

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

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 2. Numbers And Numeration

Substrand Titles that Address the Substrand

(Gr. PreK-4) 2C. Relate counting to grouping and place value.

Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. PreK-K) 2D. Recognize the order of whole numbers.

Quarter Mile Math Level 1

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 3. Operations

Substrand Titles that Address the Substrand

(Gr. PreK-K) 3A. Develop strategies for selecting the appropriate computational and operational methods in problem solving.

Quarter Mile Math Level 1

(Gr. PreK-K) 3B. Develop readiness for single-digit addition and subtraction facts.

Quarter Mile Math Level 1

(Gr. PreK-K) 3C. Understand the commutative and associative properties.

Quarter Mile Math Level 1

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 6. Uncertainty

Substrand Titles that Address the Substrand

(Gr. PreK-K) 6A. Recognize situations in which only an estimate is required.

Quarter Mile Math Level 1

(Gr. PreK-K) 6B. Develop a variety of estimation skills and strategies.

Quarter Mile Math Level 1

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 7. Patterns/functions

Substrand Titles that Address the Substrand

(Gr. PreK-4) 7B. Represent and describe mathematical relationships.

Quarter Mile Math Level 2

Subject: MATH

Standard: Standard 3 - Mathematics

Strand: 2. Numbers And Numeration

Substrand

Titles that Address the Substrand

(Gr. 1-8) 2D. Recognize order relations for decimals, integers, and rational numbers.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Standard 3 - Mathematics

Strand: 3. Operations

Substrand

Titles that Address the Substrand

(Gr. 1-4) 3A. Add and subtract whole numbers.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 1-4) 3B. Develop strategies for selecting the appropriate computational and operational method in problem solving.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 1-4) 3D. Understand the commutative and associative properties.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 1-4) 3C. Know single digit addition, subtraction, multiplication, and division facts.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH

Standard: Standard 3 - Mathematics

Strand: 6. Uncertainty

Substrand

Titles that Address the Substrand

(Gr. 1-4) 6C. Recognize situations in which only an estimate is required.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 1-4) 6D. Develop a wide variety of estimation skills and strategies.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. 1-4) 6B. Make estimates to compare to actual results of computations.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 7. Patterns/functions

Substrand **Titles that Address the Substrand**

(Gr. 1-4) 7C. Explore and express relationships, using variables and open sentences.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 2. Numbers And Numeration

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 2A. Understand, represent, and use numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential, and expanded notation).

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) 2B. Understand and apply ratios, proportions, and percents through a wide variety of hands-on explorations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 3. Operations

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 3A. Add, subtract, multiply, and divide fractions, decimals, and integers.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-6) 3B. Use grouping symbols (parentheses) to clarify the intended order of operations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-6) 3C. Apply the associative, commutative, and distributive properties, and inverse and identity elements.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-6) 3D. Demonstrate an understanding of operational algorithms (procedures for adding, subtracting, etc.).

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-6) 3. Develop appropriate proficiency with facts and algorithms.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-6) 3F. Apply concepts of ratio and proportion to solve problems.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 4. Modeling/multiple Representation

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 4. Use variables to represent relationships.
Quarter Mile Math Level 2
Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 6. Uncertainty

Substrand **Titles that Address the Substrand**

(Gr. 5-8) 6A. Use estimation to check the reasonableness of results obtained by computation, algorithms, or the use of technology.
Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 5-8) 6B. Use estimation to solve problems for which exact answers are inappropriate.
Quarter Mile Math Level 2

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 7. Patterns/functions

Substrand **Titles that Address the Substrand**

(Gr. 5-6) 7C. Develop methods to solve basic linear equations.
Quarter Mile Math Level 3

(Gr. 5-6) 7I. Use patterns and functions to represent and solve problems.
Quarter Mile Math Level 2
Quarter Mile Math Level 3

Grades 7 - 8
Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 3. Operations

Substrand **Titles that Address the Substrand**

(Gr. 7-8) 3B. explore and use the operations dealing with roots and powers.
Quarter Mile Math Level 2

(Gr. 7-8) 3C. Use grouping symbols (parentheses) to clarify the intended order of operations.
Quarter Mile Math Level 3

(Gr. 7-8) 3D. Apply the associative, commutative, and distributive properties, and inverse and identity elements.
Quarter Mile Math Level 3

(Gr. 7-8) 3. Demonstrate an understanding of operational algorithms (procedures for adding, subtracting, etc.).
Quarter Mile Math Level 3

(Gr. 7-8) 3F. Develop appropriate proficiency with facts and algorithms.
Quarter Mile Math Level 3

(Gr. 7-8) 3G. Apply concepts of ratio and proportion to solve problems.
Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 7. Patterns/functions

Substrand **Titles that Address the Substrand**

(Gr. 7-8) 7C. Develop methods to solve basic linear and quadratic equations.
Quarter Mile Math Level 3

(Gr. 7-8) 7. Verify results of substituting variables.
Quarter Mile Math Level 3

(Gr. 7-8) 7K. Use patterns and functions to represent and solve problems.
Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 2. Numbers And Numeration

Substrand **Titles that Address the Substrand**

(Gr. 9-12) 2A. Understand and use rational and irrational numbers.
Quarter Mile Math Level 3

(Gr. 9-12) 2B. Recognize the order of real numbers.
Quarter Mile Math Level 3

Subject: MATH
Standard: Standard 3 - Mathematics
Strand: 3. Operations

Substrand **Titles that Address the Substrand**

(Gr. 9-12) 3A. Use addition, subtraction, multiplication, division, and exponentiation with real numbers and algebraic expressions.
Quarter Mile Math Level 3

(Gr. 9-12) 3. Combine functions, using the basic operations and the composition of two functions.
Quarter Mile Math Level 2
Quarter Mile Math Level 3