

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

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. K) 2. Count in sequence.

Quarter Mile Math Level 1

(Gr. K) 3. Compare numbers and sets of objects up to 10. Stanford9 Set to set Set to number Number to set
Number to number

Quarter Mile Math Level 1

(Gr. K) 4. Compare numbers and sets of objects. Stanford9 qual One more One less

Quarter Mile Math Level 1

(Gr. K) 5. Order numbers and sets of objects from 0 through 10. Stanford9

Quarter Mile Math Level 1

(Gr. K) 6. Use number words and numerals in everyday classroom situations. Stanford9

Quarter Mile Math Level 1

(Gr. K) 7. Develop an awareness of addition and subtraction. Stanford9

Quarter Mile Math Level 1

(Gr. K) 8. Recognize that a whole object can be divided into equal parts.

Quarter Mile Math Level 1

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. 1) 1. Demonstrate proficiency in applying one-to-one correspondence using a variety of objects.

Quarter Mile Math Level 1

(Gr. 1) 3. Identify and compare the number of objects in sets up to 100 elements. Stanford9 Set with fewer or fewest
elements Set with more or most elements.

Quarter Mile Math Level 1

(Gr. 1) 4. Interpret and use representations and relationships for a given number including numeral and number word. , 2
+ 3

Quarter Mile Math Level 1

(Gr. 1) 5. Read, write, order, and compare whole numbers from 0 through 100. Stanford9

Quarter Mile Math Level 1

(Gr. 1) 7. Count in a variety of ways. Stanford9 Forward and backward by ones, fives, and tens From an initial number

Quarter Mile Math Level 1

(Gr. 1) 8. Use number words and numerals in everyday classroom situations.

Quarter Mile Math Level 1

(Gr. 1) 9. Identify place value of the ones digit and tens digit in a number. Stanford9 Using manipulatives Using pictorial representation Determining the value of a number given tens and ones

Quarter Mile Math Level 1

(Gr. 1) 10. Identifying a number that is 10 more or 10 less than a given number. Stanford9

Quarter Mile Math Level 1

(Gr. 1) 11. Estimate quantity of objects in a set.

Quarter Mile Math Level 1

(Gr. 1) 12. Demonstrate an understanding of addition and subtraction. Stanford9 Telling number stories Joining and separating sets of objects Applying signs to the actions of joining and separating sets (+ and -) Using vertical and horizontal format

Quarter Mile Math Level 1

(Gr. 1) 13. Develop vocabulary associated with addition and subtraction.

Quarter Mile Math Level 1

(Gr. 1) 14. Demonstrate oral and written proficiency in basic addition facts of sums to 10 and in the corresponding basic subtraction facts. Stanford9

Quarter Mile Math Level 1

(Gr. 1) 15. explore addition using more than two addends. Manipulative representations Numerical representations

Quarter Mile Math Level 1

(Gr. 1) 16. explore the addition and subtraction of two-digit numbers.

Quarter Mile Math Level 1

(Gr. 1) 18. Solve problems using a variety of tools, models, and techniques. Stanford9 models: number lines, tally marks, lists, drawings, tables, graphs; techniques: estimation, mental math, dramatization, patterns

Quarter Mile Math Level 1

(Gr. 1) 19. Determine if estimations and calculations are reasonable. $7 - 3$ cannot be more than 7

Quarter Mile Math Level 1

(Gr. 1) 20. Recognize relationships between operations. $2 + 3 = 5$ $3 + 2 = 5$ $5 - 3 = 2$ $5 - 2 = 3$

Quarter Mile Math Level 1

(Gr. 1) 24. Explain the identity properties of addition and subtraction. Stanford9

Quarter Mile Math Level 1

(Gr. 1) 26. Demonstrate an understanding of addition and subtraction as inverse operations. Stanford9

Quarter Mile Math Level 1

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand Titles that Address the Substrand

(Gr. 1) 44. Sort, compare, and order objects using different characteristics.

Quarter Mile Math Level 1

(Gr. 1) 45. xplore patterning of objects. Stanford9 Reproducing and extending patterns Describing patterns Creating simple patterns Identifying patterns in the environment

Quarter Mile Math Level 1

(Gr. 1) 47. Extend number patterns. Stanford9 (10, 11, 12, 13, 14, 15, 16, 17, 18, 19,) (0, 2, 4, 6, 8) repeats when counting by 2s (10, 12, 14, 16, 18,)

Quarter Mile Math Level 1

Subject: MATH

Standard: Geometry, Spatial Sense, Measurement

Strand: Geometry, Spatial Sense, Measurement

Substrand Titles that Address the Substrand

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. 2) 1. Demonstrate proficiency in the use of basic number concepts and skills. Stanford9 Counting forward by ones, twos, threes, fives, and tens Reading, writing, ordering, and comparing whole numbers from 0 through 100 Recognizing written words for numbers from 0 through 20 Using ordinal numbers, first through twentieth Using + and - symbols

Quarter Mile Math Level 1

(Gr. 2) 2. Develop an understanding of basic number concepts and skills. Stanford9 Counting backward by ones, twos, fives, and tens Recognizing odd and even numbers Reading, writing, ordering, and comparing whole numbers from 0 through 1000 Comprehending and using number words and numerals in everyday situations Developing representations for given numbers, numerals, and number words Using >, <, and = symbols

Quarter Mile Math Level 1

(Gr. 2) 4. Find the sum using more than two addends.

Quarter Mile Math Level 1

(Gr. 2) 5. Recognize and use multiple representations for a given number. $30 - 10 = 20$ $10 + 10 = 20$

Quarter Mile Math Level 1

(Gr. 2) 6. Develop an understanding of addition and subtraction of two-digit numbers Stanford9 with and without regrouping.

Quarter Mile Math Level 1

(Gr. 2) 7. Estimate answers to addition and subtraction problems. Determining whether results are reasonable Using calculators to check estimates

Quarter Mile Math Level 1

(Gr. 2) 9. Determine which operations are needed to solve problems. Stanford9

Quarter Mile Math Level 1

(Gr. 2) 10. Express multiplication as repeated addition. Stanford9 Using physical materials Using symbolic representation

Quarter Mile Math Level 1

(Gr. 2) 11. Develop vocabulary associated with operations.

Quarter Mile Math Level 1

(Gr. 2) 12. Investigate the concept of division.

Quarter Mile Math Level 1

(Gr. 2) 13. Solve problems using a variety of tools, models, and techniques. Stanford9 models: number line, tally marks, lists, drawings, tables, graphs; techniques: estimation, mental math, dramatization, patterns

Quarter Mile Math Level 1

(Gr. 2) 15. Demonstrate relationships between operations. Stanford9 $18 - 9 = 9$ because $9 + 9 = 18$

Quarter Mile Math Level 1

(Gr. 2) 16. Identify the value of a digit in the ones, tens, and hundreds place. Stanford9 Using manipulatives Using pictorial representations Determining the value of a number expressed in expanded notation

Quarter Mile Math Level 1

(Gr. 2) 17. Demonstrate proficiency in determining the value of a digit in the ones and tens place.

Quarter Mile Math Level 1

(Gr. 2) 23. Recognize that the order of the addends does not affect the sum (commutative. Stanford9 property of addition).

Quarter Mile Math Level 1

(Gr. 2) 24. Recognize that grouping addends differently does not affect the sum (associative property of addition).

Quarter Mile Math Level 1

(Gr. 2) 25. Use the inverse relationship of addition and subtraction. Stanford9

Quarter Mile Math Level 1

(Gr. 2) 27. Recognize that the order of factors does not affect the product (commutative property of multiplication).

Quarter Mile Math Level 1

(Gr. 2) 28. Apply the knowledge that adding zero will not affect the sum (identity property of addition).

Quarter Mile Math Level 1

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand

Titles that Address the Substrand

(Gr. 3) 1. Demonstrate proficiency in the use of basic number concepts and skills. Stanford9 Identifying odd and even numbers Comparing numbers and sets from 0 to 1000 Reading and writing number words from 0 to 1000 Naming numbers from 0 to 9999 Ordering numbers from 0 to 9999 Using $>$, $<$, $=$, and symbols

Quarter Mile Math Level 1

(Gr. 3) 2. Demonstrate an understanding of place value using physical materials and Stanford9 numerical and pictorial representations. Identifying the place value of any digit in numbers 1 through 9999 Determining the value of a number written in expanded notation Writing numbers in expanded notation

Quarter Mile Math Level 1

(Gr. 3) 3. Round whole numbers to the nearest ten and hundred. Stanford9

Quarter Mile Math Level 1

(Gr. 3) 4. Use skills associated with estimation to solve problems. Stanford9 Using compatible numbers Using front-end estimation $+ 36 + 30$ Determining whether results are reasonable Using calculators to check answers to estimation problems

Quarter Mile Math Level 1

(Gr. 3) 5. Demonstrate proficiency in adding and subtracting two-digit numbers Stanford9 with and without regrouping.

Quarter Mile Math Level 1

(Gr. 3) 6. Add and subtract three-digit numbers with and without regrouping.

(Gr. 3) 7. Develop vocabulary associated with operations.

Quarter Mile Math Level 1

(Gr. 3) 10. Multiply whole numbers with and without regrouping using Stanford9 single-digit multipliers.

Quarter Mile Math Level 1

(Gr. 3) 12. Divide using one-digit divisors.

Quarter Mile Math Level 1

(Gr. 3) 13. Determine which operations are needed to solve problems. Stanford9

Quarter Mile Math Level 1

(Gr. 3) 14. Analyze problems for missing information. Stanford9

Quarter Mile Math Level 1

(Gr. 3) 15. Solve non-routine problems using a variety of strategies. Stanford9

Quarter Mile Math Level 1

(Gr. 3) 22. Add and subtract money values. Stanford9

Quarter Mile Math Level 2

(Gr. 3) 23. Round money values to the nearest dollar. Stanford9

Quarter Mile Math Level 2

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand

Titles that Address the Substrand

(Gr. 3) 51. Use addition and subtraction number sentences to express equalities.

Quarter Mile Math Level 1

(Gr. 3) 52. Solve addition and subtraction number sentences with a missing addend or subtrahend.

Quarter Mile Math Level 1

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. 4) 1. Identify the place value of a digit in a whole number to the millions place. Stanford9
Quarter Mile Math Level 2

(Gr. 4) 2. Compare and order numbers and sets to 9999. Stanford9 Using $>$, $<$, $=$, and
Quarter Mile Math Level 2

(Gr. 4) 3. Demonstrate an understanding of place value. Stanford9 Linking concrete materials to number symbols
Identifying a number when given a pictorial representation of groups of ones, tens, hundreds, and thousands Writing a
number in expanded notation $342 = (3 \times 100) + (4 \times 10) + (2 \times 1)$ Determining the value of a digit the value of 4 is 40
the value of 2 is 2

(Gr. 4) 4. Identify a number that is 1000 more or 1000 less than a given number. Stanford9
Quarter Mile Math Level 2

(Gr. 4) 5. Round whole numbers to the nearest ten, hundred, and thousand. Stanford9
Quarter Mile Math Level 2

(Gr. 4) 6. Round money values to the nearest dollar and dime. Stanford9
Quarter Mile Math Level 2

(Gr. 4) 7. Round decimals to the nearest whole number. Stanford9
Quarter Mile Math Level 2

(Gr. 4) 9. Estimate sums, differences, products, and quotients of whole numbers. Stanford9 Using compatible
numbers Using front-end estimation $+ 31 + 30$
Quarter Mile Math Level 2

(Gr. 4) 10. Demonstrate proficiency in addition and subtraction of three-digit numbers with Stanford9 and without
regrouping.
Quarter Mile Math Level 2

(Gr. 4) 14. Apply rules to determine divisibility by 2, 3, 5, and 10.
Quarter Mile Math Level 2

(Gr. 4) 15. Use problem-solving strategies. Stanford9 Identifying what information is missing Identifying operations
needed to solve problems Applying a variety of strategies to solve non-routine problems guess and check
Quarter Mile Math Level 2

(Gr. 4) 19. Demonstrate proficiency with one-digit multipliers and one-digit divisors. Stanford9
Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. 4) 20. Multiply with two-digit multipliers. Stanford9
Quarter Mile Math Level 1
Quarter Mile Math Level 2

(Gr. 4) 24. Model and interpret proper fractions, improper fractions, and mixed numbers.
Quarter Mile Math Level 2

(Gr. 4) 25. Restate fractions as a form of division. as $5 \over 4$
Quarter Mile Math Level 2

(Gr. 4) 27. Recognize a whole as 100%, as 50%, and as 25%.

Quarter Mile Math Level 2

(Gr. 4) 28. Use models to interpret equivalent fractions including the simplification (lowest terms) of fractions.

Quarter Mile Math Level 2

(Gr. 4) 29. Convert between improper fractions and whole or mixed numbers.

Quarter Mile Math Level 2

(Gr. 4) 30. Use models to compare and order fractions with and without common Stanford9 denominators. fraction represented to the largest fraction represented.

Quarter Mile Math Level 2

(Gr. 4) 31. Model addition and subtraction of fractions with common denominators.

Quarter Mile Math Level 2

(Gr. 4) 32. Read, write, model, and interpret decimals through the hundredths place.

Quarter Mile Math Level 2

(Gr. 4) 33. Identify place value of a digit in a decimal to the hundredths place. Stanford9

Quarter Mile Math Level 2

(Gr. 4) 35. Identify and compare representations of decimals and money amounts. Stanford9

Quarter Mile Math Level 2

(Gr. 4) 36. Compare and order decimals and money amounts. Stanford9 .6 < .9

Quarter Mile Math Level 2

(Gr. 4) 37. Add and subtract decimals and money amounts in context. Stanford9

Quarter Mile Math Level 2

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand

Titles that Address the Substrand

(Gr. 4) 58. Solve open number sentences involving addition, subtraction, multiplication, Stanford9 and division.

Quarter Mile Math Level 2

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand

Titles that Address the Substrand

(Gr. 5) 1. Extend understanding of whole numbers through billions and decimals through Stanford9 thousandths. Rounding Naming, ordering, comparing Identifying place value Using expanded notation (whole numbers)

Quarter Mile Math Level 2

(Gr. 5) 2. Demonstrate proficiency in the use of whole number concepts through millions. Stanford9 Rounding Naming, ordering, comparing Identifying place value Using expanded notation (whole numbers)

Quarter Mile Math Level 2

(Gr. 5) 3. Demonstrate proficiency in the use of basic operations on whole numbers through two-digit multipliers. Stanford9 two-digit

Quarter Mile Math Level 2

(Gr. 5) 4. Divide whole numbers with two-digit divisors.

Quarter Mile Math Level 2

(Gr. 5) 5. Apply rules to determine divisibility by 2, 3, 5, and 10.

Quarter Mile Math Level 2

(Gr. 5) 6. Develop an understanding of fractions and mixed numbers using physical materials and pictorial and numerical representations. Stanford9 Naming, ordering, comparing Identifying equivalent forms (common denominators) Identifying lowest terms (simplification) Identifying proper and improper fractions

Quarter Mile Math Level 2

(Gr. 5) 7. Demonstrate proficiency in adding and subtracting fractions with common denominators. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 8. Multiply and divide fractions. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 9. Add, subtract, and multiply decimals. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 10. Model and relate percents to parts of 100 using equivalent fractions and decimals.

Quarter Mile Math Level 2

(Gr. 5) 11. Identify alternative representations of fractions, mixed numbers, decimals, and percents. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 13. Apply basic operations in problem-solving situations involving whole numbers, decimals, fractions, mixed numbers, and money. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 14. Solve contextual problems requiring rounding of numbers. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 15. Develop an understanding of number theory concepts. Stanford9 Prime factors Least common multiples Greatest common factors

Quarter Mile Math Level 2

(Gr. 5) 16. Use estimation to determine whether results are reasonable. Stanford9

Quarter Mile Math Level 2

(Gr. 5) 17. Use methods of estimation appropriate to a given situation. Stanford9 Front-end Compatible numbers Clustering All of the addends are close to the same dollar amount\$2. Therefore, $\$2 \cdot 3 = \6 .

Quarter Mile Math Level 2

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand

Titles that Address the Substrand

(Gr. 5) 42. Develop an understanding of the order of operations. Simplify within parentheses, then multiply or divide in order from left to right, then add or subtract in order from left to right.

Quarter Mile Math Level 2

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. 6) 1. Demonstrate proficiency in the use of whole number and decimal concepts. Stanford9 Rounding
Determining place value Naming, ordering, comparing

Quarter Mile Math Level 2

(Gr. 6) 2. Demonstrate an understanding of decimals using expanded notation.

Quarter Mile Math Level 2

(Gr. 6) 3. Exhibit proficiency in the use of fractions and mixed numbers. Stanford9 Comparing, ordering Changing to
equivalent forms Changing to lowest terms

Quarter Mile Math Level 2

(Gr. 6) 4. Demonstrate proficiency in multiplying and dividing fractions. Stanford9

Quarter Mile Math Level 2

(Gr. 6) 5. Add and subtract fractions that do not have common denominators. Stanford9

Quarter Mile Math Level 2

(Gr. 6) 6. Demonstrate proficiency in adding, subtracting, and multiplying decimals. Stanford9

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 7. Divide decimals. Stanford9 Whole number divisor Decimal divisors (tenths)

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 8. Demonstrate proficiency in using methods of estimation appropriate to a given Stanford9 situation.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 9. Demonstrate proficiency in using estimation to determine whether results are Stanford9 reasonable.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 11. Use the least common multiple or the greatest common factor of two numbers in Stanford9 operations on
fractions.

Quarter Mile Math Level 2

(Gr. 6) 12. Use basic operations in context. Stanford9

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 14. Compare and order integers.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 6) 15. Add and subtract integers.

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 6) 17. Develop understanding of alternative representations of decimals, fractions, percent, mixed numbers, and percent. Stanford9

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 6) 18. Identify missing information in problem-solving situations. Stanford9

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 6) 19. Develop and apply a variety of strategies to solve problems with emphasis on multi-step and non-routine problems. Stanford9

Quarter Mile Math Level 2
Quarter Mile Math Level 3

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand

Titles that Address the Substrand

(Gr. 6) 42. Demonstrate an understanding of exponential notation. $8 = 2^3 = 2 \cdot 2 \cdot 2$

Quarter Mile Math Level 2

(Gr. 6) 43. Extend the understanding of the order of operations. Simplify within parentheses, then evaluate with exponents, then multiply or divide in order from left to right, then add or subtract in order from left to right.

Quarter Mile Math Level 2
Quarter Mile Math Level 3

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand

Titles that Address the Substrand

(Gr. 7) 1. Demonstrate proficiency in adding and subtracting fractions without common denominators.

Quarter Mile Math Level 2

(Gr. 7) 2. Add, subtract, multiply, and divide integers. Stanford9

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 7) 5. Perform basic operations on rational numbers. Stanford9

Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 7) 8. Find least common multiples and greatest common factors using prime factorization.

Quarter Mile Math Level 2

(Gr. 7) 9. Evaluate powers of whole numbers and roots of perfect squares. Stanford9

Quarter Mile Math Level 2

(Gr. 7) 10. Convert numbers between standard notation and scientific notation. Stanford9

Quarter Mile Math Level 2

(Gr. 7) 14. Identify information missing in problem-solving situations. Stanford9

Quarter Mile Math Level 2

(Gr. 7) 15. Use problem-solving strategies effectively. Stanford9

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 7) 17. Demonstrate proficiency in converting among percents, fractions, and decimals. Stanford9

Quarter Mile Math Level 2

(Gr. 7) 18. Identify equivalent fractions, including lowest-term fractions and Stanford9 improper fractions.

Quarter Mile Math Level 2

(Gr. 7) 19. Use exponents to express decimals in expanded notation.

Quarter Mile Math Level 2

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand

Titles that Address the Substrand

(Gr. 7) 37. Demonstrate proficiency in the use of the order of operations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 7) 45. Solve equations and inequalities by substituting values from a given set (domain). Stanford9

Quarter Mile Math Level 3

Grades 8 - 8

Subject: MATH

Standard: Discrete Mathematics, Probability, Statistics

Strand: Discrete Mathematics, Probability, Statistics

Substrand

Titles that Address the Substrand

(Gr. 8) 42. Use mean, median, mode, and range to analyze statistical data. Stanford 9

Quarter Mile Math Level 2

Subject: MATH

Standard: Number Sense, Number Systems, Number Theory

Strand: Number Sense, Number Systems, Number Theory

Substrand

Titles that Address the Substrand

(Gr. 8) 1. Demonstrate proficiency in performing basic operations on rational numbers. Stanford 9

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 8) 2. Demonstrate proficiency in converting rational numbers between standard Stanford9 notation and scientific notation.

Quarter Mile Math Level 2

(Gr. 8) 3. Demonstrate proficiency in evaluating rational number expressions using the Stanford 9 order of operations.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 8) 4. Identify alternative representations of rational numbers. Stanford 9

Quarter Mile Math Level 2

(Gr. 8) 5. Demonstrate proficiency in determining least common multiples and greatest common factors.

Quarter Mile Math Level 2

(Gr. 8) 10. Demonstrate proficiency using estimation techniques in problem solving related Stanford 9 to real-life situations. Rounding Front-end Compatible numbers Clustering

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 8) 12. Identify missing information in problem-solving situations. Stanford 9

Quarter Mile Math Level 3

Subject: MATH

Standard: Patterns, Functions, Algebra

Strand: Patterns, Functions, Algebra

Substrand Titles that Address the Substrand

(Gr. 8) 33. Develop an understanding of algebraic terms. Variable Term Coefficient Constant xponent Sentence, equation, inequality Phrase, expression

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 8) 34. Simplify and evaluate linear algebraic expressions. Stanford 9 Combining like terms Using laws of exponents restricted to positive integral exponents Using the distributive property Using order of operations

Quarter Mile Math Level 3

(Gr. 8) 36. Solve linear equations and inequalities. Stanford 9

Quarter Mile Math Level 2

Subject: MATH

Standard: Advanced Mathematics

Strand: Patterns, Functions, Algebra

Substrand Titles that Address the Substrand

(Gr. 9-12) 63. Solve problems using non-routine strategies.

Quarter Mile Math Level 2

Subject: MATH

Standard: Algebra I

Strand: Number Sense, Number Systems, Number Theory

Substrand Titles that Address the Substrand

(Gr. 9-12) 4. Use the order of operations, including exponentiation, to simplify numeric and variable expressions.

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH
Standard: Algebra I
Strand: Patterns, Functions, Algebra

Substrand	Titles that Address the Substrand
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(Gr. 9-12) 20. Perform basic operations on algebraic expressions.
Quarter Mile Math Level 3

(Gr. 9-12) 21. Evaluate algebraic expressions. Stanford9
Quarter Mile Math Level 3

(Gr. 9-12) 26. Solve linear equations. Stanford9
Quarter Mile Math Level 3

(Gr. 9-12) 28. Solve literal equations for any variable.
Quarter Mile Math Level 3

Subject: MATH
Standard: Algebra II With Trigonometry
Strand: Number Sense, Number Systems, Number Theory

Substrand	Titles that Address the Substrand
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(Gr. 9-12) 2. Perform operations on rational variable expressions.
Quarter Mile Math Level 3

Subject: MATH
Standard: Introduction To Algebra
Strand: Number Sense, Number Systems, Number Theory

Substrand	Titles that Address the Substrand
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(Gr. 9-12) 2. Demonstrate proficiency with operations on integers and rational numbers.
Quarter Mile Math Level 3

(Gr. 9-12) 8. Solve percent problems.
Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 9-12) 9. Demonstrate proficiency in simplifying rational number expressions using the order of operations.
Quarter Mile Math Level 2
Quarter Mile Math Level 3

(Gr. 9-12) 10. Demonstrate proficiency in the application of number theory concepts. Primes Factors Multiples
Divisibility Least common multiple Greatest common factor
Quarter Mile Math Level 2

(Gr. 9-12) 11. Demonstrate proficiency in converting between decimal notation and scientific notation.
Quarter Mile Math Level 2

(Gr. 9-12) 12. Apply the laws of exponents to simplify expressions containing natural number exponents.
Quarter Mile Math Level 2

Subject: MATH

Standard: Mathematics In Society

Strand: Number Sense, Number Systems, Number Theory

Substrand

Titles that Address the Substrand

(Gr. 9-12) 9. Recognize equivalent representations of the same number. Decimal Fraction Percent Per unit Integer
Logarithm Scientific notation

Quarter Mile Math Level 3