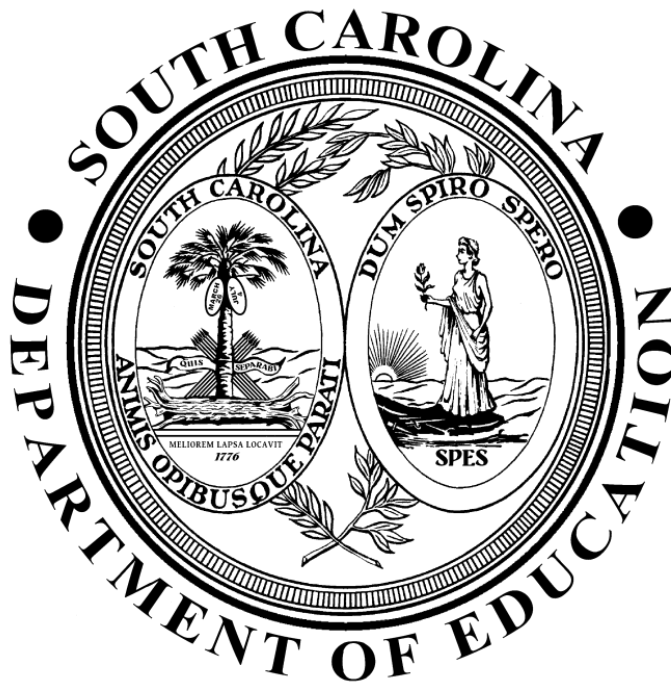STATE OF SOUTH CAROLINA

DEPARTMENT OF EDUCATION

Content Shifts and Potential Gaps for Implementation of the 2025 South Carolina College- and Career Ready Mathematics Standards

Office of Assessment and Standards

June 2024

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How to Use this Document

This document has been created to share the major changes to the grade level indicators. Bolded words in the indicators represent new content or changes to the content for that grade level or course.

Use this document to help plan how to address gaps as we transition to the *2025 South Carolina College- and Career-Ready Mathematics Standards* in the 2025-2026 school year.

Kindergarten

Indicator	New or Shift
K.MGSR.1.1 Identify a penny, nickel, dime, and quarter.	New
KNR.2.1 Count forward by ones and tens to 100 and **backward from 10 by ones**.	New
K.NR.2.4 Given a number from 0 to 20, count out that many objects.	New

Other Considerations:

- Hexagon, cone, and cylinder moved to first grade
- No longer compare numbers 0-10, only objects

1st Grade

Indicator	New or Shift
1.DPSR.1.2 **Create a survey question** and collect data with up to three categories. **Create charts and graphs** with a single unit scale to display the data. Use the graph to draw conclusions. Limit to one-step add-to, take-from, and part-part-whole questions.	New
1.MGSR.1.4 Identify and write the values of a coin **or a bill** using a ¢ symbol for coin values **or $ symbol for bills.** Limit to penny, nickel, dime, quarter, one-dollar bill, five-dollar bill, and ten-dollar bill.	New
1.MGSR.1.5 Count a collection of like coins to determine the total value of the set. Limit to pennies, nickels, and dimes with values not to exceed a dollar.	New
1.MGSR.2.1 Sort a mixed set of polygons and describe the reasoning used while sorting the polygons.	New
1.MGSR.2.4 **Classify shapes as two-dimensional/flat or three-dimensional/solid** and explain the reasoning using formal mathematical language. Limit to **triangle, square, rectangle,** rhombus, **hexagon, circle, cone, cube, cylinder**, square pyramid, and **sphere**.	Shift from kindergarten
1.MGSR.2.5 Analyze and compare a pair of two-dimensional shapes or a pair of three-dimensional shapes of assorted sizes and orientations using formal mathematical language. Limit to t**riangle, square, rectangle**, rhombus, h**exagon, circle, cone, cube**, **cylinder,** square pyramid, and **sphere**.	Shift from kindergarten
1.NR.1.4 Apply place value reasoning to identify the number that is **one more and one less**, ten more, and ten less than a given number with up to two digits.	New
1.NR.2.1 Count by ones forward or **backward** starting at any number up to 120 making accurate decade transitions.	New
1.PAFR.1.2 Compose and decompose numbers less than or equal to 20 in more than one way. Record each composition or decomposition as an equation.	New

2ⁿᵈ Grade

Indicator	New or Shift
2.DPSR.1.1 **Create a survey question** and collect data with up to four categories. Create **tally charts**, picture graphs, **dot plots**, and bar graphs with a single-unit scale to read the graph, answer questions, and draw conclusions. Limit to one-step add-to, take-from, part-part-whole, and comparison questions.	New
2.MGSR.2.2 Classify shapes as polygons or non-polygons and defend that determination based on their attributes.	New
2.MGSR.2.3 Classify two-dimensional shapes as triangles or quadrilaterals and justify each classification.	New
2.NR.2.1 Count forward and **backward** by ones, tens, and hundreds from any number within 999 and identify patterns in the sequence.	New
2.NR.3.2 When given a two-digit number, identify which multiple of 10 the number is closest to.	New
2.PAFR.1.2 Determine and explain if an equation (within 20) is true using a variety of equation formats.	New
2.PAFR.1.4 For any number from 0 to 99, find the number that makes 100 when added to the given number.	New
2.PAFR.1.6 Apply the Associative Property of Addition to find the sum (through 20) of three addends and explain that the value can be found using various grouping strategies.	Shift from 1ˢᵗ grade
2.PAFR.1.7 Determine the unknown number in addition and subtraction equations within 20, with the unknown in any position.	Shift from 1ˢᵗ grade
2.PAFR.2.1 Describe, extend, and create a growing shape pattern with up to three terms within a sequence.	Shift from 1ˢᵗ grade
2.PAFR.2.2 Create, describe, and extend an appropriate one-step rule for number patterns using addition and subtraction within 100.	New

Other Considerations:

- Specific bills have been identified in the indicator for money.
- Pentagon, octagon, rectangular prism, and square pyramid are additions to 2D, and 3D shapes second grade mathematicians need to know.
- Mathematicians need to represent numbers in base ten language. This is in addition to standard form and expanded form.

3rd Grade

Indicator	New or Shift
3.DPSR.1.1 Collect and organize categorical and numerical data based on observations, surveys, experiments, and investigations with whole number values using tables, scaled picture graphs, scaled bar graphs, or dot plots. Use titles and labels. Limit scales to multiples of 1, 2, 5, and 10.	New
3.DPSR.2.1 Identify the possible outcomes of a simple event.	New
3.MGSR.1.2 Determine the perimeter of **regular and irregular triangles and quadrilaterals with known side lengths**.	New
3.MGSR.1.3 Determine if a real-world situation is an example of the need for finding the area or the perimeter of a figure.	Shift from 5th grade
3.MGSR.2.1 Determine the value of any collection of coins, not to exceed $5. Write the amount in the form of dollars and cents using the decimal notation. Limit to penny, nickel, dime, and quarter.	New
3.MGSR.2.4 Estimate and measure length/distance to the nearest half inch and **nearest whole centimeter**.	New
3.MGSR.3.1 Describe and draw right, acute, obtuse, and straight angles. Identify these angle types in two-dimensional figures including triangles and quadrilaterals.	Shift from 4th grade
3.MGSR.3.2 Identify, describe, and draw points, lines, line segments, rays, intersecting lines, perpendicular lines, and parallel lines. Identify these in two-dimensional figures.	Shift from 4th grade
3.NR.1.2 Compose and decompose 4-digit whole numbers in multiple ways using thousands, hundreds, tens, and ones.	New
3.PAFR.2.3 Identify, create, and extend numerical patterns to determine the next three terms in an addition or subtraction sequence.	New
3.PAFR.2.4 Recognize that a whole number is a multiple of each of its factors 1–10.	Shift from 4th grade

Other Considerations:

- Mathematicians need to represent numbers in base ten language. This is in addition to standard, word and expanded form.
- Solve 2-step word problems involving addition and subtraction only.

4th Grade

Indicator	New or Shift
4.DPSR.1.1 Collect and organize numerical and categorical data based on observations, investigations, surveys, and experiments using tables, scaled bar graphs, or dot plots. Use titles and labels. Scales to include whole numbers, halves, and fourths.	New
4.DPSR.2.1 Determine the possible outcomes of a simple event and record the probability as certain, possible, or impossible.	New
4.MGSR.2.1 Calculate the value of a collection of coins and bills in real-world situations to determine whether there is enough money to make a purchase. Justify based on comparison of money amounts.	New
4.MGSR.2.2 Solve real-world situations involving addition and subtraction of time intervals within 60 minutes to find elapsed time, start time, or end time.	Shift from 3rd
4.MGSR.2.3 Measure length to the nearest quarter inch.	Shift from 3rd
4.MGSR.3.1 Classify triangles according to side length (isosceles, equilateral, scalene) and angle measure (acute, obtuse, right, equiangular).	New
4.MGSR.3.2 Classify quadrilaterals in a hierarchy based on their shared attributes.	Shift from 5th
4.NR.2.5 Explain and demonstrate how a mixed number is equivalent to a fraction greater than 1 and how a fraction greater than 1 is equivalent to a mixed number. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.	New
4.PAFR.1.2 Compute the product of a one-digit whole number times a multiple of 10 (from 10 to 90) and 100 (from 100 to 900) based on place value and properties of operations.	Shift from 3rd (multiple of 10) New (multiple of 100)
4.PAFR.2.4 Interpret a fraction as an equal sharing division situation, where a quantity (the numerator) is divided into equal parts (the denominator) to include real-world situations.	Shift from 5th

Other Considerations:

- Measurement conversions given the unit equivalencies.

5th Grade

Indicator	New or Shift
5.DPSR.1.1 Describe data by determining the range and mode, including whole numbers, fractional data, and decimal data. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, and 10, and limit decimals to decimals through the thousandths place.	New
5.DPSR.2.1 Represent the probability of a simple event as 0, a fraction, or 1. Limit fractions to denominators of 2, 3, 4, 5, 6, 8, 10, 20, and 25.	Shift from 7th
5.MGSR.1.1 Solve problems involving area and **perimeter of composite figures by decomposing with rectangles.**	Shift from 3rd (area) New (perimeter)
5.MGSR.2.2 Estimate and measure lengths to the nearest eighth of an inch or **nearest millimeter**.	Shift from 4th (nearest $\frac{1}{8}$ inch) New (millimeter)
5.PAFR.3.1 Determine the least common multiple (LCM) to find a common denominator. Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 50, and 100.	Shift from 6th
5.PAFR.3.2 Determine the greatest common factor (GCF) of two numbers both less than or equal to 50 to simplify a fraction into its standard form.	Shift from 6th
5.PAFR.3.3 Identify a rule that can describe the pattern from the data of a function table and write it as an expression.	New

Other Considerations:

- Parentheses are the only grouping symbols.
- Measurement conversions given the unit equivalencies.

6th Grade

Indicator	New, Shift, or Adjustment
6.DPSR.1.2 Create **box plots** to represent numerical data sets in mathematical and real-world situations.	Adjustment-only box plots
6.DPSR.1.3 Use the shape of the graph to determine whether **median or mode** best describes the data set.	Adjustment-mean is now introduced in 7th
6.DPSR.1.4 Calculate and interpret the **median, mode, range**, interquartile range in mathematical and real-world situations.	Adjustment-mean is now introduced in 7th
6.DPSR.2.1 Given the probability of a random event, expressed as a number from 0 to 1, state the likelihood of the event occurring.	Shift down from 7th
6.DPSR.2.2 Find the probability of simple events in mathematical and real-world situations. Fractions limited to denominators of 2, 4, 5, 8, 10, 25, 50, and 100.	Shift down from 7th
6.DPSR.2.3 Given the probability of an event, identify and calculate the complement of that event.	New
6.MGSR.2.1 Determine if two angles are complementary or supplementary.	Shift down from 7th
6.MGSR.2.2 Determine the measure of angles using a protractor.	Shift up from 4th
6.PAFR.3.2 Identify the multiplicative inverse of a number and multiply multiplicative inverses to find their product is equal to 1.	Shift down from 7th
6.PAFR.3.3 Identify the additive inverse of a number and add additive inverses to find their sum is equal to zero.	Shift down from 7th
6.PAFR.3.5 Add, subtract, multiply, and divide integers in mathematical and real-world situations	Shift down from 7th
6.PAFR.3.6 **Add, subtract, multiply,** and divide positive fractions, including mixed numbers in mathematical and real-world situations.	Adjusted to include all operations

Other Considerations:

- Denominators are specified in 6th grade to avoid repeating decimals.
- "Sort a set of positive rational numbers" in addition to compare and order.
- Dimensional analysis conversions will be given on a reference sheet.
- Statistical and nonstatistical questions moved to Geometry with Statistics

7th Grade

Indicator	New or Shift
7.DPSR.1.1 Create stem-and-leaf plots to represent numerical data sets in mathematical and real-world situations.	New
7.DPSR.1.2 Use the shape of the graph to select the measure of center (mean, median, or mode) that best describes the data set.	Shift up from 6th
7.DPSR.1.3 Calculate and interpret the measures of center (mean, median, mode) and spread (mean absolute deviation, interquartile range, range) in mathematical and real-world situations.	Shift up from 6th
7.DPSR.1.4 Create histograms to represent data sets and interpret histograms to answer questions or draw conclusions about data sets.	Shift up from 6th
7.MGSR.1.1 Identify the parts of a circle. Limit the parts to center, radius, diameter, and **chord**.	New
7.MGSR.2.1 Determine the measure of the third angle given the measure of the other two angles of a triangle using the **Triangle Sum Theorem.**	Shift down from 8th
7.MGSR.3.1 Find distances between ordered pairs on the coordinate plane, limited to the same x-coordinate or the same y-coordinate.	Shift up from 6th
7.PAFR.2.4 Use dimensional analysis to convert units **between metric and customary systems**.	New
7.PAFR.3.1 Simplify numerical expressions that include integer exponents using the laws of exponents: the Product of Powers, Quotient of Powers, Power of a Power, Power of a Product, Power of a Quotient, Zero Power, and **Negative Exponent**.	Shift down from 8th

Other Considerations:

- Dimensional analysis is still in 6th grade but converting between metric and customary systems is new.
- Using rational numbers is expected throughout all indicators in 7th grade.
- Random sampling moved to Statistical Modeling.
- Cross sections moved to Geometry with Statistics

8ᵗʰ Grade

Indicator	New or Shift
8.DPSR.1.2 Draw inferences about data sets from two populations using the shape of the distribution, measures of center, and measures of variability. Limit Measures to *mean, median, mode, range, mean absolute deviation, and interquartile range.*	Shift up from 7ᵗʰ
8.DPSR.1.3 Describe how adding and deleting data throughout the data set can affect the mean, median, mode, and distribution of the data set.	Shift up from 6ᵗʰ
8.DPSR.1.4 **For two data sets** (numerical or graphical), compare and interpret the centers, spreads, and overlap of data to draw inferences about data in mathematical and real-world situations. Limit displays to double line graphs, **back-to-back stem-and-leaf plots**, and double box plots.	Shift up from 7ᵗʰ
8.DPSR.2.1 Determine the sample space for a compound event.	Shift up from 7ᵗʰ
8.DPSR.2.2 Calculate and interpret the probability of compound independent and dependent events.	Shift up from 7ᵗʰ
8.PAFR.1.4 Describe the key features of given functions, including **domain, range, intervals of increasing or decreasing**, constant, discrete, continuous, and intercepts.	Shift down from Algebra
8.PAFR.3.3 Apply laws of exponents to simplify **algebraic expressions** involving no more than three variables and integer exponents.	Shift down from Algebra 1

Other Considerations:

- Comparing two data sets has moved to 8ᵗʰ grade
- Systems of equations and two-way tables have moved to Algebra 1
- Surface area of cylinders has moved to Geometry with Statistics
- Scatter plots are still in 8ᵗʰ, but finding the line of best fit has moved to Geometry with Statistics and Algebra 1
- Matrices have moved to Algebra 2 with Probability
- Scientific notation is no longer in SC math standards

Geometry with Statistics

Indicator	New or Shift
GS.DPSR.1.2 Use two representative points from the data to find an approximate line of fit and compare it to the line of best fit.	Shift up from 8th
GS.DPSR.1.3 Conduct an investigation for a statistical question, interpret statistical significance in the context of a situation, and answer investigative questions appropriately.	Shift up from 6th
GS.DPSR.2.1 Distinguish between correlation and causation.	Shift from Prob and Stats
GS.DPSR.3.1 Describe categories of events as subsets of a sample space using unions, intersections, or complements of other events.	Shift from Prob and Stats
GS.DPSR.3.2 Apply the Addition Rule to find the probability of both mutually exclusive and not mutually exclusive events and interpret the answers in context.	Shift from Prob and Stats
GS.DPSR.3.3 Apply the Multiplication Rule to determine the probability of independent events and interpret the answers in context.	Shift from Prob and Stats
GS.MGSR.1.2 Identify the shape of a two-dimensional cross-section of a three-dimensional figure.	Shift up from 7th
GS.MGSR.6.1 Discover and apply the converse of the Pythagorean Theorem.	Shift up from 8th
GS.NR.1.1 Rewrite numerical expressions of irrational and rational numbers involving radicals, including addition, subtraction, multiplication, and division, to recognize geometric patterns.	Shift from Algebra 1

Other Considerations:

- Some shifts are just more clarification, or that the concept now first appears here in Geometry with Statistics
- Scatter plots are still created and analyzed in 8th grade, but line of best fit was moved to Geometry with Statistics

Algebra 1

Indicator	New or Shift
A1.DPSR.1.1 Summarize categorical data in **two-way** frequency tables, interpret relative frequencies in real-world situations, and informally determine possible associations and trends in the data.	Shift from 8th
A1.DPSR.2.1 Use **two-way** frequency tables to make inferences and interpret the data in terms of real-world or mathematical situations.	Shift from 8th
A1.PAFR.2.3 Solve and graph linear, quadratic, exponential, and **linear absolute value equations** given in tabular, symbolic, and/or verbal forms using intercepts, domain and range, intervals of increasing and decreasing, vertex (maximum and minimum), end-behavior, and symmetry, and interpret these in terms of mathematical and real-world situations.	Shift from Algebra 2
A1.PAFR.2.7 Use graphs to obtain exact and/or approximate solutions of equations, inequalities, and **systems of linear** equations in two variables (given or obtained by using technology).	Shift up from 8th

Other Considerations:

- Some shifts are just more clarification, or that the concept now first appears here in Algebra 1
- Systems of Equations is no longer in 8th grade.
- Two-way tables are no longer in 8th grade

Algebra 2 with Probability

Indicator	New or Shift
A2P.DPSR.1.1 Describe events as subsets of a sample space using characteristics or categories of the outcomes, or as unions, intersections, or complements of other events.	Shift from Prob and Stats
A2P.DPSR.1.2 Explain whether two events, A and B, are independent if and only if the probability of A and B occurring together is the product of their probabilities and use this characterization to determine if they are independent.	Shift from Prob and Stats
A2P.DPSR.1.3 Determine whether the conditional probability of A given B as P(A and B)/P(B) and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B in mathematical and real-world situations.	Shift from Prob and Stats
A2P.DPSR.1.4 Recognize and explain the concepts of conditional probability and independence.	Shift from Prob and Stats
A2P.DPSR.2.1 Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A and interpret the answer in terms of the model.	Shift from Prob and Stats
A2P.DPSR.2.2 Apply the Addition Rule, P(A or B) = P(A) + P(B) − P(A and B) and interpret the answer in terms of the model.	Shift from Prob and Stats
A2P.DPSR.2.3 Apply the general Multiplication Rule in a uniform probability model, P(A and B) = P(A)·P(B|A) = P(B)·P(A|B) and interpret the answer in terms of the model.	Shift from Prob and Stats
A2P.DPSR.2.4 Use permutations and combinations to determine the number of possible outcomes in a sample space.	Shift from Prob and Stats
A2P.MGSR.1.1 Build the unit circle for sine and cosine functions using right triangle definitions.	Shift from Precalculus
A2P.MGSR.1.2 Use models of periodic phenomena to evaluate and analyze the graph of sine and cosine functions.	Shift from Precalculus
A2P.NR.1.2 Add, subtract, and multiply complex numbers.	Shift from Precalculus
A2P.NR.2.1 Perform operations with matrices including addition, subtraction, and scalar multiplication.	Shift from 8th grade and Pre-Calculus
A2P.PAFR.1.2 Solve quadratic inequalities that model mathematical and real-world situations.	New

Indicator	New or Shift
A2P.PAFR.2.1 Graph rational and radical functions and describe their key features. Limit to square roots and cube roots only.	Shift from Precalculus
A2P.PAFR.3.1 Create, solve, and graph exponential functions, including those that model real-life situations.	Shift from Algebra 1
A2P.PAFR.3.2 Find the sum of the terms of arithmetic and geometric sequences.	Shift from Precalculus

Other Considerations:

- Some shifts are just more clarification, or that the concept now first appears here in Algebra 2 with Probability

Discrete Mathematics Overview

- Using graph theory to model relationships and solve problems.
- Investigating principles of set theory.
- Analyzing numbers with different bases in real-world situations.
- Analyzing, modeling, and solving problems involving fair outcomes.

Reasoning in Mathematics Overview

- Application of statistical reasoning to complete investigations.
    - Ethics of data collection.
    - Introduce case studies and the types of studies.
    - Identify sampling techniques.
- Analyzing data of statistical experiments.
    - Comparing and contrasting categorical and quantitative data.
    - Identify the variable of interest and interpret a variety of displays (boxplots, histograms) and estimate center, spread, shape, and outliers.
- Exploring the sources of variability in sampling methods.
    - Biased sampling methods and biased statistics studies. This includes the importance of designing surveys and/or observation instruments.
    - Identify and explore statistical biases and the effects on the generalizability of the results.
- Identifying transformations using matrices.
    - Use matrices to organize information and identify matrices used to describe geometric transformations.
    - Represent figures using matrices and explore ways of determining different transformations.
- Analyzing truth tables to validate real-world situations.
    - Analyze truth tables to determine and verify the validity of arguments.
    - Create arguments and statements to validate arguments.
- Analyzing numerical data through estimation and approximation in real-world situations.
    - Estimating and calculating very large and small numbers.
    - Aspect ratios.
    - Weighted averages and sums.
    - Investigate and validate identification numbers.
- Analyzing present and future value of investments involving interest.
    - Compare and contrast nominal interest rate with APR.
    - Determine the future value of an investment.
- Analyzing data that follows and exponential patterns using the idea of a common ratio between consecutive values.
    - Make connections between recursive rules and explicit function rules.

- Analyzing real-world scenarios involving credit card debt and loans.
  - The monthly payment required to retire a debt at a fixed rate.
  - Compare and contrast different credit card offers using minimum payments.
- Analyzing regression of linear functions.
  - Analyze data using recursive defined rules and compare those to explicit.
  - Compute and analyze the correlation coefficient of data.
- Analyzing step and piecewise function in real-world situations.
  - Explore step and piecewise functions to make predictions and decisions.

Applications and Modeling Overview

- Summarizing and interpreting data represented in tables or graphs to make predictions.
- Solving problems involving probability and probability models and using expected values to make informed decision in real-world situations.
- Applying trigonometric principles to solve real-world geometric situations involving inaccessible distances.
- Analyzing and applying linear programming to mathematical and real-world situations.
- Creating and analyzing mathematical models to make decisions on real-world situations.
- Critiquing the appropriateness of measurements in terms of precision, accuracy, and approximate error.
- Applying two-and-three dimensional representations, geometric transformations, coordinate systems and scale models in planning, designing, and constructing solutions to real-world situations.
- Using vectors and matrices to represent, organize, and describe data to solve problems in mathematical and real-world situations.
- Analyzing and solving application- based problems relating to direct, inverse, and joint variation.

Statistical Modeling Overview

- Designing, implementing, and communicating using descriptive and inferential statistics by collecting, critiquing, analyzing, and interpreting real-world data.
- Formulating investigative statistical questions that can be answered using data.
- Using appropriate graphical and numerical methods to analyze data.
- Interpreting the results of the analysis by making connections to the investigative statistical question.