

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

Subject: MATH
Standard: B. Number Operations And Relationships
Strand: B. Number Operations And Relationships

Substrand Titles that Address the Substrand

(Gr. K-4) B.4.1 Represent and explain whole numbers, decimals, and fractions with physical materials number lines and other pictorial models verbal descriptions place-value concepts and notation symbolic renaming (e.g., $43=40+3=30+13$)
Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. K-4) B.4.2 Determine the number of things in a set by grouping and counting (e.g., by threes, fives, hundreds) combining and arranging (e.g., all possible coin combinations amounting to thirty cents) estimation, including rounding
Quarter Mile Math Level 1

(Gr. K-4) B.4.3 Read, write, and order whole numbers, simple fractions (e.g., halves, fourths, tenths, unit fractions) and commonly-used decimals (monetary units)
Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. K-4) B.4.4 Identify and represent equivalent fractions for halves, fourths, eighths, tenths, sixteenths
Quarter Mile Math Level 2

(Gr. K-4) B.4.5 In problem-solving situations involving whole numbers, select and efficiently use appropriate computational procedures such as recalling the basic facts of addition, subtraction, multiplication, and division using mental math (e.g., $37+25$, 40×7) estimation selecting and applying algorithms for addition, subtraction, multiplication, and division using a calculator
Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. K-4) B.4.6 Add and subtract fractions with like denominators
Quarter Mile Math Level 2

(Gr. K-4) B.4.7 In problem-solving situations involving money, add and subtract decimals
Quarter Mile Math Level 2

Subject: MATH
Standard: F. Algebraic Relationships
Strand: F. Algebraic Relationships

Substrand Titles that Address the Substrand

(Gr. K-4) F.4.2 Use the vocabulary, symbols, and notation of algebra accurately (e.g., correct use of the symbol '='; effective use of the associative property of multiplication)
Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. K-4) F.4.5 Use simple equations and inequalities in a variety of ways, including using them to represent problem situations solving them by different methods (e.g., use of manipulatives, guess and check strategies, recall of number facts) recording and describing solution strategies

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. K-4) F.4.6 Recognize and use generalized properties and relationships of arithmetic (e.g., commutativity of addition, inverse relationship of multiplication and division)

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH

Standard: B. Number Operations And Relationships

Strand: B. Number Operations And Relationships

Substrand

Titles that Address the Substrand

(Gr. 5-8) B.8.1 Read, represent, and interpret various rational numbers (whole numbers, integers, decimals, fractions, and percents) with verbal descriptions, geometric models, and mathematical notation (e.g., expanded, scientific, exponential)

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) B.8.2 Perform and explain operations on rational numbers (add, subtract, multiply, divide, raise to a power, extract a root, take opposites and reciprocals, determine absolute value)

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) B.8.3 Generate and explain equivalencies among fractions, decimals, and percents

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) B.8.4 express order relationships among rational numbers using appropriate symbols ($>$, $<$, \geq , \leq ,)

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) B.8.5 Apply proportional thinking in a variety of problem situations that include, but are not limited to ratios and proportions (e.g., rates, scale drawings, similarity) percents, including those greater than 100 and less than one (e.g., discounts, rate of increase or decrease, sales tax)

Quarter Mile Math Level 2

(Gr. 5-8) B.8.6 Model and solve problems involving number-theory concepts such as prime and composite numbers divisibility and remainders greatest common factors least common multiples

Quarter Mile Math Level 2

(Gr. 5-8) B.8.7 In problem-solving situations, select and use appropriate computational procedures with rational numbers such as calculating mentally estimating creating, using, and explaining algorithms using technology (e.g., scientific calculators, spreadsheets)

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH
Standard: F. Algebraic Relationships
Strand: F. Algebraic Relationships

Substrand **Titles that Address the Substrand**

(Gr. 5-8) F.8.1 Work with algebraic expressions in a variety of ways, including using appropriate symbolism, including exponents and variables evaluating expressions through numerical substitution generating equivalent expressions adding and subtracting expressions

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 5-8) F.8.2 Work with linear and nonlinear patterns and relationships in a variety of ways, including representing them with tables, with graphs, and with algebraic expressions, equations, and inequalities describing and interpreting their graphical representations (e.g., slope, rate of change, intercepts) using them as models of real-world phenomena describing a real-world phenomenon that a given graph might represent

Quarter Mile Math Level 3

(Gr. 5-8) F.8.5 Recognize and use generalized properties and relations, including additive and multiplicative property of equations and inequalities commutativity and associativity of addition and multiplication distributive property inverses and identities for addition and multiplication transitive property

Quarter Mile Math Level 2
Quarter Mile Math Level 3

Subject: MATH
Standard: B. Number Operations And Relationships
Strand: B. Number Operations And Relationships

Substrand **Titles that Address the Substrand**

(Gr. 9-12) B.12.3 Perform and explain operations on real numbers (add, subtract, multiply, divide, raise to a power, extract a root, take opposites and reciprocals, determine absolute value)

Quarter Mile Math Level 3

Subject: MATH
Standard: F. Algebraic Relationships
Strand: F. Algebraic Relationships

Substrand **Titles that Address the Substrand**

(Gr. 9-12) F.12.3 Solve linear and quadratic equations, linear inequalities, and systems of linear equations and inequalities numerically graphically, including use of appropriate technology symbolically, including use of the quadratic formula

Quarter Mile Math Level 3