

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 1. Use the concepts of variables and expressions.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) 2. Solve linear equations using concrete, informal, and formal methods which apply the order of operations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) 5. Demonstrate an understanding of inequalities and non-linear equations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) 6. Find solutions for unknown quantities in linear equations and in simple equations and inequalities.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: B. Computation

Strand: B. Computation

Substrand **Titles that Address the Substrand**

(Gr. 9-12) 1. Use various techniques to approximate solutions, determine the reasonableness of answers, and justify the results.

Quarter Mile Math Level 2

(Gr. 9-12) 2. Explain operations with number systems other than base ten.

