

A Correlation of

Scott Foresman • Addison Wesley

en**Vision**MATH™

to the

Nebraska

Mathematics Standards
Grades K-6

PEARSON

G/M-261

Correlation Introduction

This correlation is designed to show the close alignment between Scott Foresman-Addison Wesley enVisionMATH and the State of Nebraska Mathematics Standards. Correlation page references are to the Teacher's Edition and Student Edition.

The enVisionMATH™ program is based around scientific research on how children learn mathematics as well as on classroom-based evidence that validates proven reliability.

Personalized Curriculum

enVisionMATH™ provides 20 (16 in Kindergarten) focused topics that are coherent, digestible groups of lessons focusing on one or a few related content areas. A flexible sequence of topics is small enough for a district to rearrange into a personalized curriculum that matches the sequence preferred by the district. The curriculum is designed so that all standards can be taught before the major mathematics testing.

Instructional Design

enVisionMATH™ teaches for deep conceptual understanding using research-based best practices. Essential understandings connected by Big Ideas are explicitly stated in the Teacher's Edition. Daily Spiral Review and the Problem of the Day focus foundational skills and allow for ongoing practice with a variety of problem types. Daily interactive concept development encourages students to interact with teachers and other students to develop conceptual understanding.

Visual Learning allows students to benefit from seeing math ideas portrayed pictorially as well as being able to see connections between ideas. enVisionMATH™ created a Visual Learning Bridge which is a step-by-step bridge between the interactive learning activity and the lesson exercises to help students focus on one idea at a time and see the connections within the sequence of ideas. The strong sequential visual/verbal connections deepen conceptual understanding for students of all learning modalities and are particularly effective with English language learners and struggling readers. Guiding questions in blue type help the teacher guide students through the examples, ask probing questions to stimulate higher order thinking, and allow for checking of understanding.

Differentiated Instruction

enVisionMATH™ engages and interests all students with leveled activities for ongoing differentiated instruction. A Teacher-Directed Intervention activity at the end of every lesson provides immediate opportunities to get students on track. In addition, ready made leveled learning centers for each lesson allow different students to do the same activity at different levels at the same time giving the teacher uninterrupted time to focus on reteaching students who require intervention. All centers can be used repeatedly due to the inclusion of a "Try Again" at the end. They can also be used for ongoing review and they can be used year after year. Topic-specific considerations for EL, Special Education, At-Risk, and Advanced students enable the teacher to accommodate the diverse learners in the classroom.

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**Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Kindergarten**

1.1 NUMERATION/NUMBER SENSE

1.1.1 By the end of first grade, students will recognize, write, and orally express the sequential order of the number system.

51A-60C, 75A-93C, 143A-148C, 213A-232C

Example indicators:

•Recognize and write numerals from 0-100.

53A-60C, 75A-93C, 213A-232C

•Count forward by 1s, 2s, 5s and 10s up to 100.

51A-60C, 75A-93C, 213A-232C

•Count backward from 10 to 0 by 1s.

231A-232C

•Identify ordinal positions of first, second, third, through tenth.

143A-148C

1.1.2 By the end of first grade, students will demonstrate ways of representing numbers and compare relations among numbers.

51A-70C, 101A-110C, 137A-142C, 213A-232C

Example indicators:

•Count objects to demonstrate one-to-one correspondence.

61A-62C, 69A-70C

•Use comparison vocabulary (bigger, smaller, more, less, equal, higher, and lower).

63A-68C, 101A-110C

•Identify and represent wholes into equal parts for the fractions of one-half and one-fourth.

137A-142C

•Connect number words and numerals to the quantities they represent.

51A-60C, 75A-93C

•Demonstrate place value in the base-ten number system using models.

Related Content: 213A-232C

1.1.3 By the end of first grade, students will identify numbers and applications in everyday situations.

53A-60C, 75A-93C, 213A-232C, 237A-248C

Example indicators:

•Identify how numbers are used in counting situations (setting the table and passing out candy treats).

53A-60C, 75A-93C, 213A-232C

-Identify how numbers are used for identification (room numbers and phone numbers).

Related Content: 53A-60C, 75A-93C, 213A-232C

-Recognize and demonstrate the value of a collection of pennies, nickels, dimes, and quarters whose total value is 100 cents or less.

237A-248C

1.1.4 By the end of first grade, students will demonstrate the value of numbers (0-20) using concrete objects.

55A-56C, 59A-62C, 75A-78C, 81A-84C, 87A-92C, 213A-220C

1.2 COMPUTATION/ESTIMATION

1.2.1 By the end of first grade, students will demonstrate the concepts of addition and subtraction up to 10.

177A-190C, 195A-208C

Example indicators:

-Demonstrate the value of basic facts using concrete objects.

177A-190C, 195A-208C

-Recognize the symbols + and - as representing the operations of addition and subtraction.

183A-188C, 201A-206C

-Recognize the symbol = represents equal quantities.

185A-188C, 203A-206C

-Solve problems involving one-step solutions related to children's experiences.

177A-190C, 195A-208C

-Demonstrate strategies for whole number computation.

177A-190C, 195A-208C

-Compute efficiently and accurately basic number facts for addition and subtraction.

177A-190C, 195A-208C

1.2.2 By the end of first grade, students will justify estimations to mathematical problems.

161A-162C, 171A-172C

Example indicator:

-Make estimations and comparisons to actual results.

161A-162C, 171A-172C

1.3 MEASUREMENT

1.3.1 By the end of first grade, students will measure two or more items or sets using nonstandard units of measure and compare attributes.

153A-172C

Example indicators:

•Compare attributes of items (length-shorter/longer, height-taller/shorter, weight-heavier/lighter, and temperature-hotter/colder).

153A-172C

•Measure items using nonstandard units (human foot, hand span, new pencil, toothpick, block, and paper clip).

159A-160C, 165A-166C, 169A-172C

1.3.2 By the end of first grade, students will identify tools of measurement and their appropriate use (clocks, calendar, ruler, balance scale, and thermometer).

259A-262C, 277A-284C

1.3.3 By the end of first grade, students will tell time to the half-hour using an analog and digital clock.

259A-262C

1.3.4 By the end of first grade, students will identify the different units of measurement used in their environment (cents, dollars, pounds, gallons, liters, meters, miles, minutes, and hours).

237A-248C

1.3.5 By the end of first grade, students will identify past, present, and future as orientations in time.

253A-258C

1.4 GEOMETRY/SPATIAL CONCEPTS

1.4.1 By the end of first grade, students will compare relative position (left/right, above/below, over/under, up/down, and near/far).

17A-28C

1.4.2 By the end of first grade, students will identify, describe, and create circles, squares, triangles, and rectangles.

115A-118C, 121A-122C

Example indicators:

•Construct congruent shapes and designs using manipulatives.

121A-122C

•Identify and describe common geometric shapes in their environment.

115A-118C, 126A-126C

1.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

1.5.1 By the end of first grade, students will collect information about objects and events in their environment (favorite candy bar, number of siblings, and number of pets).

95A-96C, 291A-292C

1.5.2 By the end of first grade, students will organize and display collected information using objects and pictures.

95A-96C, 293A-298C

1.5.3 By the end of first grade, students will compare and interpret information from displayed data (more, less, and fewer).

95A-96C, 289A-290C, 299A-302C

1.5.4 By the end of first grade, students will describe the process used in data collection and analysis.

95A-96C, 289A-302C

1.6 ALGEBRAIC CONCEPTS

1.6.1 By the end of first grade, students will identify, describe, extend, and create patterns (objects, sounds, movements, shapes, numbers, and colors).

33A-46C

1.6.2 By the end of first grade, students will sort and classify objects according to one or more attributes (size, shape, color, and thickness).

3A-12C

1.6.3 By the end of first grade, students will identify and describe patterns in their environment.

33A-46C

**Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Grade One**

1.1 NUMERATION/NUMBER SENSE

1.1.1 By the end of first grade, students will recognize, write, and orally express the sequential order of the number system.

3A-26B, 263A-298B

Example indicators:

-Recognize and write numerals from 0-100.

3A-14B- 23A-298B

-Count forward by 1s, 2s, 5s and 10s up to 100.

3A-214B, 275A-282B

-Count backward from 10 to 0 by 1s.

3A-26B

-Identify ordinal positions of first, second, third, through tenth.

287A-290B

1.1.2 By the end of first grade, students will demonstrate ways of representing numbers and compare relations among numbers.

3A-26B, 31A-46B, 303A-326B, 331A-362B, 585A-604B

Example indicators:

-Count objects to demonstrate one-to-one correspondence.

3A-26B, 119A-134B

-Use comparison vocabulary (bigger, smaller, more, less, equal, higher, and lower).

31A-46B, 331A-362B

-Identify and represent wholes into equal parts for the fractions of one-half and one-fourth.

585A-604B

-Connect number words and numerals to the quantities they represent.

3A-14B

-Demonstrate place value in the base-ten number system using models.

303A-326B

1.1.3 By the end of first grade, students will identify numbers and applications in everyday situations.

3A-26B, 367A-368B

Example indicators:

-Identify how numbers are used in counting situations (setting the table and passing out candy treats).

3A-26B

-Identify how numbers are used for identification (room numbers and phone numbers).

Related Content: 3A-26B

- Recognize and demonstrate the value of a collection of pennies, nickels, dimes, and quarters whose total value is 100 cents or less.

367A-386B

- 1.1.4 By the end of first grade, students will demonstrate the value of numbers (0-20) using concrete objects.**

3A-26B

1.2 COMPUTATION/ESTIMATION

- 1.2.1 By the end of first grade, students will demonstrate the concepts of addition and subtraction up to 10.**

55A-78B, 83A-114B, 135A-138B, 143A-166B, 171A-190B

Example indicators:

- Demonstrate the value of basic facts using concrete objects.

55A-78B, 83A-114B, 143A-166B, 171A-190B

- Recognize the symbols + and - as representing the operations of addition and subtraction.

63A-74B, 95A-114B

- Recognize the symbol = represents equal quantities.

63A-74B, 95A-114B

- Solve problems involving one-step solutions related to children's experiences.

55A-78B, 83A-114B, 493A-496B

- Demonstrate strategies for whole number computation.

55A-78B, 83A-114B, 135A-138B, 143A-166B, 171A-190B, 533A-536B

- Compute efficiently and accurately basic number facts for addition and subtraction.

55A-78B, 83A-114B, 143A-166B, 171A-190B

- 1.2.2 By the end of first grade, students will justify estimations to mathematical problems.**

347A-350B, 399A-406B

Example indicator:

- Make estimations and comparisons to actual results.

347A-350B, 399A-406B

1.3 MEASUREMENT

- 1.3.1 By the end of first grade, students will measure two or more items or sets using nonstandard units of measure and compare attributes.**

395A-448B

Example indicators:

- Compare attributes of items (length-shorter/longer, height-taller/shorter, weight-heavier/lighter, and temperature-hotter/colder).

395A-398B, 431A-434B, 443A-446B

-Measure items using nonstandard units (human foot, hand span, new pencil, toothpick, block, and paper clip).

399A-406B

1.3.2 By the end of first grade, students will identify tools of measurement and their appropriate use (clocks, calendar, ruler, balance scale, and thermometer).

407A-414B, 435A-446B, 453A-476B

1.3.3 By the end of first grade, students will tell time to the half-hour using an analog and digital clock.

453A-464B

1.3.4 By the end of first grade, students will identify the different units of measurement used in their environment (cents, dollars, pounds, gallons, liters, meters, miles, minutes, and hours).

367A-390B, 407A-418B, 423A-430B, 453A-464B

1.3.5 By the end of first grade, students will identify past, present, and future as orientations in time.

Related Content: 453A-464B

1.4 GEOMETRY/SPATIAL CONCEPTS

1.4.1 By the end of first grade, students will compare relative position (left/right, above/below, over/under, up/down, and near/far).

51A-54B

1.4.2 By the end of first grade, students will identify, describe, and create circles, squares, triangles, and rectangles.

195A-210B, 215A-218B, 227A-234B

Example indicators:

-Construct congruent shapes and designs using manipulatives.

215A-218B

-Identify and describe common geometric shapes in their environment.

227A-234B

1.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

1.5.1 By the end of first grade, students will collect information about objects and events in their environment (favorite candy bar, number of siblings, and number of pets).

541A-552B, 557A-572B

1.5.2 By the end of first grade, students will organize and display collected information using objects and pictures.

541A-552B, 557A-572B

1.5.3 By the end of first grade, students will compare and interpret information from displayed data (more, less, and fewer).

541A-552B, 557A-572B

1.5.4 By the end of first grade, students will describe the process used in data collection and analysis.

541A-552B, 557A-572B

1.6 ALGEBRAIC CONCEPTS

1.6.1 By the end of first grade, students will identify, describe, extend, and create patterns (objects, sounds, movements, shapes, numbers, and colors).

243A-258B

1.6.2 By the end of first grade, students will sort and classify objects according to one or more attributes (size, shape, color, and thickness).

199A-202B, 235A-238B

1.6.3 By the end of first grade, students will identify and describe patterns in their environment.

243A-258B

Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Grade Two

4.1 NUMERATION/NUMBER SENSE

4.1.1 By the end of fourth grade, students will demonstrate place value of whole numbers through the millions and decimals to the hundredth place.

99A-138B, 531A-534B, Grade 3: 40A-47B

Example indicators:

•Read and write numerals (in digits and words) through the millions place and decimals to the hundredth place.

99A-110B

•Order and compare whole numbers through the millions place and decimals to the hundredth place using the symbols $<$, $>$, and $=$.

115A-118B, 531A-534B

•Round whole numbers to the nearest named place, such as rounding 1,234 to the nearest hundred would be 1,200.

Grade 3: 40A-47B

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

351A-374B, 519A-522B, Grade 3: 306A-307B, 312A-315B

Example indicators:

•Write numbers in expanded form, such as $432 = 400 + 30 + 2$.

519A-522B

•Represent equivalent fractions with denominators of 2, 4, 5, 8 and 10 ($1/2 = 2/4$) using concrete objects.

Related Content: 355A-358B

•Write equivalent decimals ($.4 = .40$).

Related Content: Grade 3: 312A-315B

•Write decimals as fractions using denominators of 10 and 100 ($.68 = 68/100$).

Grade 3: 306A-307B

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

71A-94B, 115A-118B, 531A-534B

Example indicators:

•Order and compare whole numbers, common fractions, and decimals using the symbols $<$, $>$, and $=$.

115A-118B, 531A-534B

•Illustrate mathematical concepts by using objects and drawing pictures or diagrams (subtraction as the opposite of addition and multiplication as repeated addition).

71A-94B

•Solve and check a mathematical problem by using the related facts.

71A-94B

4.1.4 By the end of fourth grade, students will identify examples of positive and negative numbers and zero.

Related Content: Grade 3: 402A-403B, Grade 4: 276A-279B

Example indicator:**-Demonstrate simple concepts of positive and negative numbers (a thermometer for temperature or distances to the right or left of zero on a number line).**

Related Content Grade 3: 402A-403B, Grade 4: 276A-279B

4.1.5 By the end of fourth grade, students will make change and count out in amounts up to \$20.00.

295A-302B, Grade 3: 22A-23B, 312A-315B

Example indicators:**-Count back change from purchase price to amount given using fewest coins possible.**

295A-302B, Grade 3: 22A-23B

-Calculate change through subtraction and choose correct bills and coins to make this amount.

295A-302B, Grade 3: 22A-23B, 312A-315B

4.2 COMPUTATION/ESTIMATION**4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.**

3A-30B, 35A-66B, 71A-94B, 171A-190B, 195A-214B, 219A-246B, 251A-278B, 591A-614B, 619A-638B, Grade 3: 440A-448B, Grade 4: 152A-155B

Example indicators:**-Demonstrate with accuracy and reasonable speed the basic facts of addition (1-20), subtraction (1-20), multiplication (1-144), and division (1-44).**

3A-30B, 35A-66B, 71A-94B, 591A-614B, 619A-638B

-Add and subtract accurately five-digit numbers including columns of numbers.

Related Content: 559A-582B

-Multiply up to a three-digit number by a two-digit number.

Grade 4: 152A-155B

-Divide up to a three-digit number by a one-digit divisor.

Grade 3: 440A-448B

-Choose correct operation and solve word problems.

27A-30B, 63A-66B, 91A-94B, 187A-190B, 211A-214B, 243A-246B, 275A-278B, 611A-614B

4.2.2 By the end of fourth grade, students will estimate, add, and subtract decimals without and with calculators and solve word problems.

Grade 3: 312A-315B

Example indicator:

•Add and subtract decimals to the hundredth place.

Grade 3: 312A-315B

4.2.3 By the end of fourth grade, students will estimate, add, and subtract fractions with like denominators without calculators and solve word problems.

Grade 3: 294A-297B

Example indicator:

•Solve problems involving fractions of halves, fourths, and eighths using the operations of addition and subtraction.

Grade 3: 294A-297B

4.3 MEASUREMENT

4.3.1 By the end of fourth grade, students will estimate, measure, and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.

395A-398B, 427A-430B, 439A-442B, 467A-470B

Example indicators:

•Use the appropriate units of measurement.

395A-398B, 427A-430B, 439A-442B, 467A-470B

•Estimate and accurately measure length to the nearest meter or centimeter and calculate area.

395A-398B

•Estimate and accurately measure mass/weight to the nearest gram.

439A-442B

•Estimate and accurately measure capacity to the nearest milliliter.

427A-430B

•Measure and read temperature accurately to the nearest degree using Celsius thermometer.

467A-470B

4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

291A-294B, 419A-426B, 435A-438B, 467A-470B

Example indicators:

•Use the appropriate units of measurement.

291A-294B, 419A-426B, 435A-438B, 467A-470B

•Estimate and accurately measure length to the nearest yard, foot, inch, and quarter inch and calculate area.

291A-294B

•Estimate and accurately measure mass/weight to the nearest ounce and pound.

435A-438B

•Estimate and accurately measure capacity to the nearest fluid ounce.

419A-426B

•Measure and read temperature accurately to the nearest degree using Fahrenheit thermometer.

467A-470B

4.3.3 By the end of fourth grade, students will tell and write correct time to the minute using an analog clock.

451A-458B

Example indicators:

•Set an analog clock to a given time.

451A-458B

•State time in different ways (8:35, 35 minutes after 8:00, or 25 minutes until 9:00).

451A-458B

•Identify time of day (am, pm, noon, and midnight).

Related Content: 451A-458B

4.3.4 By the end of fourth grade, students will measure and determine the perimeter of a many-sided figure without a formula using standard and metric units of measure.

399A-402B

4.4 GEOMETRY/SPATIAL CONCEPTS

4.4.1 By the end of fourth grade, students will identify, describe, and create two-and three-dimensional geometric shapes.

315A-330B, 343A-346B

4.4.2 By the end of fourth grade, students will identify and draw points, lines, line segments, rays, and angles.

Grade 3: 244A-245B; Grade 4: 196A-199B

4.4.3 By the end of fourth grade, students will identify, analyze, and compare two-dimensional geometric figures using congruence, symmetry, similarity, and simple transformations.

331A-342B

4.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.

479A-506B, 583A-586B

Example indicators:

•Collect, organize, and interpret data in line plots, tables, charts, and graphs (pie graphs, bar graphs, and pictographs).

479A-490B, 583A-586B

•Draw valid conclusions from displayed data.

479A-490B, 503A-506B, 583A-586B

•Investigate and record patterns in a simple probability situation in an organized way.

495A-502B

4.6 ALGEBRAIC CONCEPTS

4.6.1 By the end of fourth grade, students will use and interpret variables and mathematical symbols to write and solve one-step equations.

Grade 3: 32A-33B, 95, 216A-217B, 222A-223B,

Example indicators:

•Use letters, boxes, or other symbols to stand for any number, measured quantity, or object in simple situations to demonstrate the beginning concept of a variable and writing formulas.

Grade 3: 32A-33B, 95, 222A-223B

•Identify and use various indicators of multiplication (parentheses, \times , $*$) and division, ($/$, \div).

Related Content Grade 3: 216A-217B

4.6.2 By the end of fourth grade, students will identify, describe, and extend arithmetic patterns, using concrete materials and tables.

635A-638B

Example indicator:

•Use Input/Output or function box to identify and extend patterns.

635A-638B

Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Grade Three

4.1 NUMERATION/NUMBER SENSE

4.1.1 By the end of fourth grade, students will demonstrate place value of whole numbers through the millions and decimals to the hundredth place.

4A-9B, 12A-17B, 40A-47B, 304A-307B

Example indicators:

•Read and write numerals (in digits and words) through the millions place and decimals to the hundredth place.

4A-9B, 304A-307B

•Order and compare whole numbers through the millions place and decimals to the hundredth place using the symbols $<$, $>$, and $=$.

12A-17B, 43

•Round whole numbers to the nearest named place, such as rounding 1,234 to the nearest hundred would be 1,200.

40A-47B

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

6A-9B, 284A-287B, 306A-307B, 312A-315B

Example indicators:

•Write numbers in expanded form, such as $432 = 400 + 30 + 2$.

6A-9B

•Represent equivalent fractions with denominators of 2, 4, 5, 8 and 10 ($1/2 = 2/4$) using concrete objects.

284A-287B

•Write equivalent decimals ($.4 = .40$).

Related Content: 312A-315B

•Write decimals as fractions using denominators of 10 and 100 ($.68 = 68/100$).

306A-307B

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

12A-17B, 43, 66A-67B, 108A-109B, 164A-165B, 170A-171B, 288A-289B

Example indicators:

•Order and compare whole numbers, common fractions, and decimals using the symbols $<$, $>$, and $=$.

12A-17B, 43, 288A-289B

•Illustrate mathematical concepts by using objects and drawing pictures or diagrams (subtraction as the opposite of addition and multiplication as repeated addition).

66A-67B, 108A-109B, 164A-165B, 170A-171,

•Solve and check a mathematical problem by using the related facts.

66A-67B, 108A-109B, 170A-171B

4.1.4 By the end of fourth grade, students will identify examples of positive and negative numbers and zero.

Related Content: 402A-403B, Grade 4: 276A-279B

Example indicator:**-Demonstrate simple concepts of positive and negative numbers (a thermometer for temperature or distances to the right or left of zero on a number line).**

Related Content: 402A-403B, Grade 4: 276A-279B

4.1.5 By the end of fourth grade, students will make change and count out in amounts up to \$20.00.

22A-23B, 312A-315B

Example indicators:**-Count back change from purchase price to amount given using fewest coins possible.**

22A-23B

-Calculate change through subtraction and choose correct bills and coins to make this amount.

22A-23B, 312A-315B

4.2 COMPUTATION/ESTIMATION**4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.**32A-39B, 48A-59B, 66A-73B, 86A-101B, 108A-133B, 140A-157B, 184A-199B, 440A-440B;
Grade 4: 152A-155B**Example indicators:****-Demonstrate with accuracy and reasonable speed the basic facts of addition (1-20), subtraction (1-20), multiplication (1-144), and division (1-44).**

32A-39B, 66A-73B, 108A-133B, 140A-157B, 184A-199B

-Add and subtract accurately five-digit numbers including columns of numbers.

Related Content: 50A-57B, 90A-97B

-Multiply up to a three-digit number by a two-digit number.

Grade 4: 153A-155B

-Divide up to a three-digit number by a one-digit divisor.

442A-448B

-Choose correct operation and solve word problems.

58A-59B, 78A-79, 98A-101B, 132A-133B, 154A-157B, 196A-199B, 316A-319B

4.2.2 By the end of fourth grade, students will estimate, add, and subtract decimals without and with calculators and solve word problems.

312A-315B

Example indicator:

•Add and subtract decimals to the hundredth place.

312A-315B

4.2.3 By the end of fourth grade, students will estimate, add, and subtract fractions with like denominators without calculators and solve word problems.

294A-297B

Example indicator:

•Solve problems involving fractions of halves, fourths, and eighths using the operations of addition and subtraction.

294A-297B

4.3 MEASUREMENT

4.3.1 By the end of fourth grade, students will estimate, measure, and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.

350A-361B, 402A-403B

Example indicators:

•Use the appropriate units of measurement.

350A-361B

•Estimate and accurately measure length to the nearest meter or centimeter and calculate area.

350A-355B, 360A-361B

•Estimate and accurately measure mass/weight to the nearest gram.

358A-359B

•Estimate and accurately measure capacity to the nearest milliliter.

356A-357B

•Measure and read temperature accurately to the nearest degree using Celsius thermometer.

402A-403B

4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

328A-341B, 402A-403B

Example indicators:

•Use the appropriate units of measurement.

328A-341B

•Estimate and accurately measure length to the nearest yard, foot, inch, and quarter inch and calculate area.

328A-337B

•Estimate and accurately measure mass/weight to the nearest ounce and pound.

340A-341B

•Estimate and accurately measure capacity to the nearest fluid ounce.

338A-339B

-Measure and read temperature accurately to the nearest degree using Fahrenheit thermometer.

402A-403B

4.3.3 By the end of fourth grade, students will tell and write correct time to the minute using an analog clock.

392A-397B, 400A-401B

Example indicators:

-Set an analog clock to a given time.

392A-397B

-State time in different ways (8:35, 35 minutes after 8:00, or 25 minutes until 9:00).

392A-397B

-Identify time of day (am, pm, noon, and midnight).

400A-401B

4.3.4 By the end of fourth grade, students will measure and determine the perimeter of a many-sided figure without a formula using standard and metric units of measure.

368A-373B

4.4 GEOMETRY/SPATIAL CONCEPTS

4.4.1 By the end of fourth grade, students will identify, describe, and create two- and three-dimensional geometric shapes.

234A-234B, 246A-253B

4.4.2 By the end of fourth grade, students will identify and draw points, lines, line segments, rays, and angles.

244A-245B, Grade 4: 196A-199B

4.4.3 By the end of fourth grade, students will identify, analyze, and compare two-dimensional geometric figures using congruence, symmetry, similarity, and simple transformations.

260A-296B

4.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.

458A-483B

Example indicators:

-Collect, organize, and interpret data in line plots, tables, charts, and graphs (pie graphs, bar graphs, and pictographs).

460A-471B, 478A-483B

-Draw valid conclusions from displayed data.

460A-471B, 478A-483B

-Investigate and record patterns in a simple probability situation in an organized way.

472A-477B

4.6 ALGEBRAIC CONCEPTS

4.6.1 By the end of fourth grade, students will use and interpret variables and mathematical symbols to write and solve one-step equations.

32A-33B, 95, 216A-217B, 222A-223B

Example indicators:

•Use letters, boxes, or other symbols to stand for any number, measured quantity, or object in simple situations to demonstrate the beginning concept of a variable and writing formulas.

32A-33B, 95, 222A-223B

•Identify and use various indicators of multiplication (parentheses, \times , $*$) and division, ($/$, \div).

Related Content: 216A-217B

4.6.2 By the end of fourth grade, students will identify, describe, and extend arithmetic patterns, using concrete materials and tables.

206A-227B, 298A-299B

Example indicator:

•Use Input/Output or function box to identify and extend patterns.

210A-215B, 218A-221B, 298A-299B

Scott Foresman – Addison Wesley enVisionMATH
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Grade Four

4.1 NUMERATION/NUMBER SENSE

4.1.1 By the end of fourth grade, students will demonstrate place value of whole numbers through the millions and decimals to the hundredth place.

4A-19B, 113, 268A-283B

Example indicators:

•Read and write numerals (in digits and words) through the millions place and decimals to the hundredth place.

8A-9B, 268A-269B

•Order and compare whole numbers through the millions place and decimals to the hundredth place using the symbols $<$, $>$, and $=$.

10A-13B, 113, 270A-273B, 276A-279B

•Round whole numbers to the nearest named place, such as rounding 1,234 to the nearest hundred would be 1,200.

14A-15B

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

4A-19B, 216A-241B, 268A-283B

Example indicators:

•Write numbers in expanded form, such as $432 = 400 + 30 + 2$.

4A-7B

•Represent equivalent fractions with denominators of 2, 4, 5, 8 and 10 ($1/2 = 2/4$) using concrete objects.

224A-229B

•Write equivalent decimals ($.4 = .40$).

Related Content: 268A-269B

•Write decimals as fractions using denominators of 10 and 100 ($.68 = 68/100$).

274A-275B

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

10A-13B, 28A-31B, 34A-35B, 44A-47B, 68A-69B, 86A-89B, 113B, 216A-241B, 26A8-283B

Example indicators:

•Order and compare whole numbers, common fractions, and decimals using the symbols $<$, $>$, and $=$.

10A-13B, 113, 234A-237B, 270A-273B, 276A-279B

•Illustrate mathematical concepts by using objects and drawing pictures or diagrams (subtraction as the opposite of addition and multiplication as repeated addition).

34A-35B, 44A-47B, 68A-69B, 238A-241B, 282A-283B

•Solve and check a mathematical problem by using the related facts.

28A-31B, 86A-89B

4.1.4 By the end of fourth grade, students will identify examples of positive and negative numbers and zero.

Related Content: 276A-281B, 390A-391B

Example indicator:

•Demonstrate simple concepts of positive and negative numbers (a thermometer for temperature or distances to the right or left of zero on a number line).

Related Content: 276A-281B, 390A-391B

4.1.5 By the end of fourth grade, students will make change and count out in amounts up to \$20.00.

18A-19B, 300A-303B

Example indicators:

•Count back change from purchase price to amount given using fewest coins possible.

18A-19B

•Calculate change through subtraction and choose correct bills and coins to make this amount.

Related Content: 18A-19B, 300A-303B

4.2 COMPUTATION/ESTIMATION

4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.

28A-47B, 54A-69B, 76A-89B, 96A-119B, 142A-157B, 164A-187B

Example indicators:

•Demonstrate with accuracy and reasonable speed the basic facts of addition (1-20), subtraction (1-20), multiplication (1-144), and division (1-44).

36A-43B, 54A-67B, 76A-85B

•Add and subtract accurately five-digit numbers including columns of numbers.

36A-43B

•Multiply up to a three-digit number by a two-digit number.

146A-155B

•Divide up to a three-digit number by a one-digit divisor.

178A-181B

•Choose correct operation and solve word problems.

34A-35B, 44A-47B, 68A-69B, 86A-89B, 116A-119B, 156A-157B

4.2.2 By the end of fourth grade, students will estimate, add, and subtract decimals without and with calculators and solve word problems.

290A-309B

Example indicator:

•Add and subtract decimals to the hundredth place.

296A-303B

4.2.3 By the end of fourth grade, students will estimate, add, and subtract fractions with like denominators without calculators and solve word problems.

250A-253B, 258A-261B

Example indicator:

-Solve problems involving fractions of halves, fourths, and eighths using the operations of addition and subtraction.

250A-253B, 258A-261B

4.3 MEASUREMENT

4.3.1 By the end of fourth grade, students will estimate, measure, and solve word problems using metric units for linear measure, area, mass/weight, capacity, and temperature.

318A-327B, 374A-383B, 390A-391B

Example indicators:

-Use the appropriate units of measurement.

374A-383B

-Estimate and accurately measure length to the nearest meter or centimeter and calculate area.

318A-327B, 374A-375B

-Estimate and accurately measure mass/weight to the nearest gram.

378A-379B

-Estimate and accurately measure capacity to the nearest milliliter.

376A-377B

-Measure and read temperature accurately to the nearest degree using Celsius thermometer.

390A-391B

4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

318A-327B, 364A-373B, 390A-391B

Example indicators:

-Use the appropriate units of measurement.

364A-373B

-Estimate and accurately measure length to the nearest yard, foot, inch, and quarter inch and calculate area.

318A-327B, 364A-365B

-Estimate and accurately measure mass/weight to the nearest ounce and pound.

368A-369B

-Estimate and accurately measure capacity to the nearest fluid ounce.

366A-367B

-Measure and read temperature accurately to the nearest degree using Fahrenheit thermometer.

390A-391B

4.3.3 By the end of fourth grade, students will tell and write correct time to the minute using an analog clock.

Related Content: 386A-389B

Example indicators:

•Set an analog clock to a given time.

Related Content: 386A-389B

•State time in different ways (8:35, 35 minutes after 8:00, or 25 minutes until 9:00).

Related Content: 386A-389B

•Identify time of day (am, pm, noon, and midnight).

Related Content: 386A-389B

4.3.4 By the end of fourth grade, students will measure and determine the perimeter of a many-sided figure without a formula using standard and metric units of measure.

328A-335B

4.4 GEOMETRY/SPATIAL CONCEPTS

4.4.1 By the end of fourth grade, students will identify, describe, and create two-and three-dimensional geometric shapes.

202A-209B, 346A-353B

4.4.2 By the end of fourth grade, students will identify and draw points, lines, line segments, rays, and angles.

196A-201B

4.4.3 By the end of fourth grade, students will identify, analyze, and compare two-dimensional geometric figures using congruence, symmetry, similarity, and simple transformations.

448A-461B

4.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.

402A-423B, 468A-477B

Example indicators:

•Collect, organize, and interpret data in line plots, tables, charts, and graphs (pie graphs, bar graphs, and pictographs).

402A-407B, 410A-423B

•Draw valid conclusions from displayed data.

402A-407B, 410A-423B

•Investigate and record patterns in a simple probability situation in an organized way.

472A-475B

4.6 ALGEBRAIC CONCEPTS

4.6.1 By the end of fourth grade, students will use and interpret variables and mathematical symbols to write and solve one-step equations.

128A-133B, 432A-437B

Example indicators:

•Use letters, boxes, or other symbols to stand for any number, measured quantity, or object in simple situations to demonstrate the beginning concept of a variable and writing formulas.

128A-133B, 432A-437B

•Identify and use various indicators of multiplication (parentheses, x , $*$) and division, ($/$, \div).

Related Content: 436A-437B

4.6.2 By the end of fourth grade, students will identify, describe, and extend arithmetic patterns, using concrete materials and tables.

96A-97B, 130A-133B, 356A-357B

Example indicator:

•Use Input/Output or function box to identify and extend patterns.

130A-133B

**Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Grade Five**

8.1 NUMERATION/NUMBER SENSE

8.1.1 By the end of eighth grade, students will recognize natural numbers whole numbers, integers, and rational numbers.

412A-413B; Grade 6: 150A-153B

8.1.2 By the end of eighth grade, students will determine equivalences among fractions, decimals, and percents.

220A-247B, 398A-403B

Example indicators:

•Find the equivalencies among fractions, decimals, and percents.

238A-234B, 398A-403B

•Solve problems with appropriate equivalencies.

246A-247B, 402A-403B

8.1.3 By the end of eighth grade, students will write and use numbers in expanded exponential form and scientific notation.

Grade 6: 10A-13B, 82A-83B

Example indicators:

•Write numbers in expanded form using exponential notation.

Grade 6: 10-A13B

•Express small and large numbers using scientific notation.

Grade 6: 82A-83B

8.1.4 By the end of eighth grade, students will identify and display numbers including prime and composite, factors and multiples, divisibility, powers, and properties.

24A-27B, 58A-61B, 67, 72A-73B, 102A-109B, 156A-161B, 223, 232A-233B, 260A-261B

Example indicator:

•Properties of numbers may include, but not be limited to, order of operations, commutative, associative, distributive, identity, and inverse.

24A-27B, 58A-59B, 67, 156A-161B, 223

8.2 COMPUTATION/ESTIMATION

8.2.1 By the end of eighth grade, students will add, subtract, multiply, and divide decimals and proper, improper, and mixed fractions with uncommon and common denominators with and without the use of technology.

42A-45B, 170A-191B, 256A-271B, 278A-289B

8.2.2 By the end of eighth grade, students will identify the appropriate operation and do the correct calculations when solving word problems.

34A-37B, 46A-49B, 74A-77B, 138A-139B, 188A-191B, 386A-389B

8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.

34A-37B, 46A-49B, 74A-77B, 126A-127B, 162A-163B, 396A-405B, Grade 6: 334A-337B

Example indicators:

-Use proportions to solve scale-model problems with fractions and decimals.

Grade 6: 334A-337B

-Problems should be of increasing level of difficulty and involve real-life situations.

34A-37B, 46A-49B, 74A-77B, 126A-127B, 162A-163B

8.2.4 By the end of eighth grade, students will apply the order of operations to solve problems with and without the use of technology.

67, 158A-161B

Example indicator:

-Evaluate all types of numerical expressions, including grouping symbols and exponents.

67, 158A-161B

8.2.5 By the end of eighth grade, students will apply strategies of estimation when solving problems with and without the use of technology.

28A-33B, 62A-63B, 86A-89B, 124A-125B, 174A-175B, 184A-185B Grade6: 109

Example indicators:

-Properly round to an appropriate place value if context permits.

28A-29B

-Perform estimation prior to calculation.

30A-33B, 62A-63B, 174A-175B, 184A-185B

-Without a calculator, estimate square roots of whole numbers up to one hundred to the nearest whole number.

Grade 6: 109

-Use compatible numbers to perform mental math.

86A-87B, 124A-125B

-Use estimation to check reasonableness of an answer.

88A-89B

8.3 MEASUREMENT

8.3.1 By the end of eighth grade, students will select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision.

296A-315B

8.3.2 By the end of eighth grade, students will convert units within measurement systems using standard and metric, given conversion factors.

354A-357B; Grade 6: 306A-309B

Example indicators:

- Convert between various units of area and various units of volume (square foot to square yards and cubic decimeters to liters, etc.).

Related Content: 354A-357B

- Check solutions to problems using unit analysis (feet/second to miles/hour).

Related Content Grade 6: 306S-309B

8.4 GEOMETRY/SPATIAL CONCEPTS

8.4.1 By the end of eighth grade, students will identify, describe, compare, and classify two-and three-dimensional geometric figures such as plane figures like polygons and circles; solid figures like prisms, pyramids, cones, spheres, and cylinders; and lines, line segments, rays, angles, parallel and perpendicular lines.

200A-213B, 322A-341B

8.4.2 By the end of eighth grade, students will use geometric properties, the Pythagorean theorem, and the relationships of congruence, similarity, and symmetry.

472A-477B

8.4.3 By the end of eighth grade, students will use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle, as well as the area and circumference of circles.

304A-315B

8.4.4 By the end of eighth grade, students will solve problems given formulas for volume and surface area of rectangular prisms, cylinders, and cones.

328A-329B, 332A-335B

8.4.5 By the end of eighth grade, students will apply transformations to two-and three-dimensional geometric figures.

464A-473B

Example indicator:

- Draw geometric figures using translations or slides, rotations or turns, reflections or flips, and scale.

464A-473B

8.4.6 By the end of eighth grade, students will use geometric terms and representations to describe the physical world.

200A-213B, 322A-341B, 464A-479B

8.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

8.5.1 By the end of eighth grade, students will collect, construct, and interpret data displays and compute mean, median, and mode.

430A-455B

Example indicator:

- Select appropriate representations of data when constructing data displays (graphs, tables, or charts).

432A-449B

8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.

430A-455B

8.5.3 By the end of eighth grade, students will conduct experiments or simulations to demonstrate theoretical probability and relative frequency.

486A-495B

Example indicator:

•Compare the results of a simulation (relative frequency) to the theoretical probability (a three color spinner or a coin).

488A-491B

8.5.4 By the end of eighth grade, students will identify statistical methods and probability for making decisions.

430A-455B

Example indicators:

•Identify the use of appropriate sampling techniques.

430A-431B

•Identify the use of appropriate charts and graphs.

432A-449B

•Identify the use of measures of central tendency (mean, median, and mode) appropriately.

450A-453B

8.6 ALGEBRAIC CONCEPTS

8.6.1 By the end of eighth grade, students will demonstrate knowledge and use of the one- and two-dimensional coordinate systems.

244A-245B, 414A-421B

Example indicators:

•Order numbers on a number line.

244A-245B

•Graph ordered pairs on a coordinate plane.

414A-417B

•Generate a table of ordered pairs to graph an equation in two variables.

420A-421B

8.6.2 By the end of eighth grade, students will apply algebraic concepts and operations to solve linear equations and word problems.

24A-27B, 58A-59B, 110A-113B, 148A-151B, 223, 288A-289B, 376A-389B

Example indicators:

•Solve multi-step equations with one variable.

Related Content: 376A-379B

-Use order of operations to evaluate algebraic expressions for given replacement values of the variables.

148A-151B

-Recognize and apply commutative, associative, distributive, inverse, and identity properties, and the properties of zero.

24A-27B, 58A-59B, 223

8.6.3 By the end of eighth grade, students will describe and represent relations, using tables, graphs, and rules.

105, 133, 382A-385B, 404A-405B

Example indicator:

-Use variables to recognize and describe patterns.

382A-382B

Scott Foresman – Addison Wesley enVisionMATH
to the Nebraska Mathematics Standards
Grade Six

8.1 NUMERATION/NUMBER SENSE

8.1.1 By the end of eighth grade, students will recognize natural numbers whole numbers, integers, and rational numbers.

150A-153B, 222A-229B

8.1.2 By the end of eighth grade, students will determine equivalences among fractions, decimals, and percents.

132A-135B, 144A-153B, 344A-363B

Example indicators:

•Find the equivalencies among fractions, decimals, and percents.

132A-135B, 146A-153B, 348A-349B

•Solve problems with appropriate equivalencies.

132A-135B, 146-A153B, 352A-353B

8.1.3 By the end of eighth grade, students will write and use numbers in expanded exponential form and scientific notation.

10A-13B, 82A-83B

Example indicators:

•Write numbers in expanded form using exponential notation.

10A-13B

•Express small and large numbers using scientific notation.

82A-83B

8.1.4 By the end of eighth grade, students will identify and display numbers including prime and composite, factors and multiples, divisibility, powers, and properties.

4A-25B, 34A-45B, 80A-81B, 96A-97B, 101, 120A-127B, 164A-165B

Example indicator:

•Properties of numbers may include, but not be limited to, order of operations, commutative, associative, distributive, identity, and inverse.

34A-45B, 80A-81B, 96A-97B, 101

8.2 COMPUTATION/ESTIMATION

8.2.1 By the end of eighth grade, students will add, subtract, multiply, and divide decimals and proper, improper, and mixed fractions with uncommon and common denominators with and without the use of technology.

62A-87B, 162A-179B, 186A-195B, 202A-215B

8.2.2 By the end of eighth grade, students will identify the appropriate operation and do the correct calculations when solving word problems.

84A-87B, 102A-105B, 110A-113B, 194A-195B, 314A-315B

8.2.3 By the end of eighth grade, students will solve problems involving whole numbers, integers, and rational numbers (fractions, decimals, ratios, proportions, and percents) with and without the use of technology.

102A-105B, 110A-113B, 194A-195B, 222A-245B, 300A-315B, 322A-337B

Example indicators:

•Use proportions to solve scale-model problems with fractions and decimals.

334A-337B

•Problems should be of increasing level of difficulty and involve real-life situations.

102A-105B, 110A-113B, 194A-195B, 314A-315B, 328A-329B

8.2.4 By the end of eighth grade, students will apply the order of operations to solve problems with and without the use of technology.

46A-53B, 73, 131

Example indicator:

•Evaluate all types of numerical expressions, including grouping symbols and exponents.

46A-53B, 73, 131

8.2.5 By the end of eighth grade, students will apply strategies of estimation when solving problems with and without the use of technology.

62A-63B, 66A-69B, 109, 110A-113B, 170A-171B, 188A-189B, 208A-209B

Example indicators:

•Properly round to an appropriate place value if context permits.

208A-209B

•Perform estimation prior to calculation.

62A-63B, 66A-69B, 170A-171B, 188A-189B, 208A-209B

•Without a calculator, estimate square roots of whole numbers up to one hundred to the nearest whole number.

109

•Use compatible numbers to perform mental math.

66A-69B, 188A-189B, 208A-209B

•Use estimation to check reasonableness of an answer.

87, 110A-113B, 362A-363B

8.3 MEASUREMENT

8.3.1 By the end of eighth grade, students will select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision.

266A-269B, 400A-419B, 426A-447B

8.3.2 By the end of eighth grade, students will convert units within measurement systems using standard and metric, given conversion factors.

400A-407B

Example indicators:

- **Convert between various units of area and various units of volume (square foot to square yards and cubic decimeters to liters, etc.).**

Related Content: 400A-407B

- **Check solutions to problems using unit analysis (feet/second to miles/hour).**

Related Content: 306A-309B, 324A-325B

8.4 GEOMETRY/SPATIAL CONCEPTS

8.4.1 By the end of eighth grade, students will identify, describe, compare, and classify two-and three-dimensional geometric figures such as plane figures like polygons and circles; solid figures like prisms, pyramids, cones, spheres, and cylinders; and lines, line segments, rays, angles, parallel and perpendicular lines.

262A-283B, 454A-457B

8.4.2 By the end of eighth grade, students will use geometric properties, the Pythagorean theorem, and the relationships of congruence, similarity, and symmetry.

284A-289B

8.4.3 By the end of eighth grade, students will use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle, as well as the area and circumference of circles.

426A-447B

8.4.4 By the end of eighth grade, students will solve problems given formulas for volume and surface area of rectangular prisms, cylinders, and cones.

458A-459B

8.4.5 By the end of eighth grade, students will apply transformations to two-and three-dimensional geometric figures.

284A-287B

Example indicator:

- **Draw geometric figures using translations or slides, rotations or turns, reflections or flips, and scale.**

284A-287B

8.4.6 By the end of eighth grade, students will use geometric terms and representations to describe the physical world.

262A-289B, 426A-447B, 454A-469B

8.5 DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS

8.5.1 By the end of eighth grade, students will collect, construct, and interpret data displays and compute mean, median, and mode.

476A-511B

Example indicator:

- Select appropriate representations of data when constructing data displays (graphs, tables, or charts).

476A-489B

8.5.2 By the end of eighth grade, students will read and interpret tables, charts, and graphs to make comparisons and predictions.

476A-511B

8.5.3 By the end of eighth grade, students will conduct experiments or simulations to demonstrate theoretical probability and relative frequency.

520A-537B

Example indicator:

- Compare the results of a simulation (relative frequency) to the theoretical probability (a three color spinner or a coin).

528A-533B

8.5.4 By the end of eighth grade, students will identify statistical methods and probability for making decisions.

476A-511B

Example indicators:

- Identify the use of appropriate sampling techniques.

502A-509B

- Identify the use of appropriate charts and graphs.

476A-489B

- Identify the use of measures of central tendency (mean, median, and mode) appropriately.

490A-493B, 500A-501B

8.6 ALGEBRAIC CONCEPTS

8.6.1 By the end of eighth grade, students will demonstrate knowledge and use of the one- and two-dimensional coordinate systems.

13, 22A-23B, 246A-249B, 380A-385B

Example indicators:

- Order numbers on a number line.

22A-23B

- Graph ordered pairs on a coordinate plane.

246A-249B

- Generate a table of ordered pairs to graph an equation in two variables.

13, 380A-385B

8.6.2 By the end of eighth grade, students will apply algebraic concepts and operations to solve linear equations and word problems.

34A-53B, 73, 98A-113B, 131, 212A-213B, 242A-245B, 372A-391B

Example indicators:

•Solve multi-step equations with one variable.

372A-375B

•Use order of operations to evaluate algebraic expressions for given replacement values of the variables.

46A-53B, 73, 131

•Recognize and apply commutative, associative, distributive, inverse, and identity properties, and the properties of zero.

34A-45B

8.6.3 By the end of eighth grade, students will describe and represent relations, using tables, graphs, and rules.

48A-49B, 131, 214A-215B, 290A-291B, 376A-391B

Example indicator:

•Use variables to recognize and describe patterns.

48A-53B, 131, 376A-385B