

Sixth Grade Math Objectives

1. Addition – up to and including six-digit numbers plus six-digit numbers
2. Subtraction – up to and including six-digit numbers minus six-digit numbers
3. Multiplication – up to and including four-digit numbers times four-digit numbers
4. Division – up to and including six-digit numbers divided by three-digit numbers
5. Fractions
 - add with like denominators
 - add with unlike denominators
 - add mixed numbers
 - estimate sums
 - subtract with like denominators
 - subtract with unlike denominator
 - subtract mixed numbers
 - multiply fractions
 - multiply mixed numbers
 - divide fractions
 - divide mixed numbers
 - relate fractions and decimals
 - relate fractions and percents
 - equivalent fractions
 - simplest forms
 - least common denominator
 - compare and order
 - relate mixed numbers as improper fractions
 - find fraction of a number
 - identify diagram of a fraction or mixed number
6. Decimals
 - place value
 - equivalent decimals
 - compare and order
 - relate decimals and fractions
 - relate decimals, fractions, and percents
 - add decimals
 - subtract decimals
 - multiply by whole number
 - multiply by decimal
 - divide by a whole number
 - divide by decimal
 - zeroes in quotient and dividend
 - identify as shown in a diagram
7. Percent
 - meaning
 - relate fractions and percents
 - relate decimals and percents
 - percent of a number
 - percent one number is of another
 - find number when percent of it is unknown
 - percent applications of discount and sale price
8. Graphs – line, pie, bar, charts
9. Estimate the measure of an angle
10. Composite and prime numbers
11. Find greatest common factor
12. Round to nearest ten, hundred, thousand
13. Mental math

Sixth Grade Math Objectives Continued

14. Geometry – line of symmetry diameter, congruent figures, measuring angles, kinds of angles (acute, obtuse, right, straight), similar figures
15. Order of operations
16. Number patterns
17. Find average, range, median, mode
18. Finding value of unknown angle of a triangle
19. Perimeter
20. Finding elapsed time
21. Area of a square, rectangle, and triangle
22. Finding factors, factor trees
23. Identify point on a number line
24. Find value of unknown variables
25. Rate – miles per hour or miles per gallon
26. Story problems
27. Write numbers in standard form or expanded form
28. Use of $<$ $>$ $=$
29. Find absolute value
30. Find volume and surface area of cubes and rectangular prisms
31. Integers from negative 10 to positive 10

Sixth Grade Reading Objectives

1. Comprehension
2. Figures of speech: simile, personification, alliteration
3. Spelling
4. Parts of speech: adjectives, adverbs, conjunctions, nouns, prepositions, verbs
5. Identify kinds of nouns: common, proper, singular, plural
6. Compound subjects and predicates
7. Choose correct source of information
8. Main idea and supporting details
9. Homophones, antonyms, synonyms
10. Cause and effect
11. Pronouns and antecedents
12. Simple and complete subjects and predicates
13. Subject and verb agreement
14. Contractions
15. Prepositional phrases
16. Using context clues
17. Comparisons using er, est, more, most
18. Reading for information
19. Predicate nominatives
20. Vocabulary
21. Possessives and plurals
22. Outlining
23. Identify natural phenomenon
24. Fact or opinion
25. Verbs and tenses
26. Use of quotation marks

Seventh Grade Math Objectives

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Fractions
 - add with like denominators
 - add with unlike denominators
 - add mixed numbers
 - estimate sums
 - subtract with like denominators
 - subtract with unlike denominators
 - subtract mixed numbers
 - estimate differences
 - multiply fractions
 - multiply mixed numbers
 - estimate products
 - divide fractions
 - divide mixed numbers
 - estimate quotients
 - relate fractions and decimals
 - relate fractions and percents
 - solve equations
 - identify shaded fractional parts on a graph
 - meaning of fractions
 - equivalent fractions
 - simplest form
 - least common denominator
 - compare and order
 - round
 - mixed number as improper fraction
 - find fraction of a number
 - reciprocals
6. Decimals
 - place value
 - equivalent decimals
 - compare and order
 - round
 - relate decimals and fractions
 - relate decimals, fractions, and percents
 - add decimals
 - subtract decimals
 - estimate sums and differences
 - multiply by whole number
 - multiply by decimal
 - estimate products
 - divide by whole number
 - divide by decimal
 - zeroes in quotient and dividend
 - estimate quotients
 - mental math strategies
 - solve equations
7. Percent
 - meaning
 - relate fractions and percents
 - relate decimals and percents
 - percent of a number
 - percent one number is of another
 - find number when percent of it is known
 - estimate percents
 - mental math
 - applications in simple interest
 - applications in discount/sale price

Seventh Grade Math Objectives Continued

8. Ratio
 - meaning
 - equal ratios
 - rate
9. Proportion
 - meaning
 - solve proportions
10. Measurement
 - length, capacity, weight, mass
 - find elapsed time
 - temperature
 - perimeter, area, volume
11. Money
 - sums and differences
 - products and quotients
12. Rounding and estimating
13. Number patterns
14. Mental math
15. Coordinate graphing
 - locate points on a number line
 - graph coordinates in four quadrants
16. Positive – negative numbers
 - meaning of integers
 - compare and order
 - add and subtract
 - multiply and divide
17. Exponents
18. Square roots
19. Algebra
 - use order of operations
 - solve number sentences
 - evaluate algebraic expressions
 - use of pi
 - use of formulas
20. Probability
21. Find the average
22. Factors and multiples
23. Common factors/greatest common factor
24. Common multiples/least common multiple
25. Prime and composite numbers
26. Geometry
 - perimeter, area, volume
 - parallelogram, trapezoid, rhombus, rectangle, square
 - hexagon, octagon, pentagon, decagon, quadrilateral
 - area of a rectangle, circle, square, triangle
 - find the value of a missing angle in a quadrilateral
 - find the value of a missing angle in a triangle
 - parallel lines, perpendicular lines
 - acute, obtuse, and right angles
 - scalene triangle, equilateral triangle
 - find complementary angles
 - use of a protractor
 - changing from one unit of measurement to another
 - changing from American to metric units of measurement
 - graphs – circle, bar, line, pie, frequency table
 - < > = symbols
 - measure and estimate angles
 - relationships in a right triangle
 - story problems
27. Write numbers in standard form and expanded form
28. Write numbers in scientific notation
29. Integers

Eighth Grade Math Objectives

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Fractions
 - add with like denominators
 - add with unlike denominators
 - add mixed numbers
 - subtract with like denominators
 - subtract with unlike denominators
 - subtract mixed numbers
 - multiply fractions
 - multiply mixed numbers
 - divide fractions
 - divide mixed numbers
 - relate fractions and decimals
 - relate fractions and percents
 - solve equations
 - meaning of fractions
 - equivalent fractions
 - simplest form
 - least common denominator
 - compare and order
 - round
 - mixed number as improper fraction
 - find fraction of a number
 - reciprocals
6. Decimals
 - place value
 - equivalent decimals
 - compare and order
 - round
 - relate decimals and fractions
 - relate decimals, fractions, and percents
 - add decimals
 - subtract decimals
 - multiply by whole number
 - multiply by decimal
 - divide by whole number
 - divide by decimal
 - zeroes in quotient and dividend
 - mental math strategies
 - solve equations
7. Percents
 - meaning
 - relate fractions and percents
 - relate decimals and percents
 - percent of a number
 - percent one number is of another
 - find number when percent of it is known
 - application in circle graph
 - estimate percents
 - mental math
 - applications in simple interest
 - applications in discount/sale price
8. Ratio
 - meaning
 - equal ratios
 - rate
9. Proportion
 - meaning
 - solve proportions

Eighth Grade Math Objectives Continued

10. Measurement
 - temperature
 - perimeter, area, volume
11. Money
 - sums and differences
 - products and quotients
12. Rounding and estimating
13. Number patterns
14. Mental math
15. Coordinate graphing
 - locate points on a number line
 - graph coordinates in four quadrants
 - graph solutions to problems
16. Positive – negative numbers
 - meaning of integers
 - compare and order
 - add and subtract
 - multiply and divide
17. Exponents – positive and negative integer exponents
18. Square roots
19. Algebra
 - use order of operations
 - solve number sentences
 - evaluate algebraic expressions
 - use of pi
 - use of formulas
 - use of quadratic equation
20. Probability
21. Find the average, median, mode, and range
22. Factors and multiples
23. Common factors – greatest common factors
24. Common multiples – least common multiple
25. Use of $>$ $<$ $=$
26. Geometry
 - perimeter, area, volume
 - parallelogram, trapezoid, rhombus, rectangle, square
 - hexagon, octagon, pentagon, decagon, quadrilateral, ray
 - hypotenuse, altitude, midpoint, radius
 - find the value of a rectangle, circle, square, triangle, trapezoid, parallelogram, and irregular shape
 - find the value of a missing angle in a quadrilateral
 - find the value of a missing angle in a triangle
 - parallel lines, perpendicular lines
 - acute, obtuse, straight, and right angles
 - equilateral triangle
 - find complementary angles and corresponding angles
 - find congruent sides
 - find diagonal
 - Pythagorean Theorem
 - find the volume of a sphere, cylinder, cone, rectangle
 - line of symmetry
 - find the perpendicular bisector
 - find the surface area
 - changing from one unit of measurement to another
 - changing from American to metric units of measurement
 - graphing expressions
 - graphs – circle, bar, line, pie, frequency table, Venn diagram
 - find the circumference of a circle
 - estimate measure of angles
 - relationships in a right triangle
 - story problems
 - foil problems
27. Graph solution to equality on a number line
28. Find the absolute value
29. Write numbers in standard form and expanded form
30. Write numbers in scientific notation
31. Slope, x-intercept, y-intercept

Seventh Grade Reading Objectives

1. Comprehension
2. Parts of speech: adverb, adjective, noun, verb, pronoun
3. Spelling
4. Vocabulary
5. Figures of speech
6. Synonyms, homophones, antonyms
7. Determine the mood of a story
8. Use of personification, onomatopoeia, metaphor, hyperbole
9. Common and proper nouns
10. Fact or opinion
11. Outlining
12. Choose correct reference book
13. Comparative and superlative forms
14. Characterization
15. Identify type of writing: short story, novel, essay, expository
16. Dictionary skills
17. Determine correct pronoun use
18. Identify parts of a business letter
19. Compound subjects and verbs
20. Punctuation
21. Grammar
22. ABC order
23. Quotation marks
24. Reading techniques: jigsaw, flowchart, skim, scan
25. Identify author's main purpose

Eighth Grade Reading Objectives

1. Comprehension
2. Spelling
3. Parts of speech: adjective, adverb, noun, verb, pronoun
4. Fact or opinion
5. Pronouns and antecedents
6. Correct use of then and than
7. Possessives and plurals
8. Acronyms
9. Correct verb usage: rise or raise, sit or sat
10. Capitalization
11. Punctuation
12. Use of commas
13. Sequencing
14. Predicate nominatives
15. Outlining
16. Use of simile, metaphor, personification, onomatopoeia
17. Cause and effect
18. Homophones, antonyms, synonyms
19. Independent and subordinate clauses
20. Use of context clues to find word meanings
21. Degrees of adjective: positive, comparative, superlative
22. Appositives
23. Use of skim and scan techniques
24. Business letter writing skills
25. Prepositional phrases
26. Identify feeling of characters in story