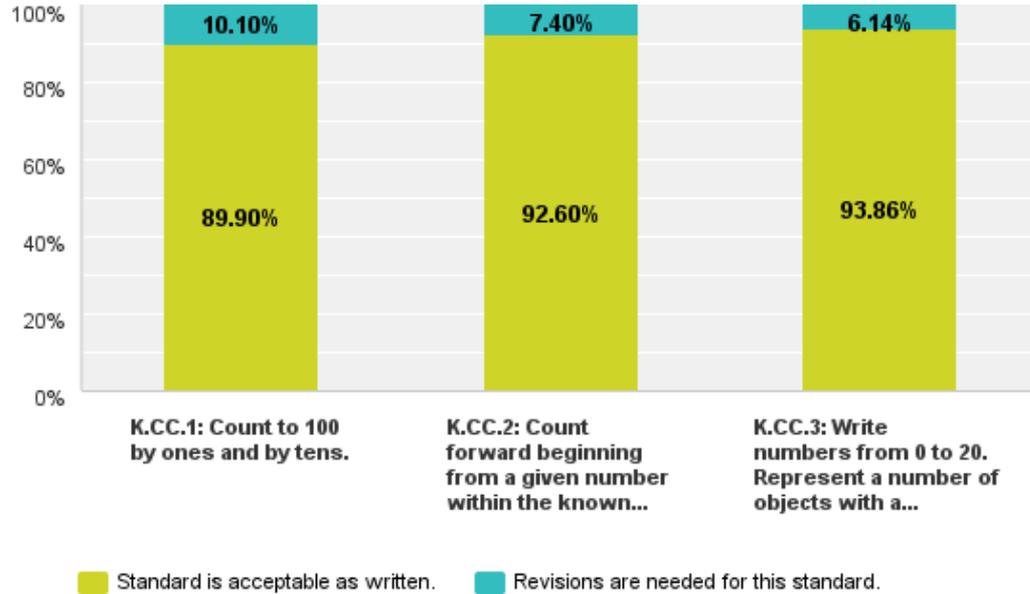


NCDPI Standards Review Math K

Tuesday, January 13, 2015

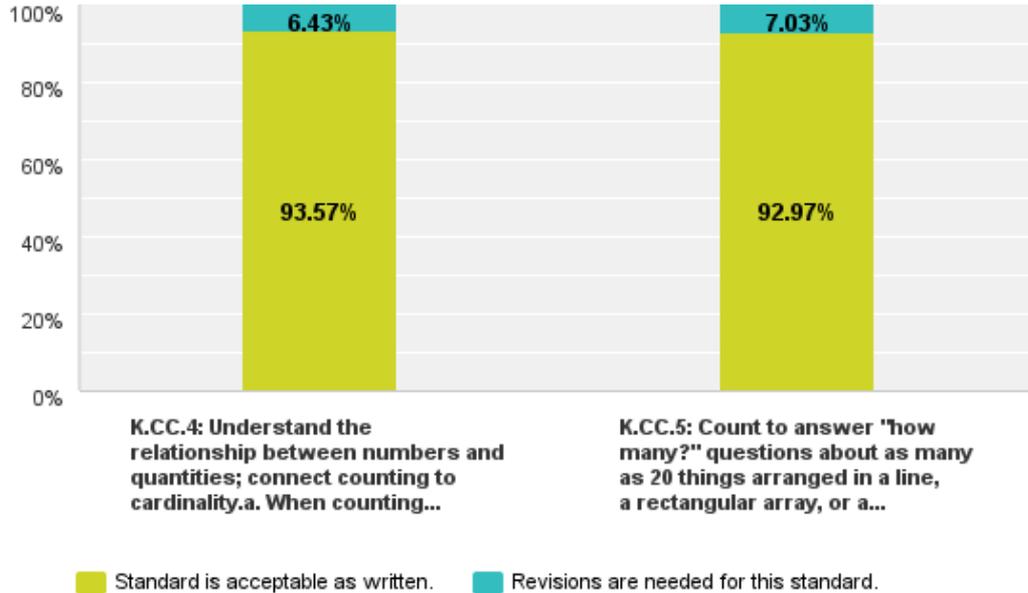
Q1: Grade K || Know number names and the count sequence.

Answered: 397 Skipped: 0



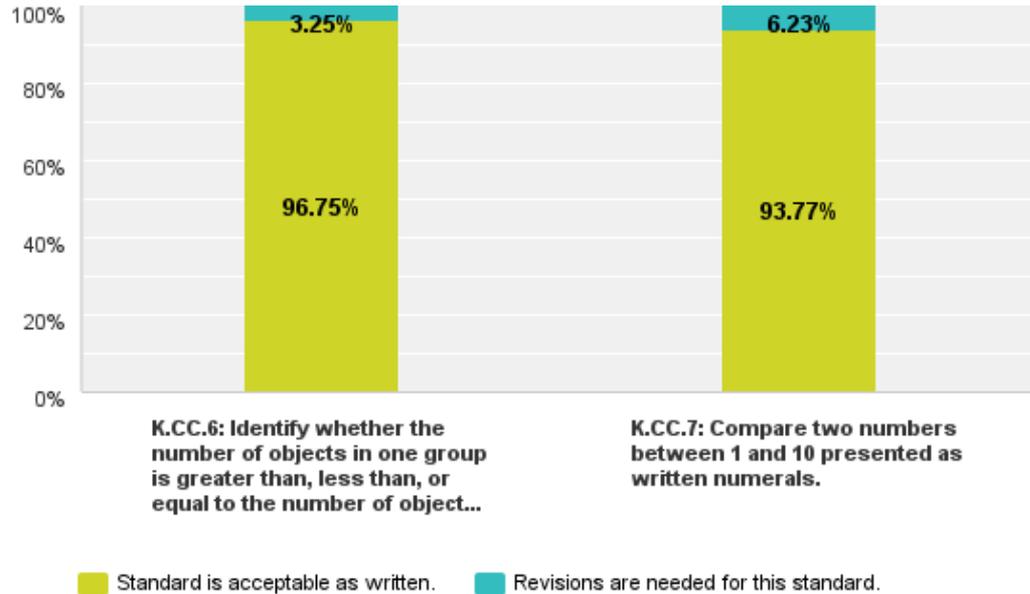
Q2: Grade K || Count to tell the number of objects.

Answered: 374 Skipped: 23



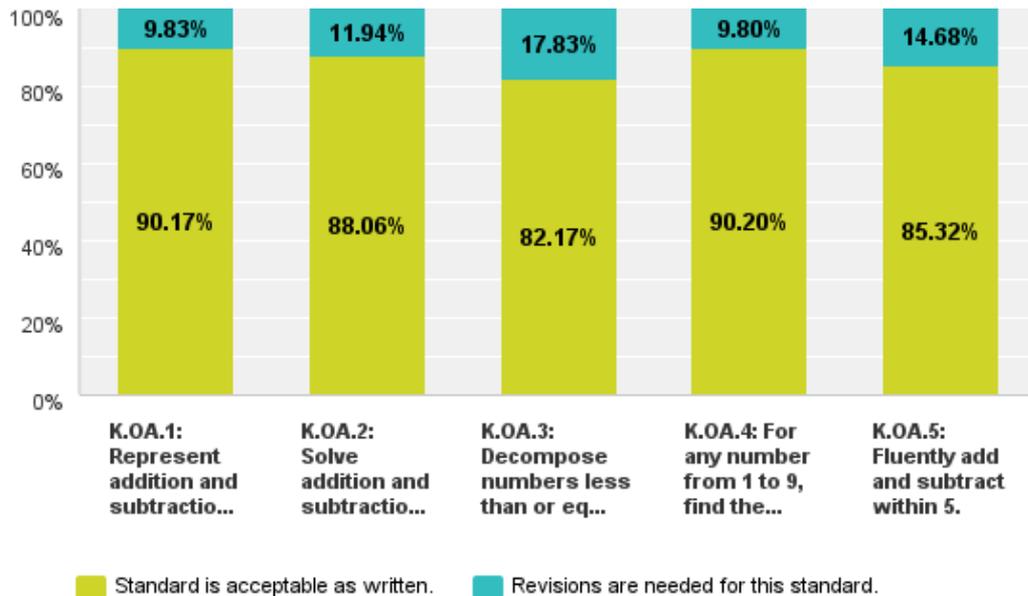
Q3: Grade K || Compare numbers.

Answered: 371 Skipped: 26



Q4: Grade K || Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Answered: 363 Skipped: 34



Q5: Grade K || Work with numbers 11-19 to gain foundations for place value.

Answered: 363 Skipped: 34

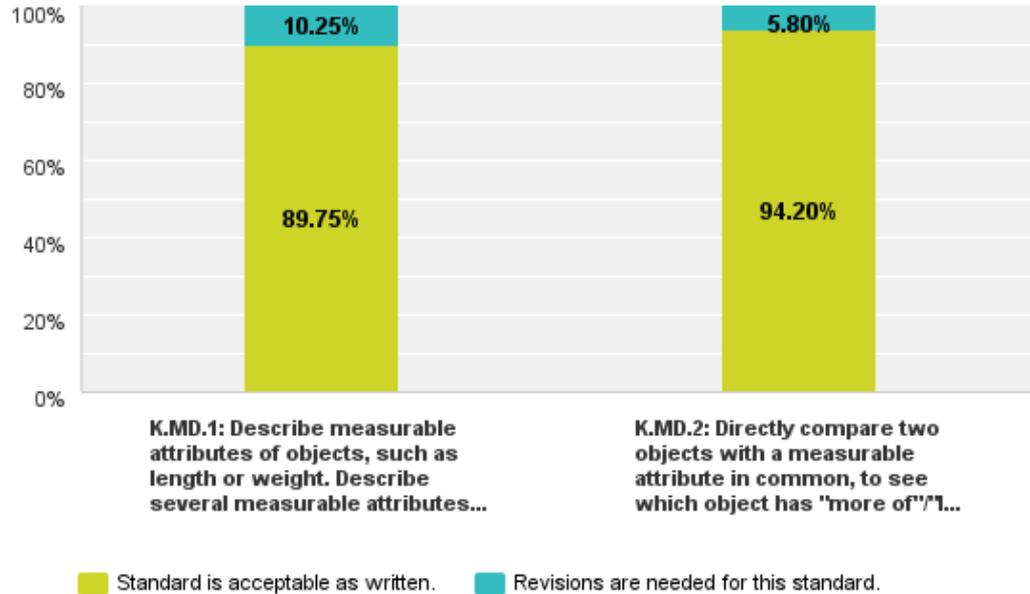


K.NBT.1: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these number...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

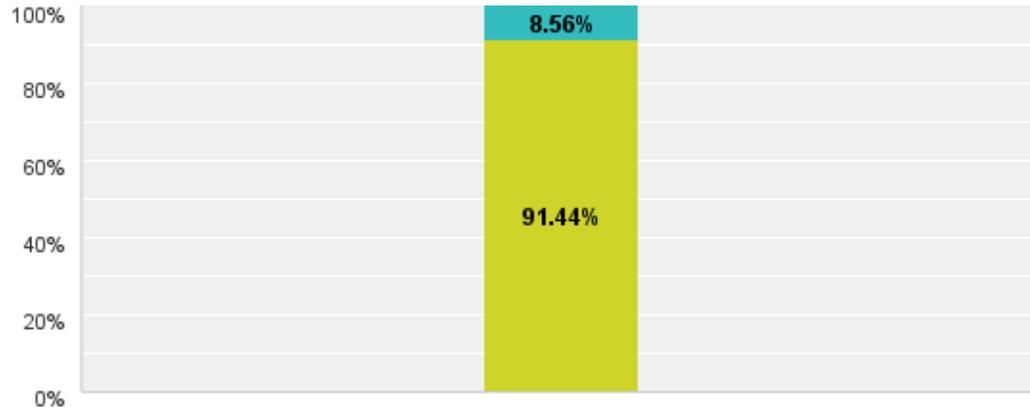
Q6: Grade K || Describe and compare measurable attributes.

Answered: 363 Skipped: 34



Q7: Grade K || Classify objects and count the number of objects in each category.

Answered: 362 Skipped: 35



K.MD.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Note: Limit category counts to be less than or equal to 10.)

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

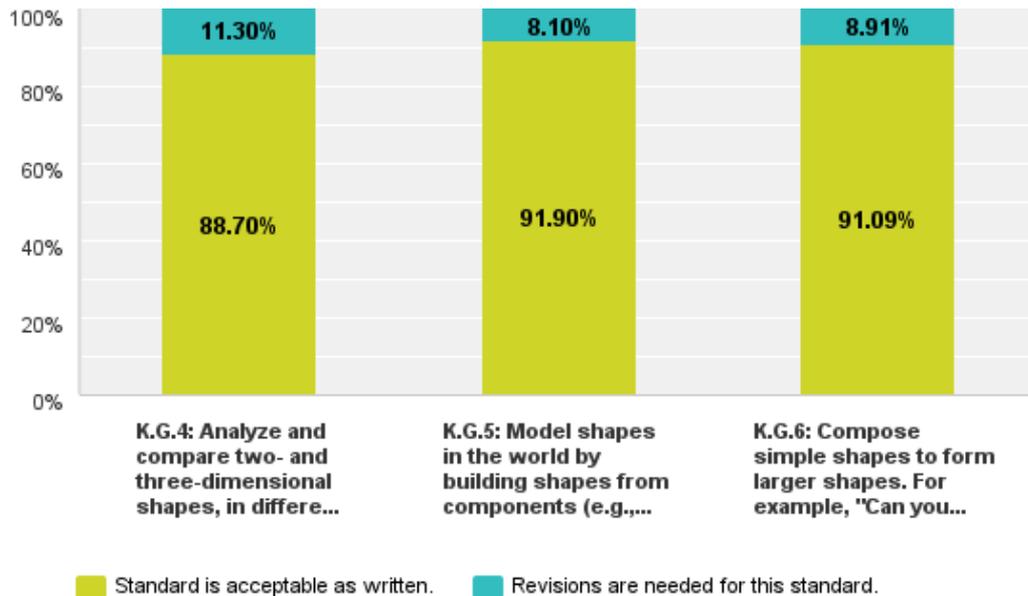
Q8: Grade K || Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

Answered: 361 Skipped: 36



Q9: Grade K || Analyze, compare, create, and compose shapes.

Answered: 360 Skipped: 37

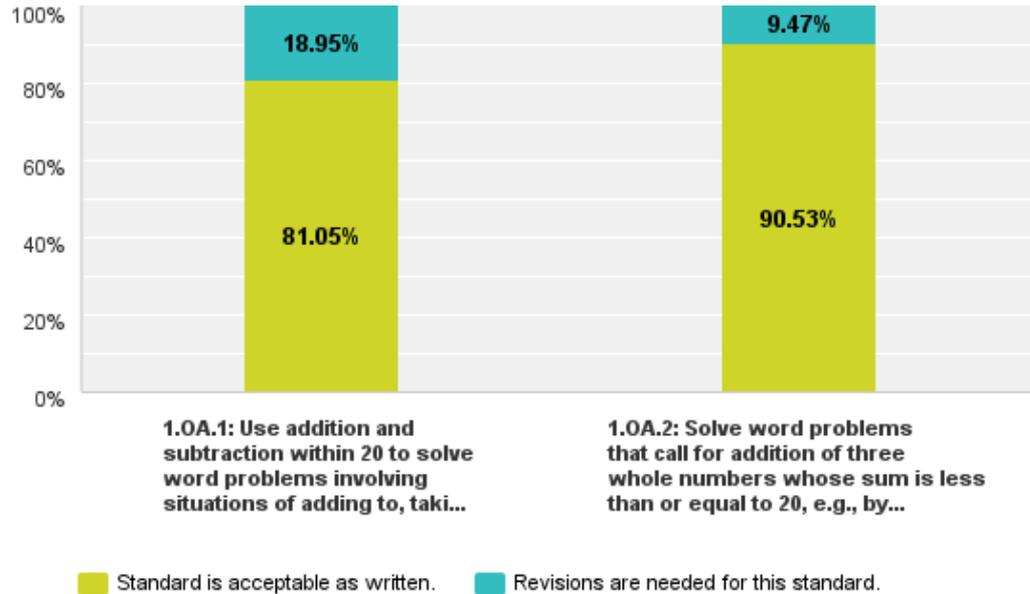


NCDPI Standards Review Math 1

Tuesday, January 13, 2015

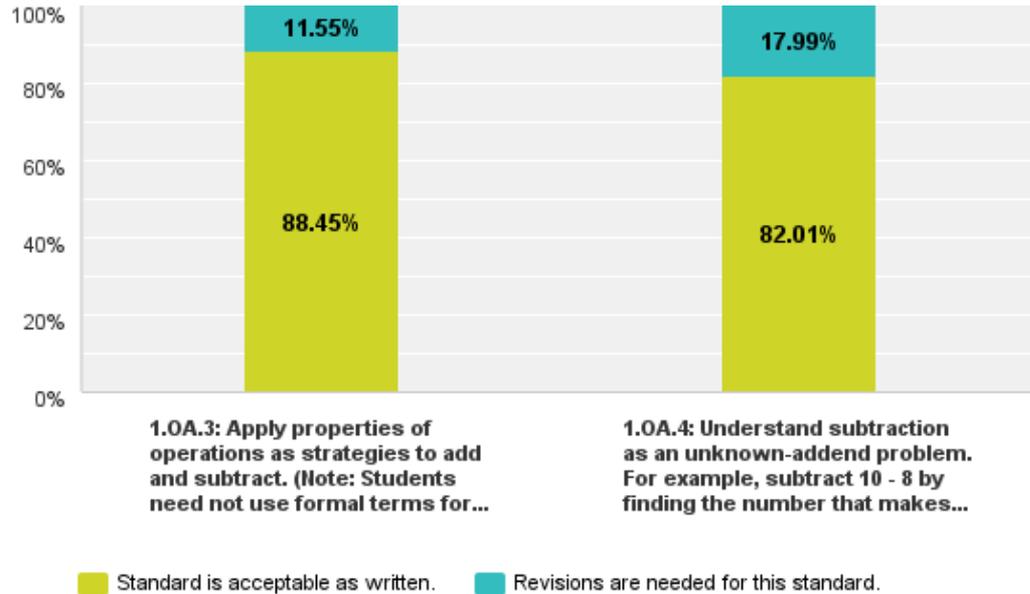
Q1: Grade 1 || Represent and solve problems involving addition and subtraction.

Answered: 343 Skipped: 0



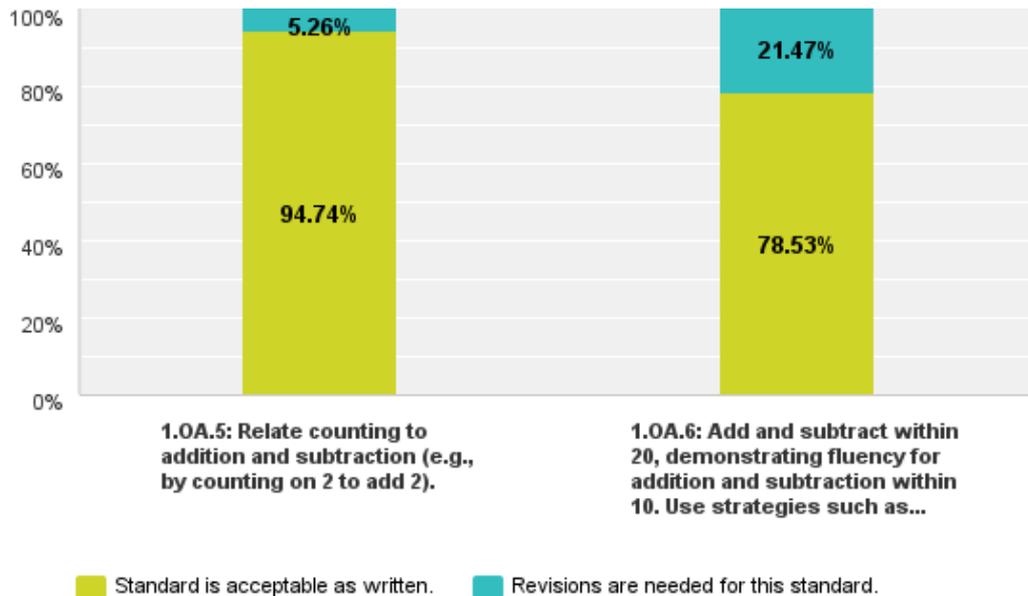
Q2: Grade 1 || Understand and apply properties of operations and the relationship between addition and subtraction.

Answered: 331 Skipped: 12



Q3: Grade 1 || Add and subtract within 20.

Answered: 328 Skipped: 15



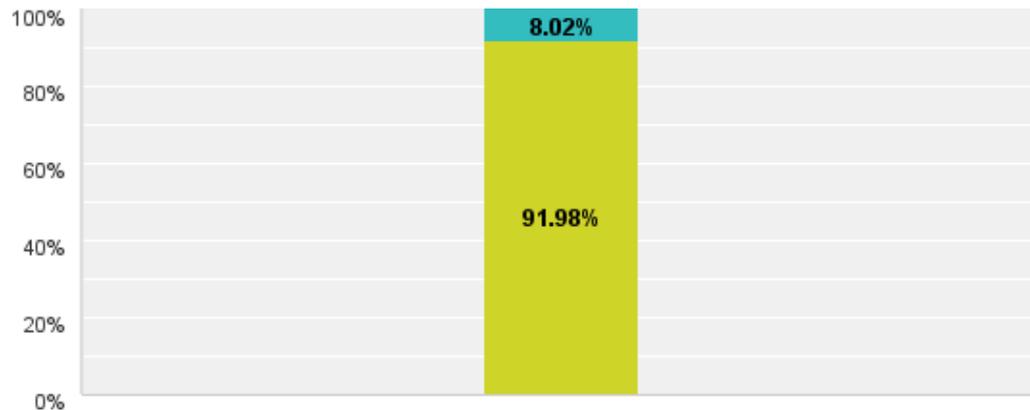
Q4: Grade 1 || Work with addition and subtraction equations.

Answered: 325 Skipped: 18



Q5: Grade 1 || Extend the counting sequence.

Answered: 324 Skipped: 19



1.NBT.1: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

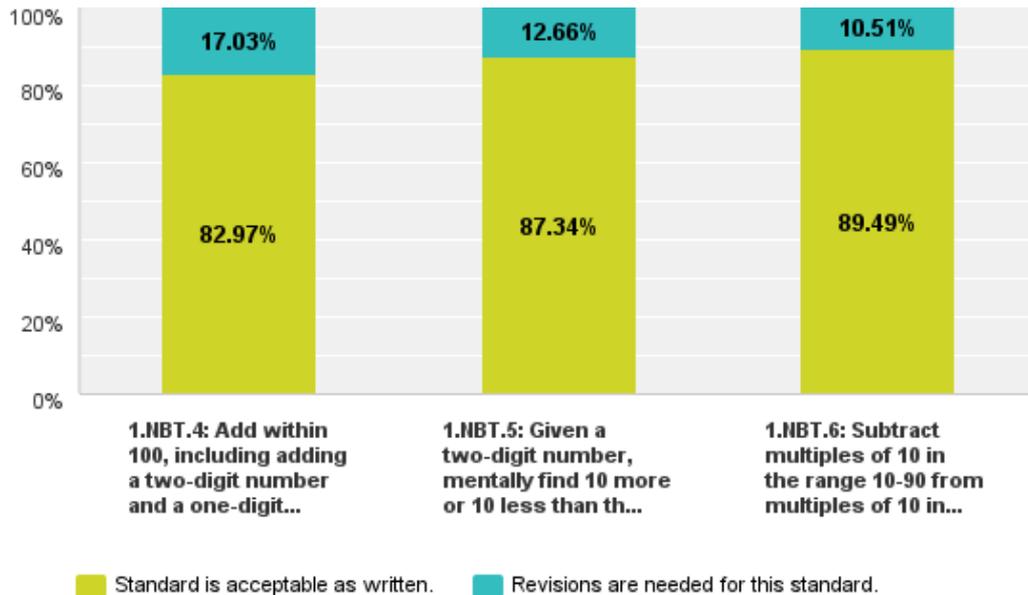
Q6: Grade 1 || Understand place value.

Answered: 324 Skipped: 19



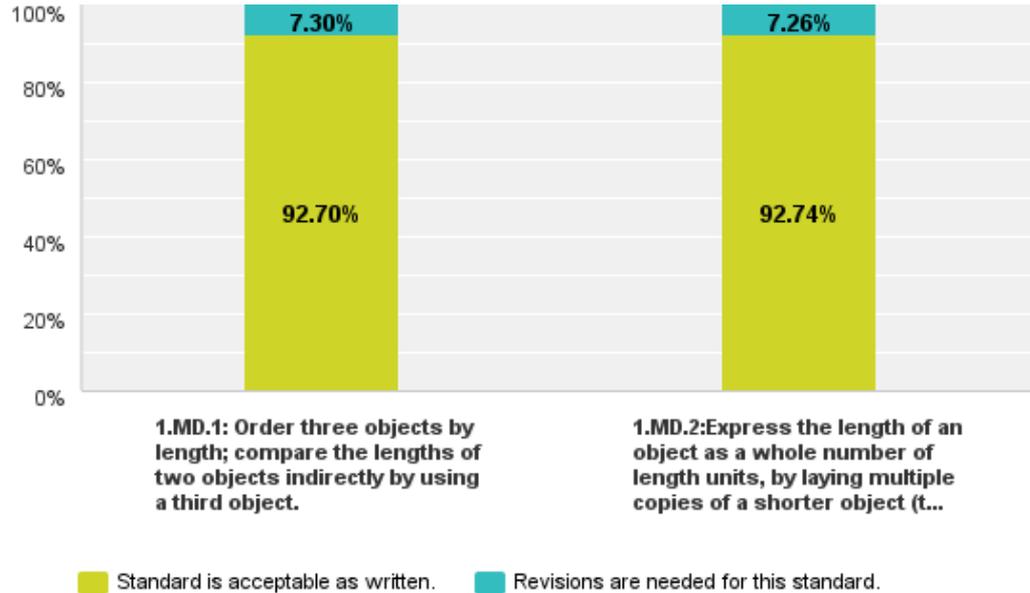
Q7: Grade 1 || Use place value understanding and properties of operations to add and subtract.

Answered: 319 Skipped: 24



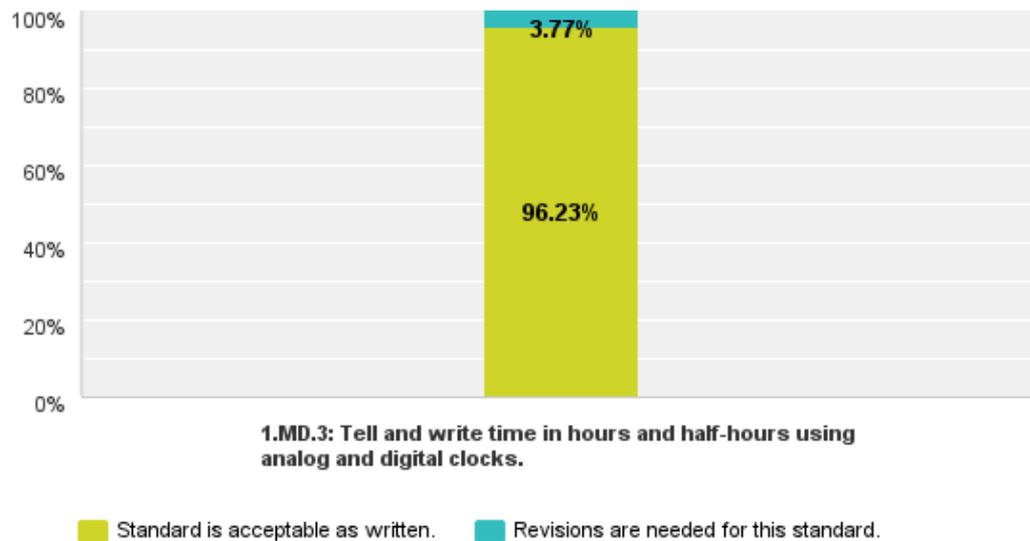
Q8: Grade 1 || Measure lengths indirectly and by iterating length units.

Answered: 318 Skipped: 25



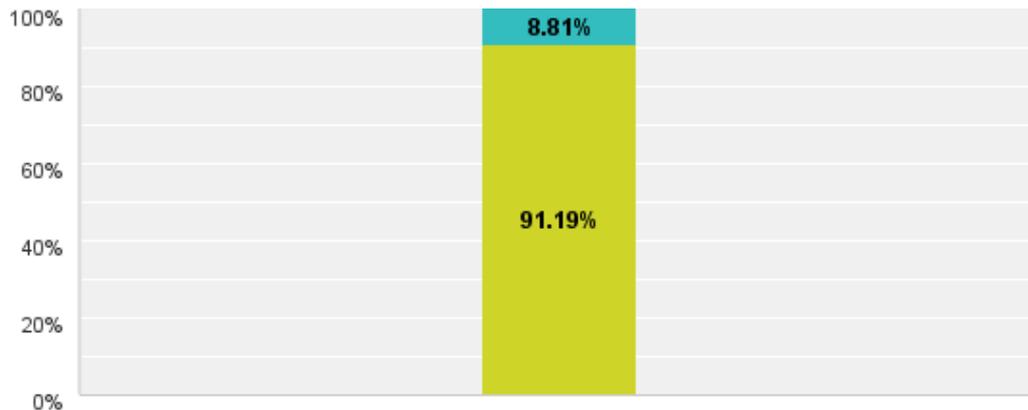
Q9: Grade 1 || Tell and write time.

Answered: 318 Skipped: 25



Q10: Grade 1 || Represent and interpret data.

Answered: 318 Skipped: 25

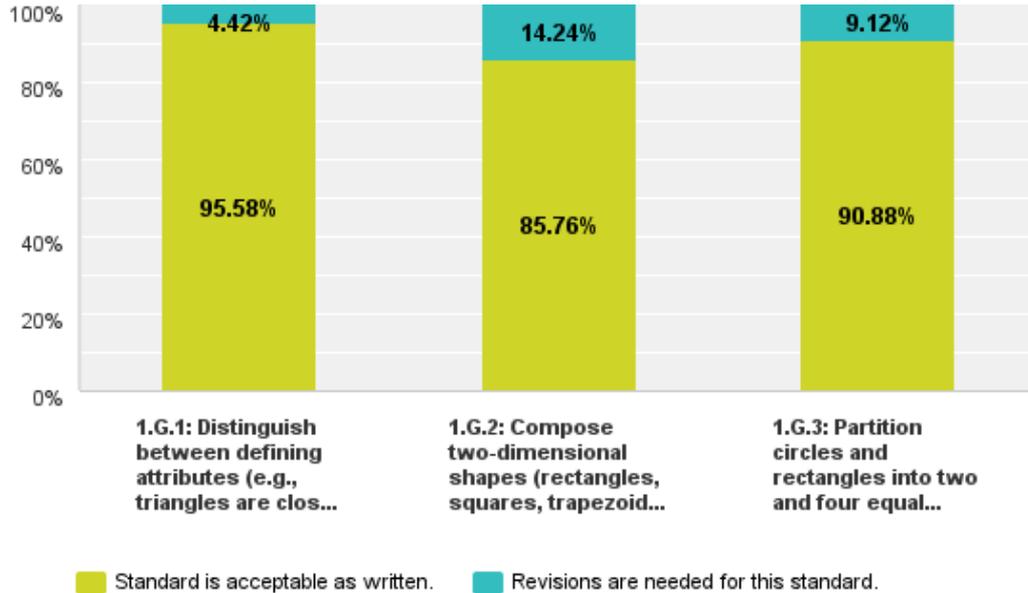


1.MD.4: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q11: Grade 1 || Reason with shapes and their attributes.

Answered: 318 Skipped: 25



NCDPI Standards Review Math 2

Tuesday, January 13, 2015

Q1: Grade 2 || Represent and solve problems involving addition and subtraction.

Answered: 338 Skipped: 0

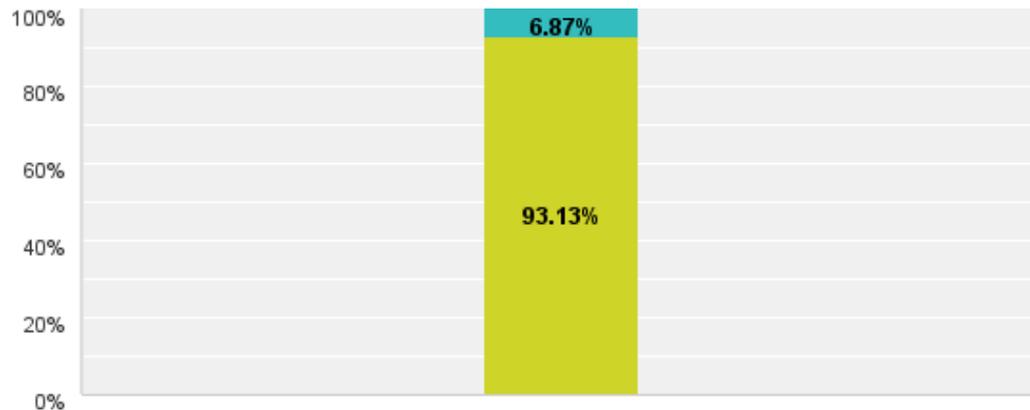


2.OA.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q2: Grade 2 || Add and subtract within 20.

Answered: 335 Skipped: 3

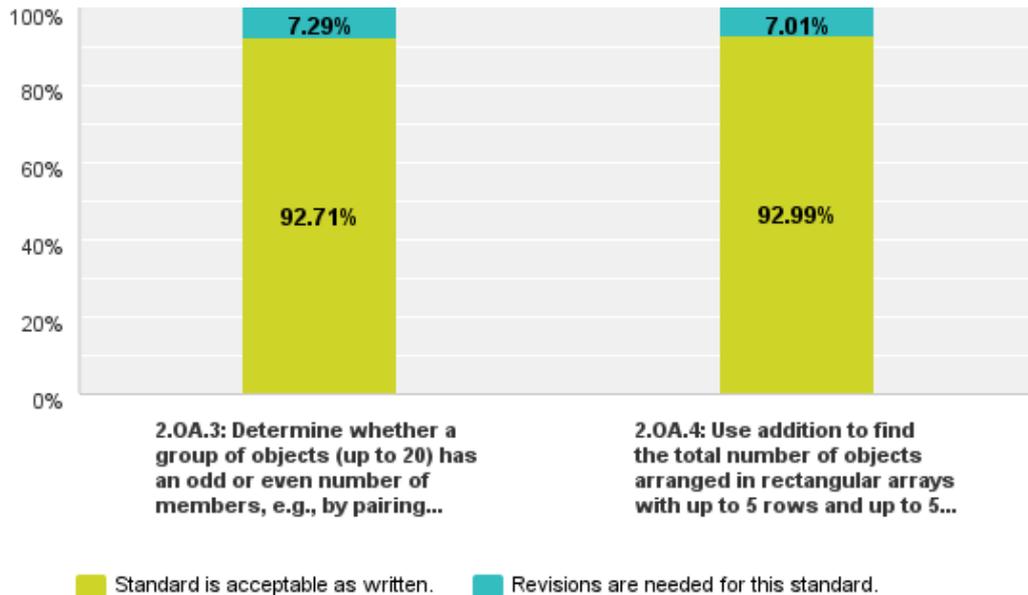


2.OA.2: Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

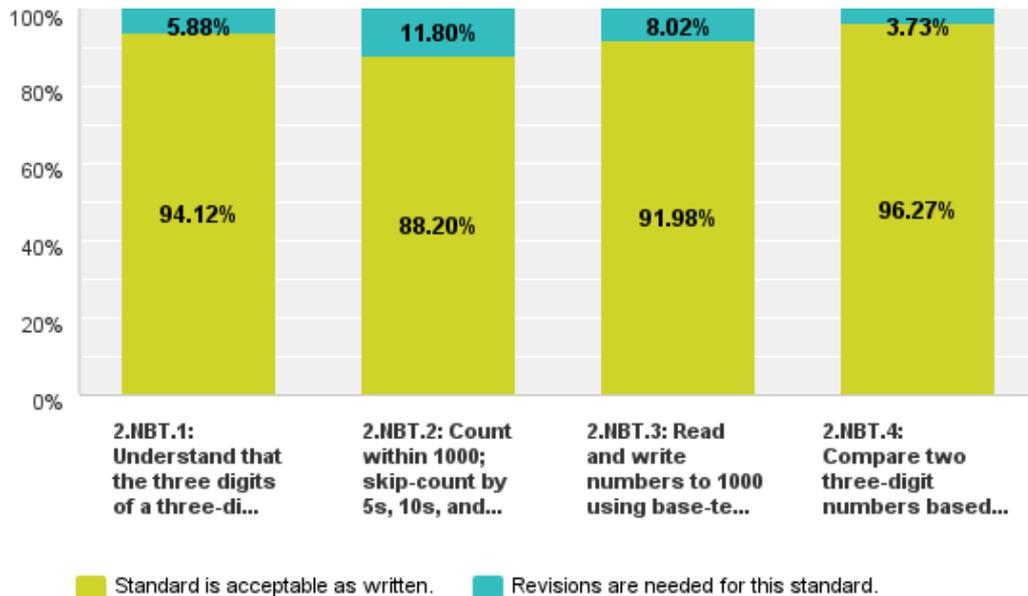
Q3: Grade 2 || Work with equal groups of objects to gain foundations for multiplication.

Answered: 330 Skipped: 8



Q4: Grade 2 || Understand place value.

Answered: 324 Skipped: 14



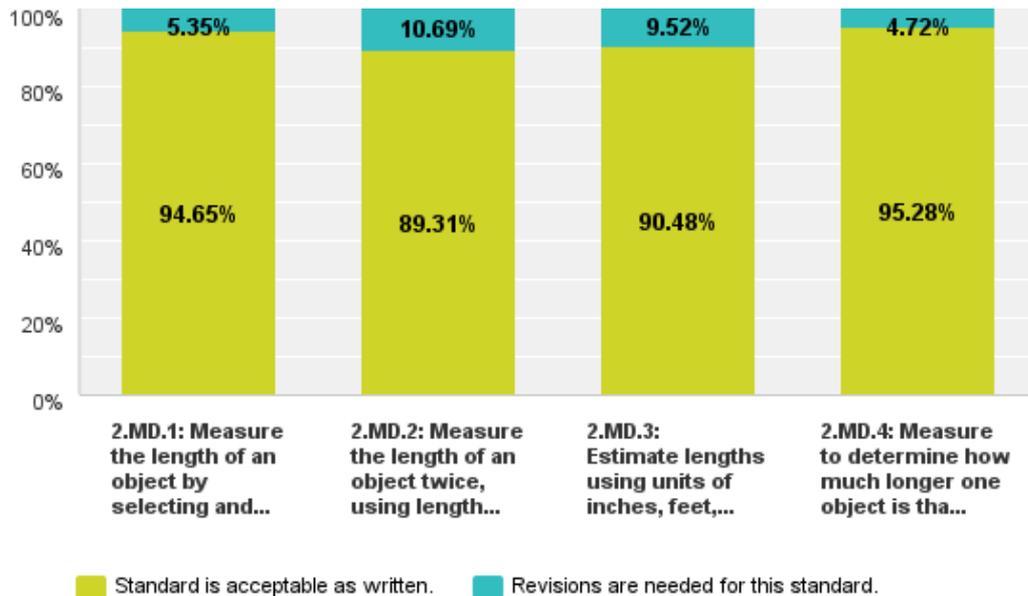
Q5: Grade 2 || Use place value understanding and properties of operations to add and subtract.

Answered: 321 Skipped: 17



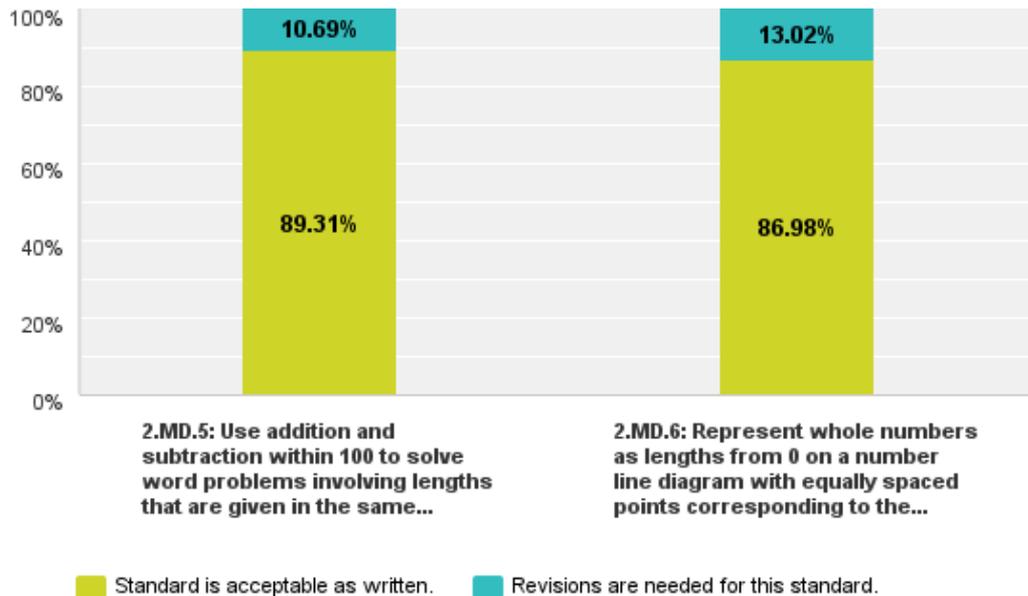
Q6: Grade 2 || Measure and estimate lengths in standard units.

Answered: 319 Skipped: 19



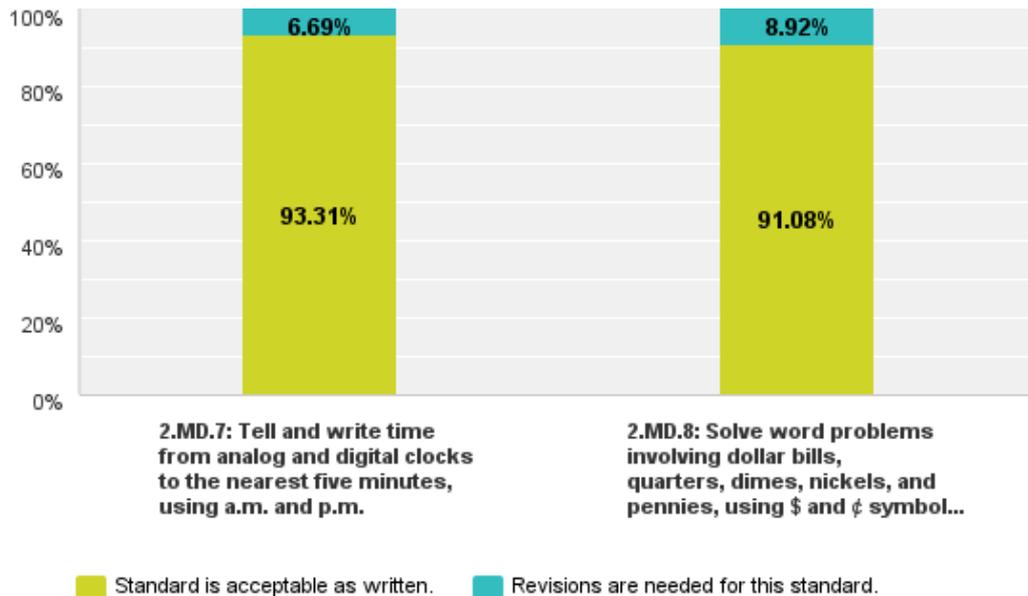
Q7: Grade 2 || Relate addition and subtraction to length.

Answered: 318 Skipped: 20



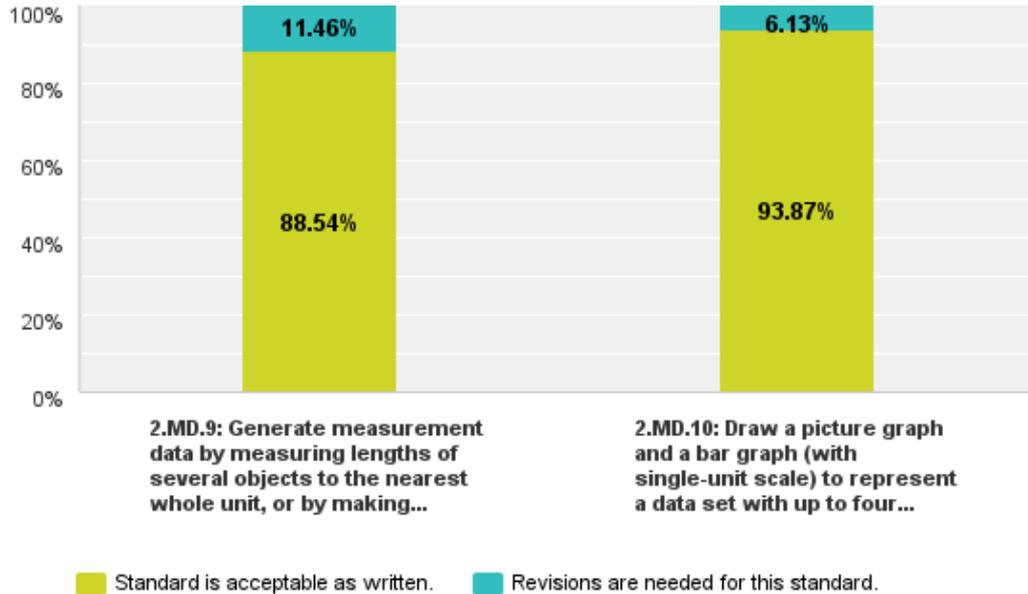
Q8: Grade 2 || Work with time and money.

Answered: 315 Skipped: 23



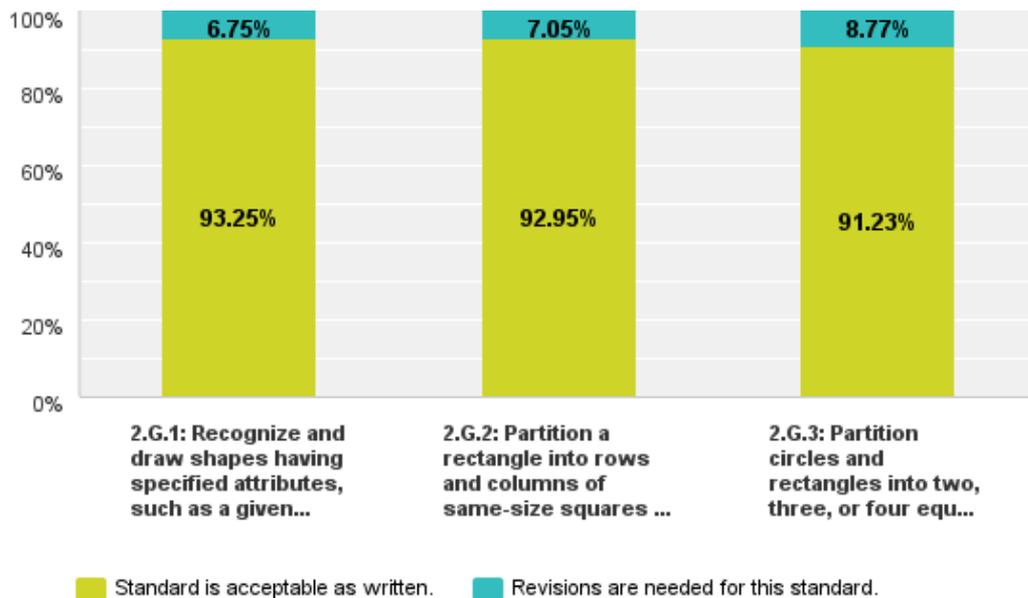
Q9: Grade 2 || Represent and interpret data.

Answered: 314 Skipped: 24



Q10: Grade 2 || Reason with shapes and their attributes.

Answered: 313 Skipped: 25

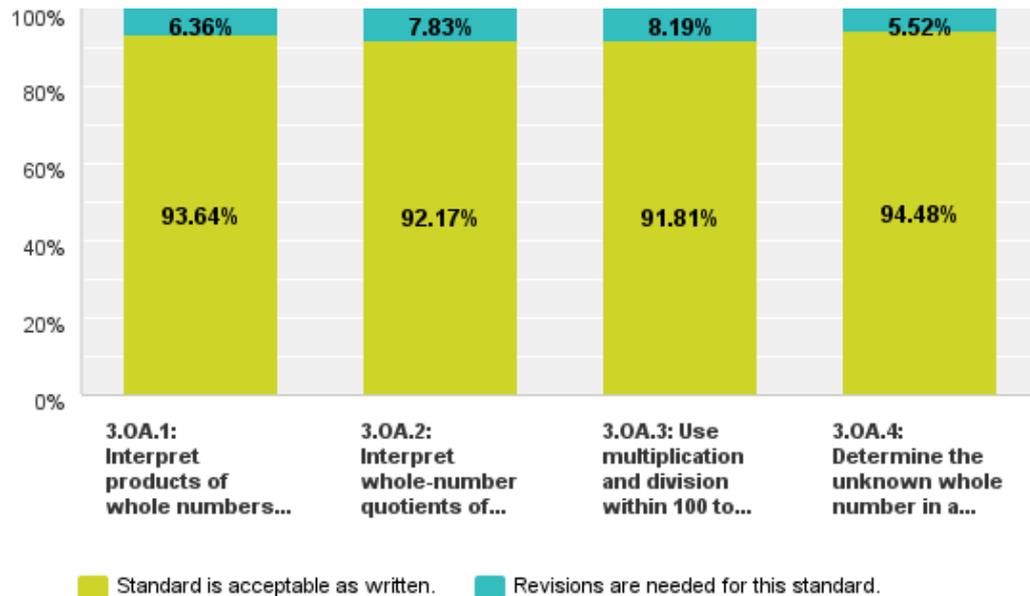


NCDPI Standards Review Math 3

Tuesday, January 13, 2015

Q1: Grade 3 || Represent and solve problems involving multiplication and division.

Answered: 346 Skipped: 0



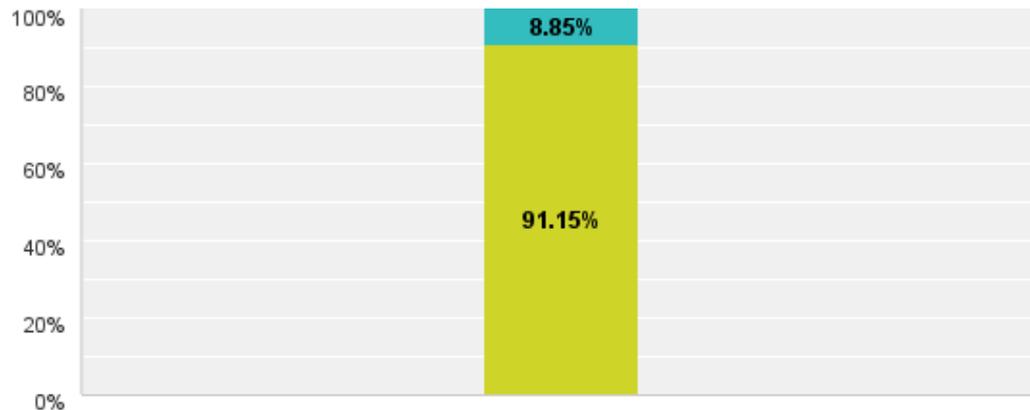
Q2: Grade 3 || Understand properties of multiplication and the relationship between multiplication and division.

Answered: 343 Skipped: 3



Q3: Grade 3 || Multiply and divide within 100.

Answered: 339 Skipped: 7

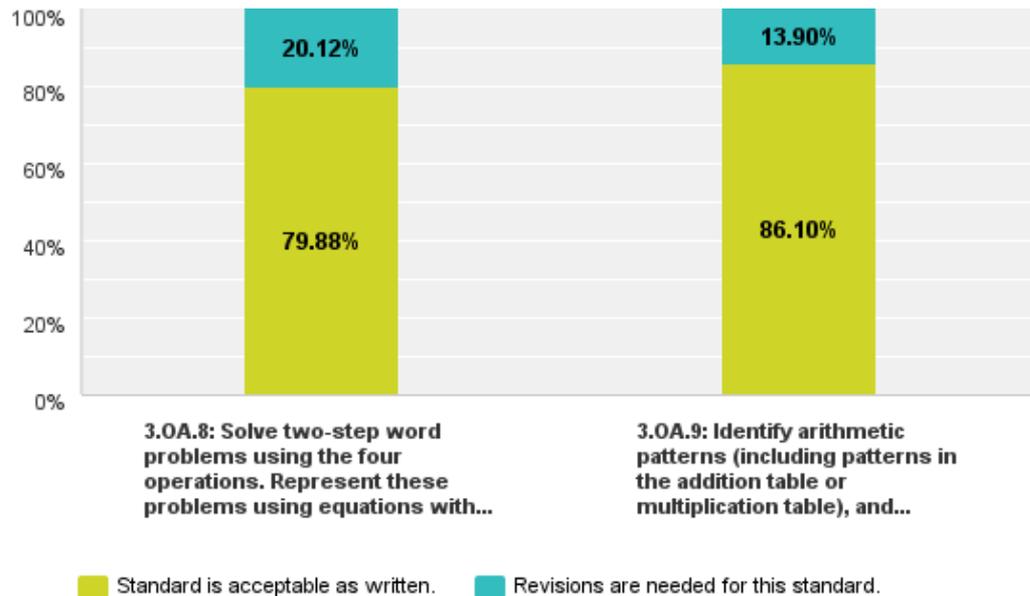


3.OA.7: Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know fro...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q4: Grade 3 || Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Answered: 334 Skipped: 12



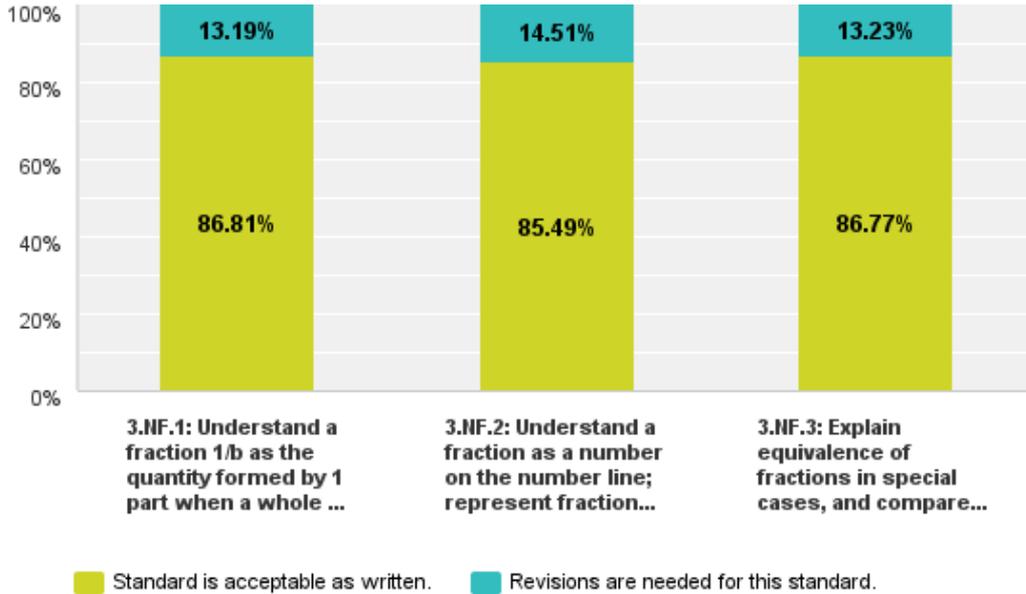
Q5. Grade 3 || Use place value understanding and properties of operations to perform multi-digit arithmetic. (Not e: A range of algorithms may be used.)

Answered: 333 Skipped: 13



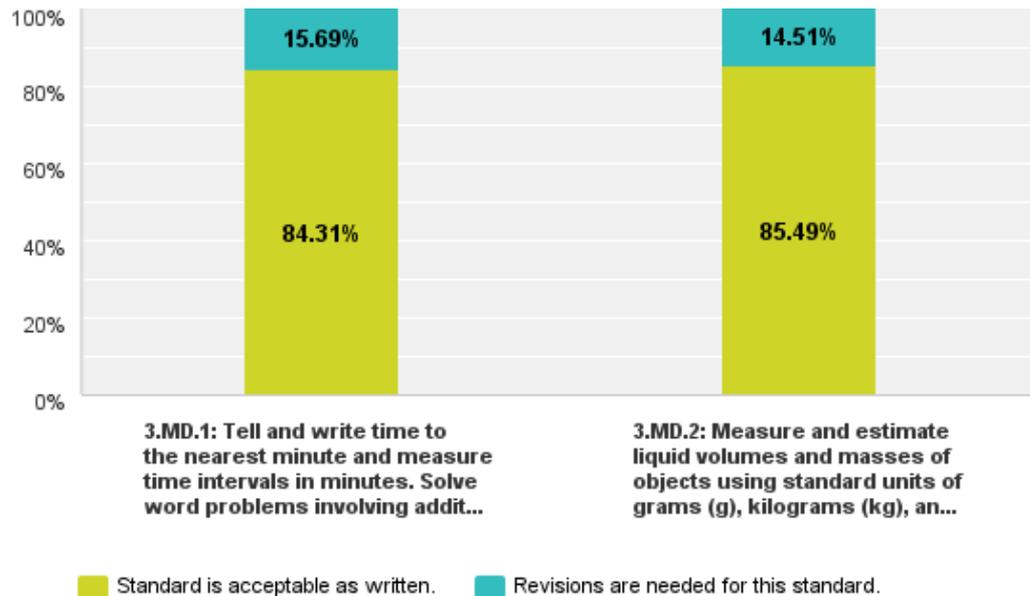
Q6. Grade 3 || Develop understanding of fractions as numbers. Note. Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.

Answered: 327 Skipped: 19



Q7: Grade 3 || Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects

Answered: 326 Skipped: 20



Q8: Grade 3 || Represent and interpret data.

Answered: 324 Skipped: 22



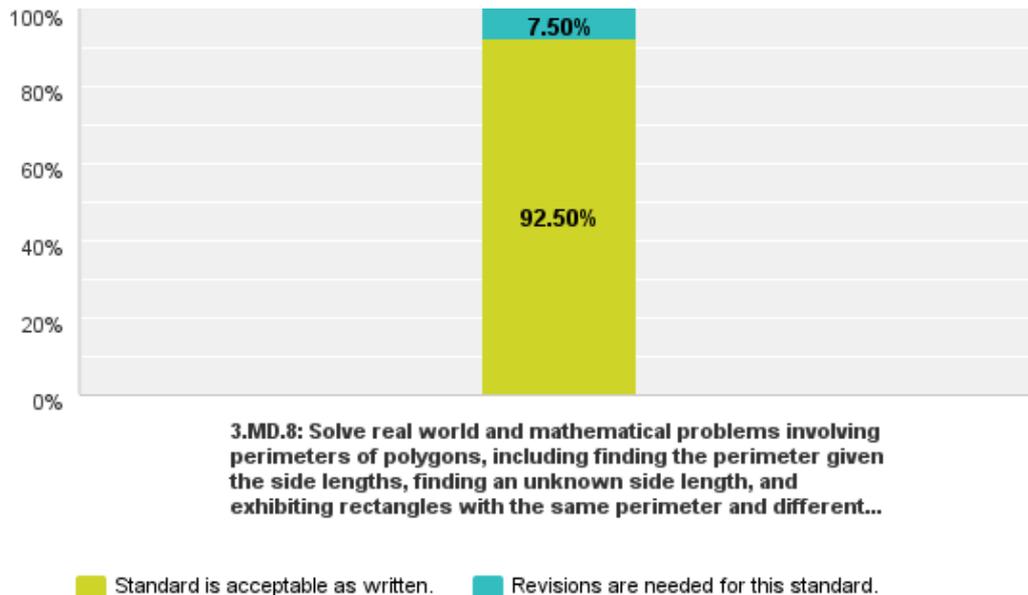
Q9: Grade 3 || Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Answered: 320 Skipped: 26



Q10: Grade 3 || Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

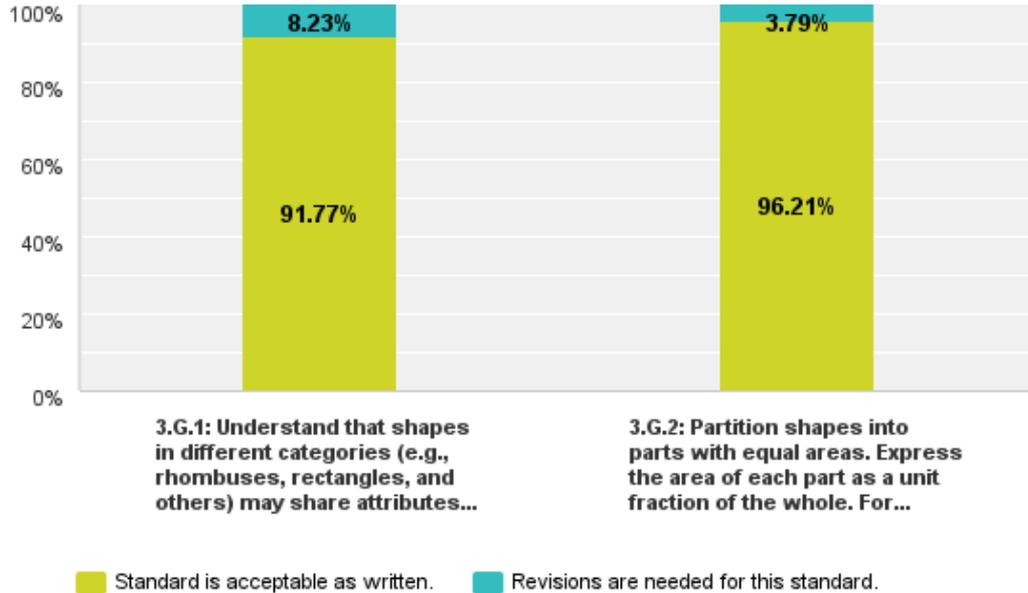
Answered: 320 Skipped: 26



3.MD.8: Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different...

Q11: Grade 3 || Reason with shapes and their attributes.

Answered: 320 Skipped: 26

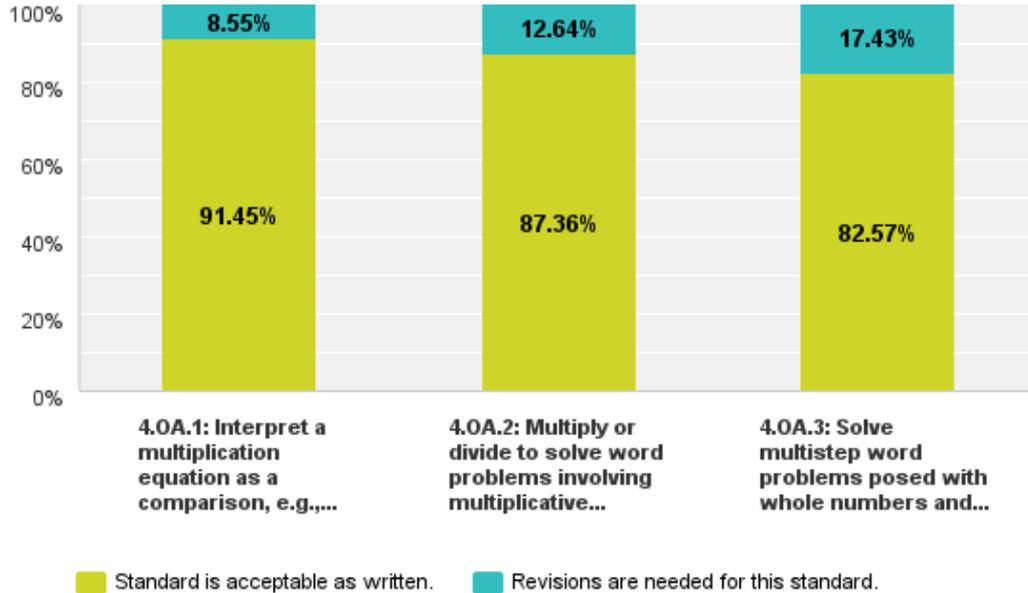


NCDPI Standards Review Math 4

Tuesday, January 13, 2015

Q1: Grade 4 || Use the four operations with whole numbers to solve problems.

Answered: 353 Skipped: 0



Q2: Grade 4 || Gain familiarity with factors and multiples.

Answered: 346 Skipped: 7

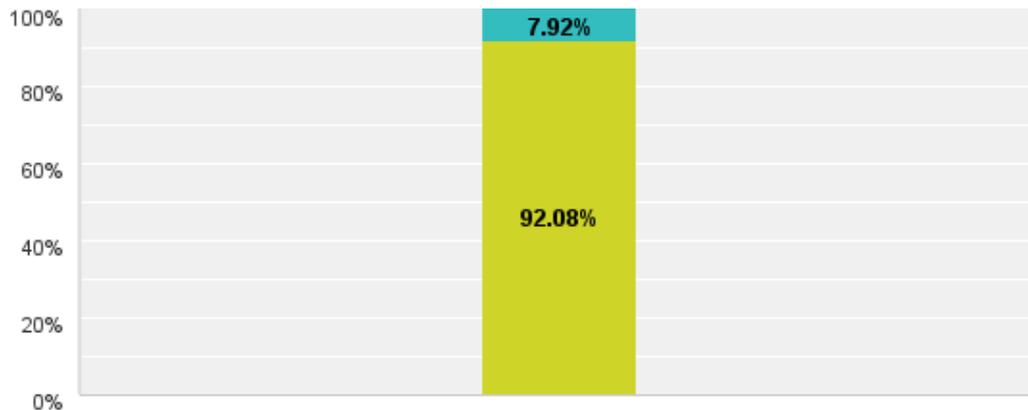


4.OA.4: Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number....

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q3: Grade 4 || Generate and analyze patterns.

Answered: 341 Skipped: 12

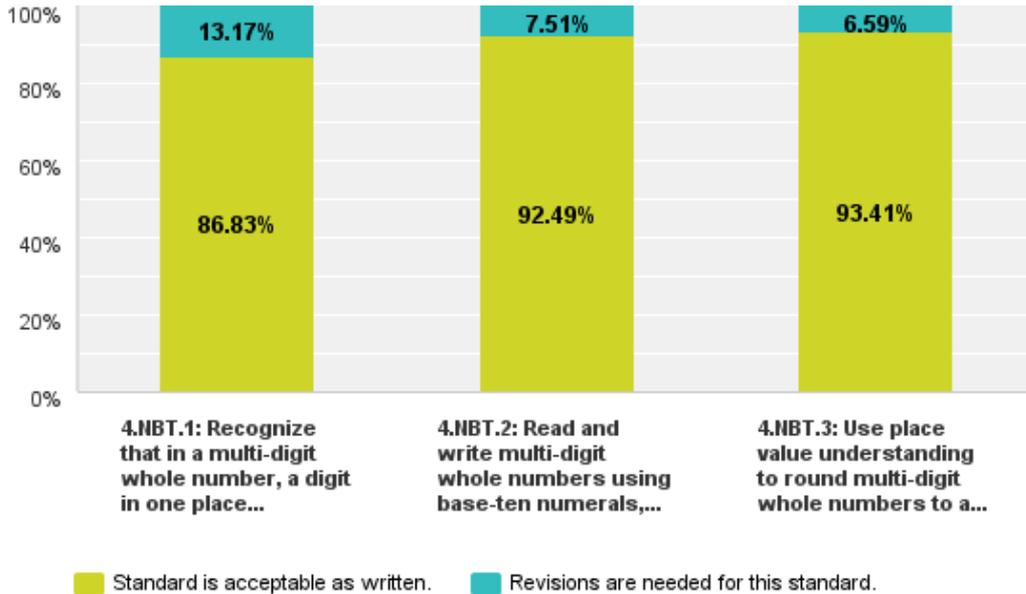


4.OA.5: Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q4. Grade 4 || Generalize place value for multi-digit whole numbers. Note: Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

Answered: 335 Skipped: 18



Q5: Grade 4 || Use place value understanding and properties of operations to perform multi-digit arithmetic.

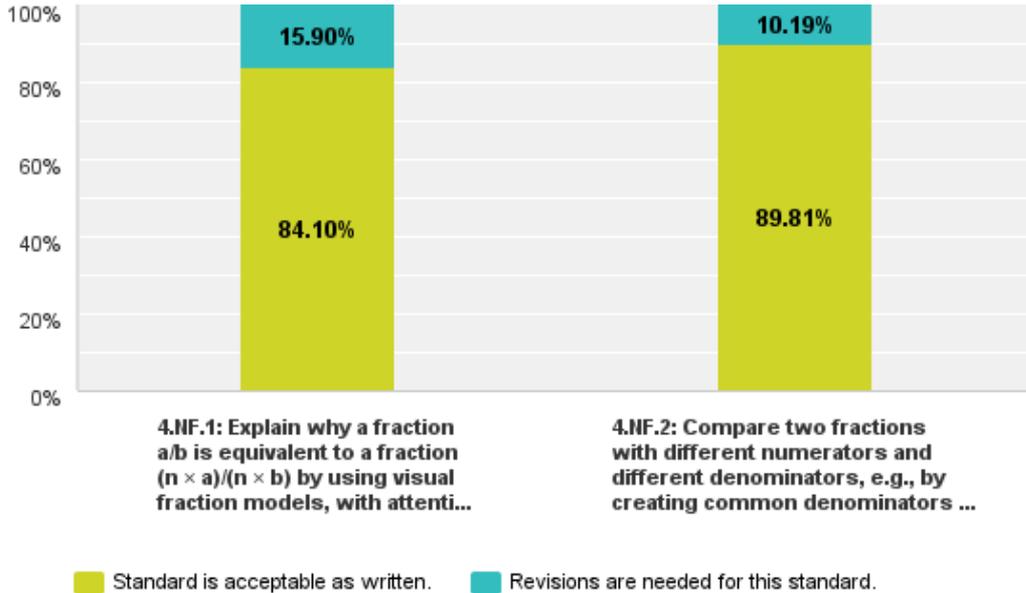
Answered: 335 Skipped: 18



Q6. Grade 4 || Extend understanding of fraction equivalence and ordering.

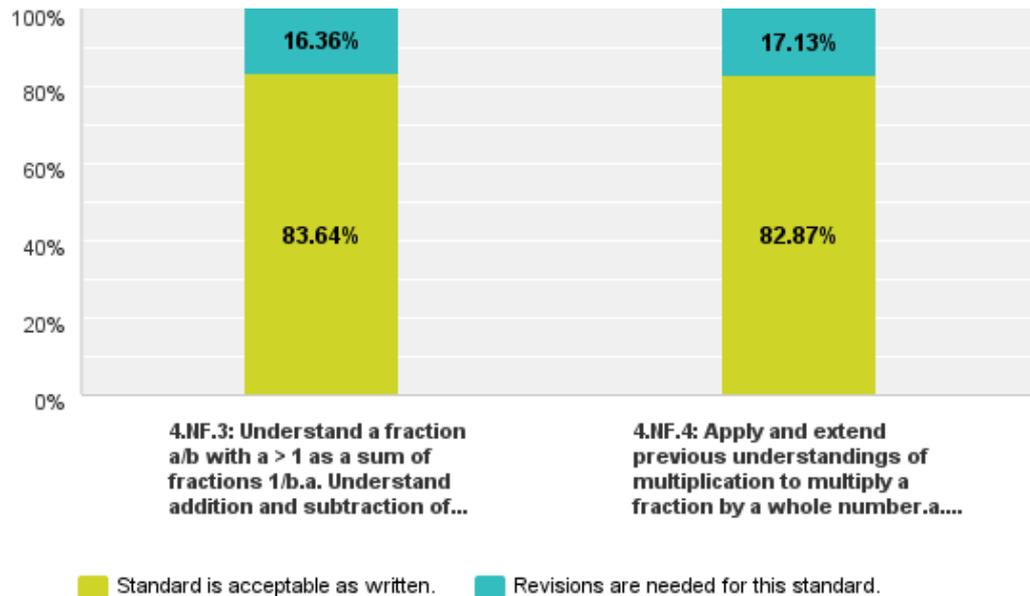
Note: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, & 100

Answered: 328 Skipped: 25



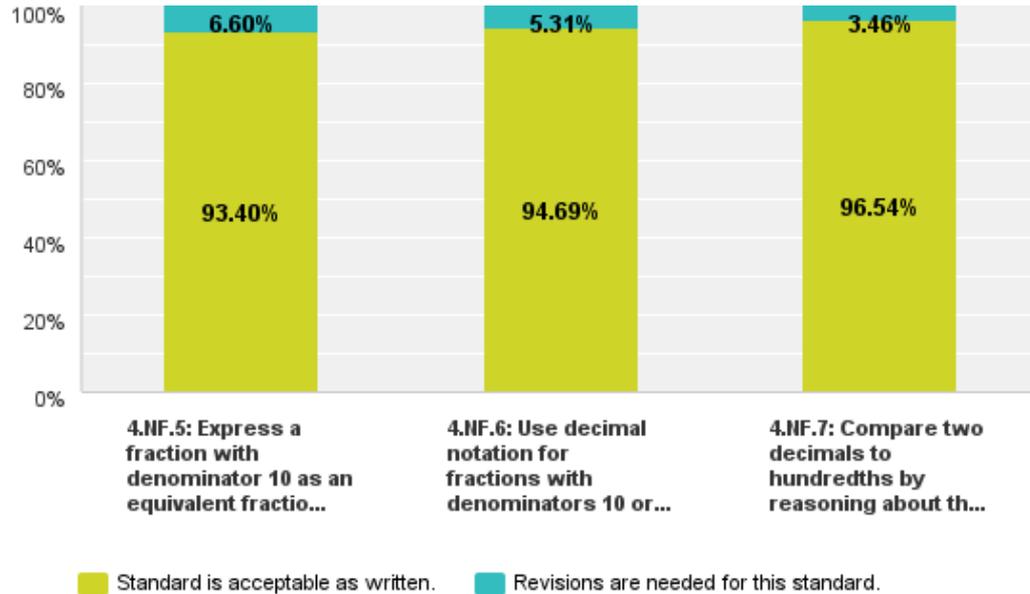
Q7: Grade 4 || Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Answered: 324 Skipped: 29



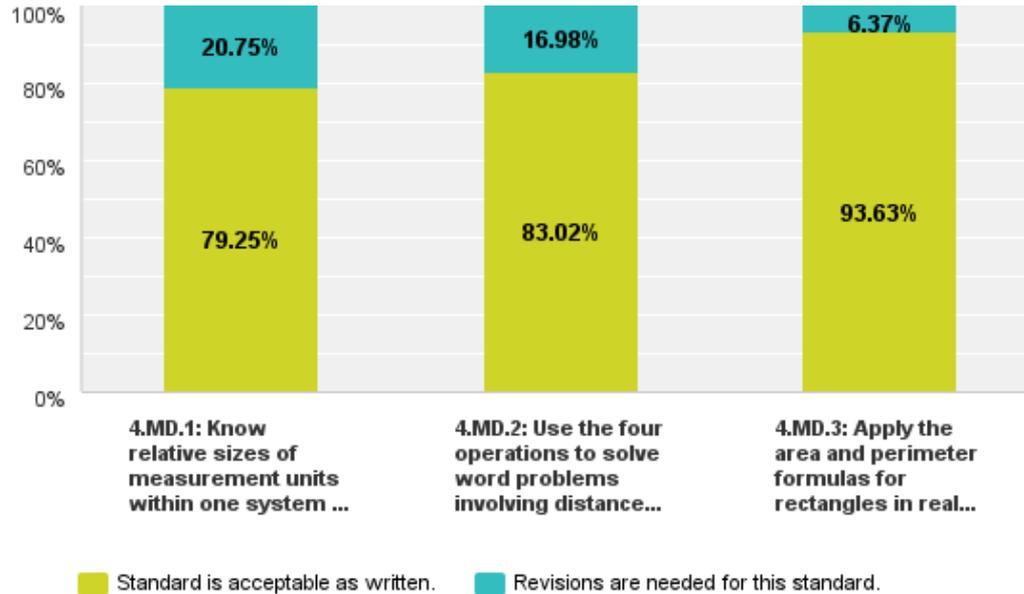
Q8: Grade 4 || Understand decimal notation for fractions, and compare decimal fractions.

Answered: 320 Skipped: 33



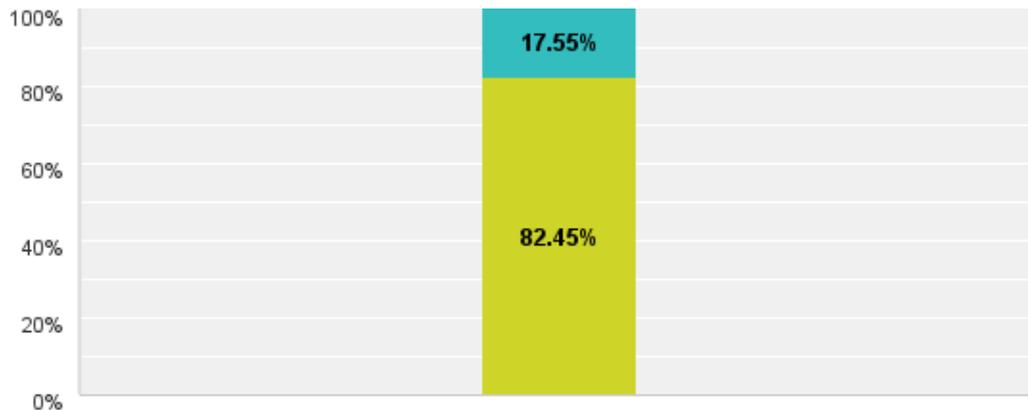
Q9: Grade 4 || Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Answered: 319 Skipped: 34



Q10: Grade 4 || Represent and interpret data.

Answered: 319 Skipped: 34

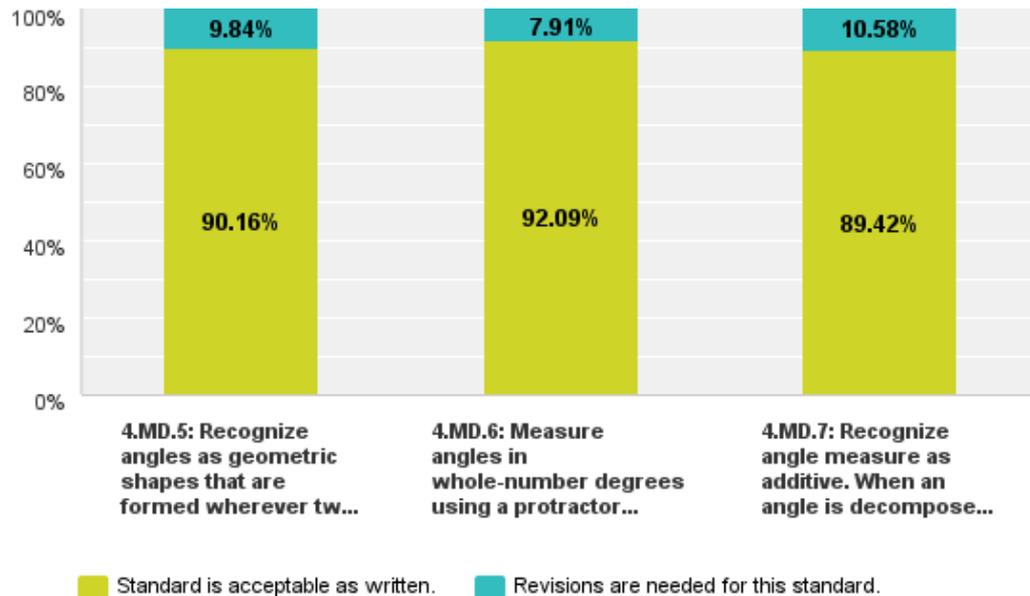


4.MD.4: Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a lin...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

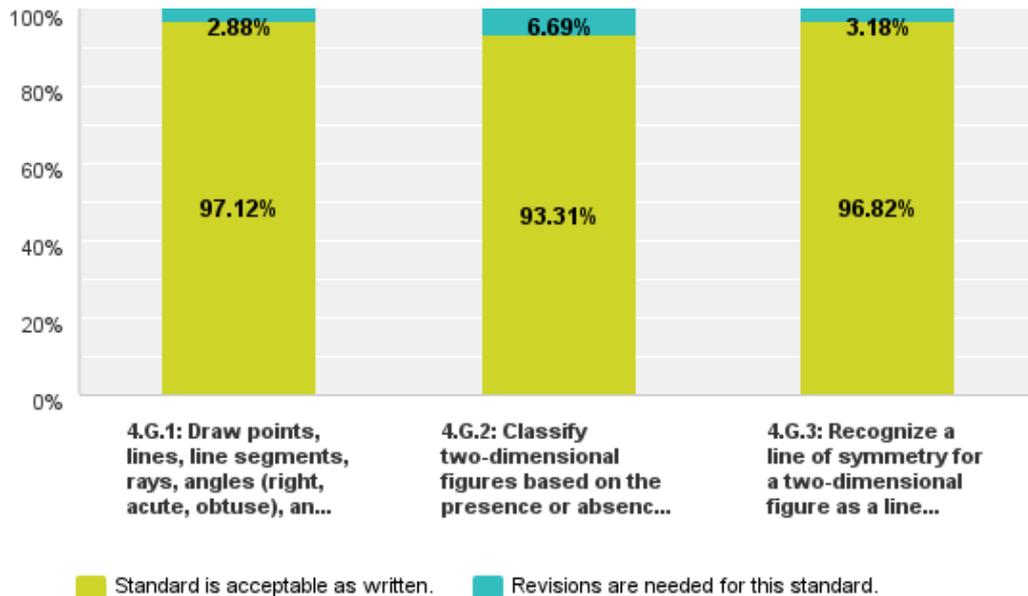
Q11: Grade 4 || Geometric measurement: understand concepts of angle and measure angles.

Answered: 316 Skipped: 37



Q12: Grade 4 || Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Answered: 315 Skipped: 38

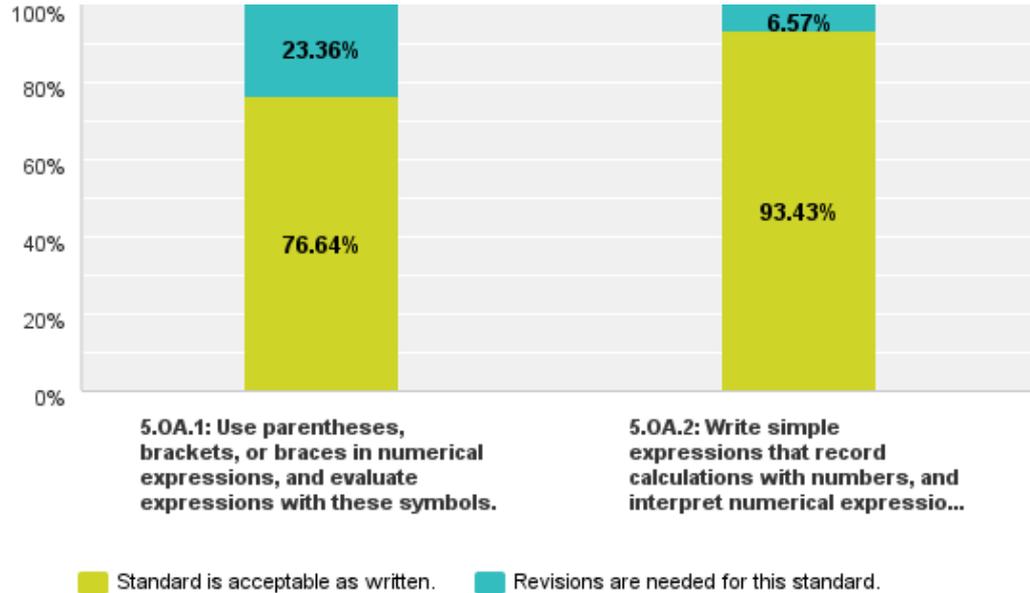


NCDPI Standards Review Math 5

Tuesday, January 13, 2015

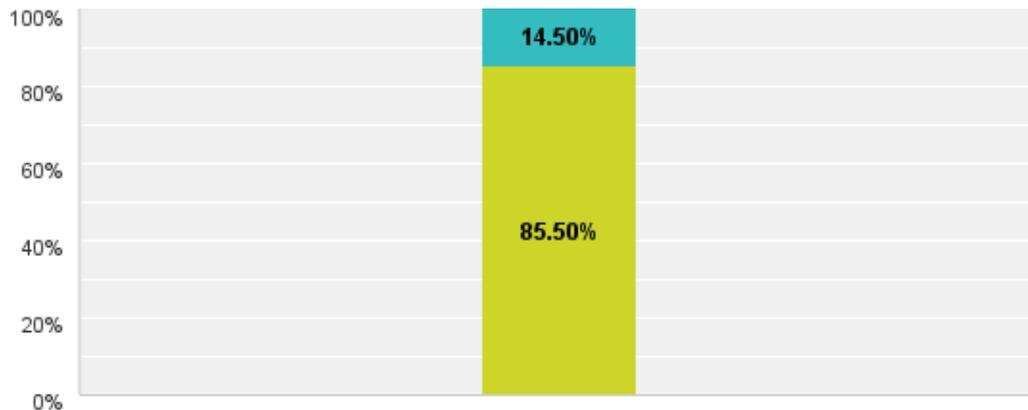
Q1: Grade 5 || Write and interpret numerical expressions.

Answered: 491 Skipped: 0



Q2: Grade 5 || Analyze patterns and relationships.

Answered: 462 Skipped: 29

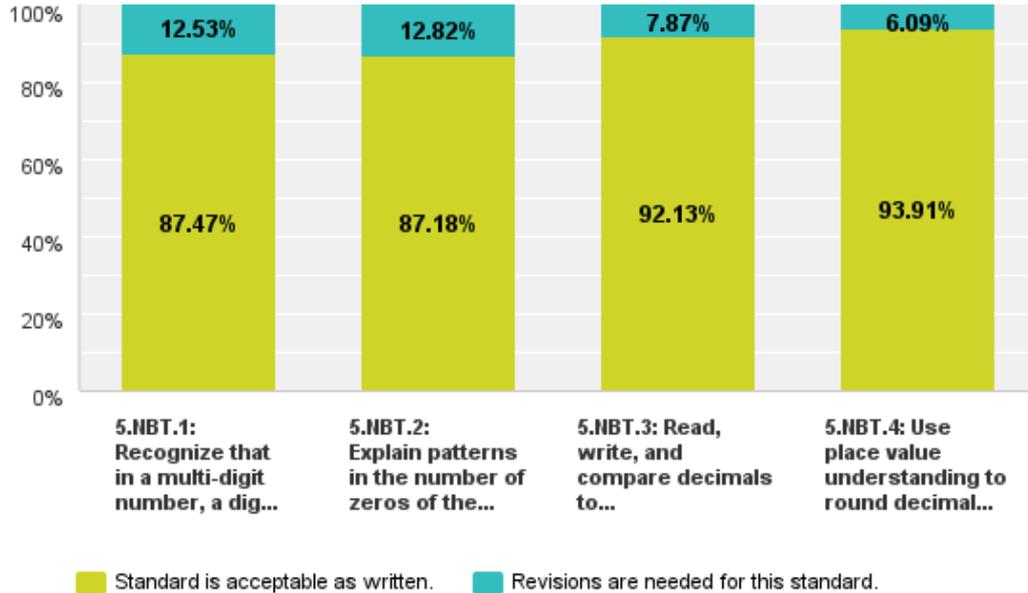


5.OA.3: Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q3: Grade 5 || Understand the place value system.

Answered: 436 Skipped: 55



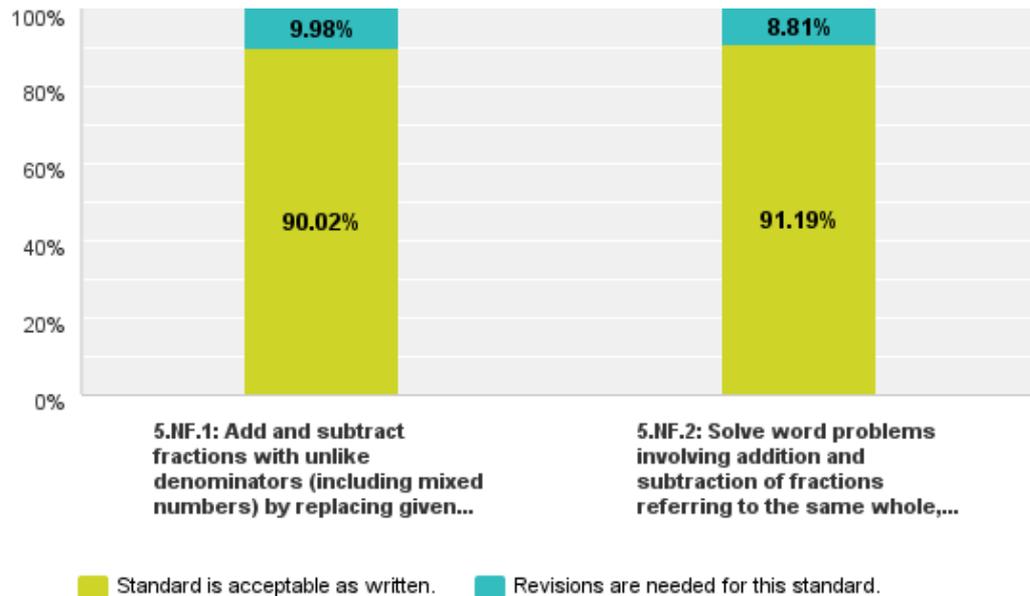
Q4: Grade 5 || Perform operations with multi-digit whole numbers and with decimals to hundredths.

Answered: 427 Skipped: 64



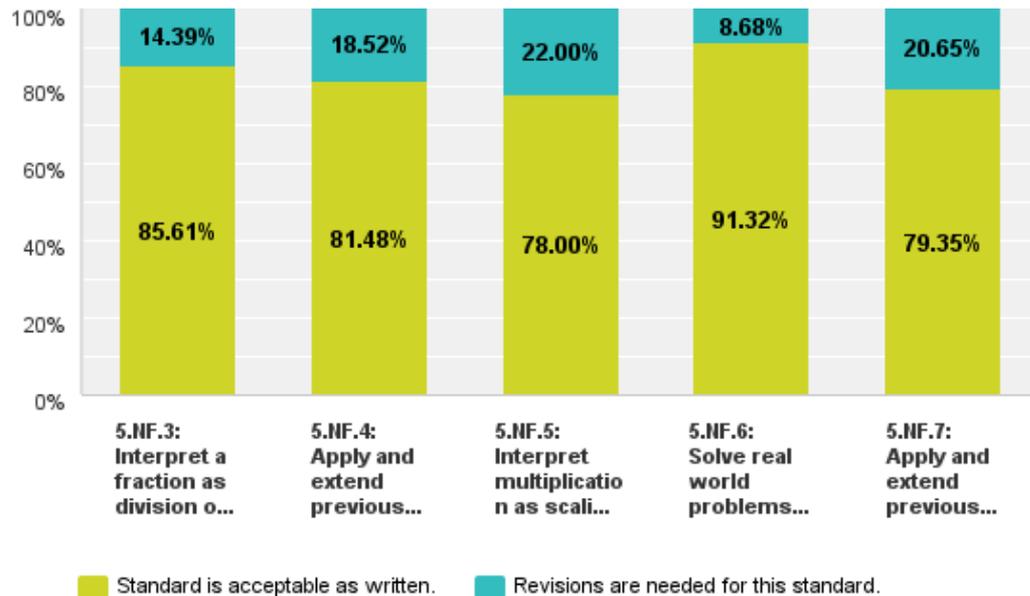
Q5: Grade 5 || Use equivalent fractions as a strategy to add and subtract fractions.

Answered: 422 Skipped: 69



Q6: Grade 5 || Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Answered: 414 Skipped: 77



Q7: Grade 5 || Convert like measurement units within a given measurement system.

Answered: 414 Skipped: 77

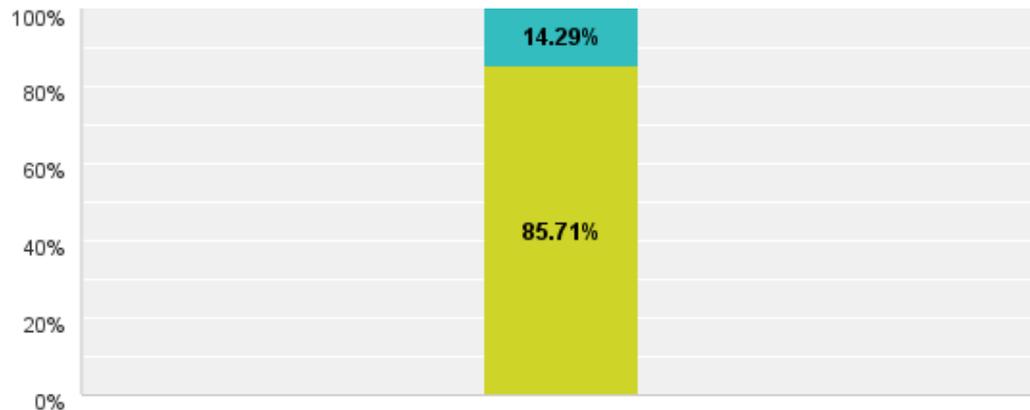


5.MD.1: Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q8: Grade 5 || Represent and interpret data.

Answered: 413 Skipped: 78

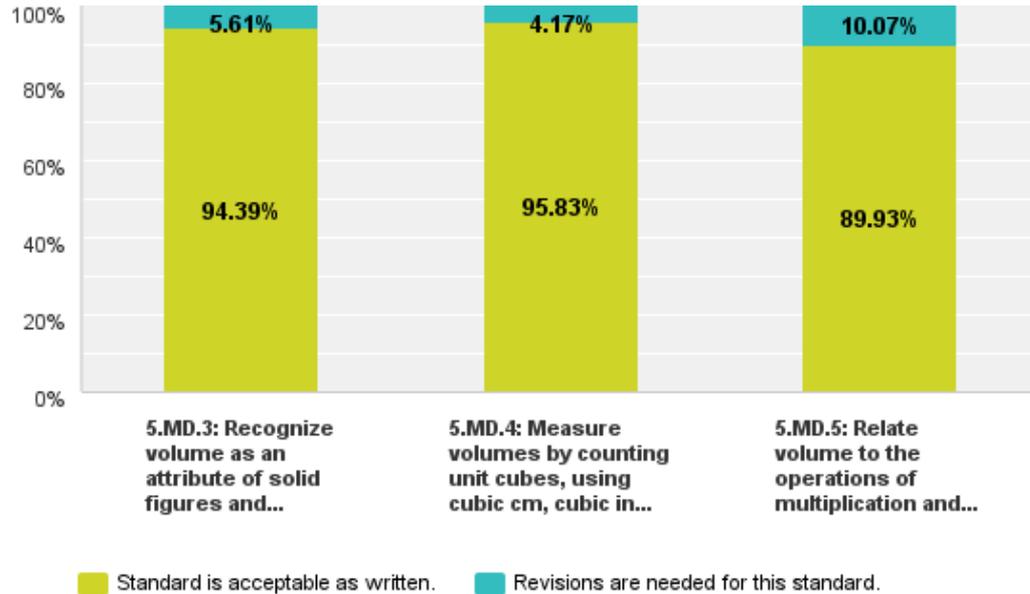


5.MD.2: Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

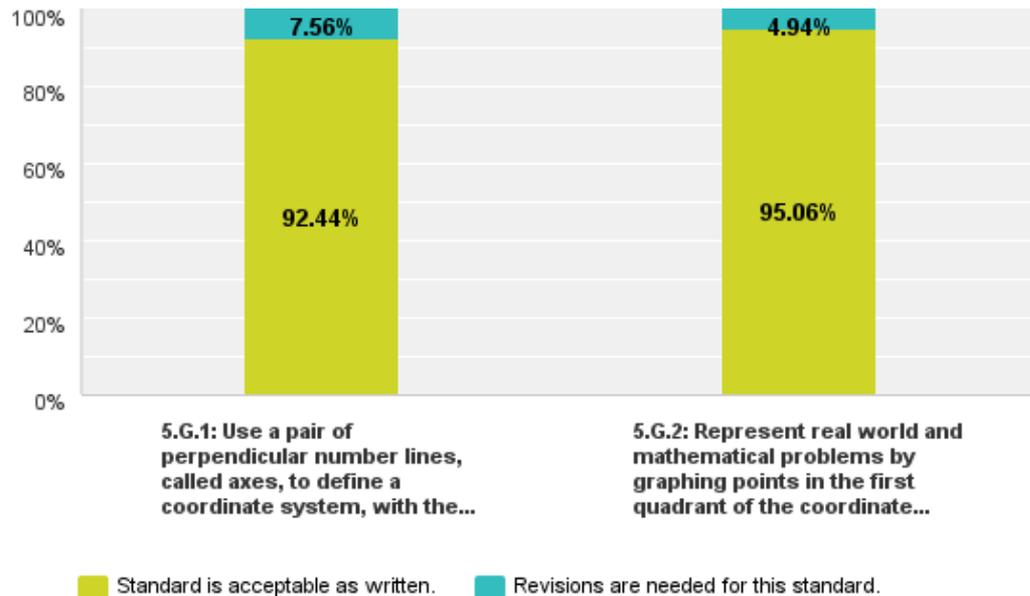
Q9: Grade 5 || Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Answered: 411 Skipped: 80



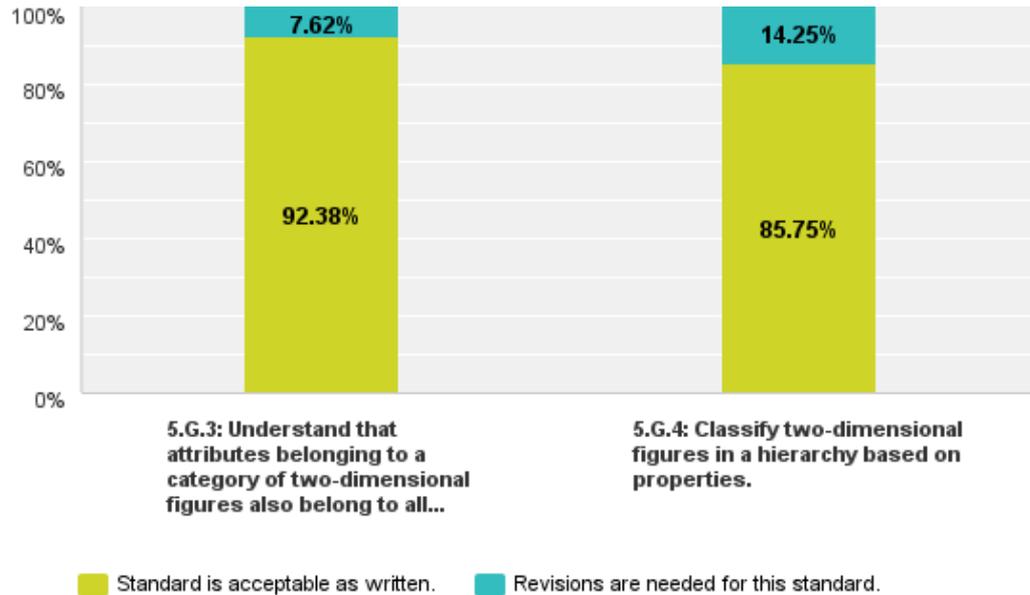
Q10: Grade 5 || Graph points on the coordinate plane to solve real-world and mathematical problems.

Answered: 410 Skipped: 81



Q11: Grade 5 || Classify two-dimensional figures into categories based on their properties.

Answered: 408 Skipped: 83

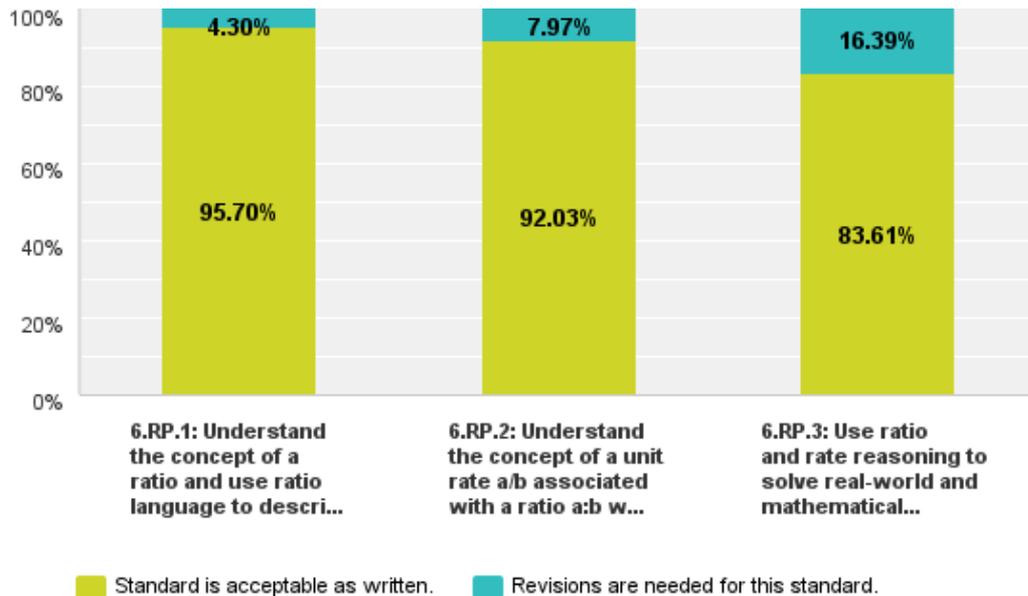


NCDPI Standards Review Math 6

Tuesday, January 13, 2015

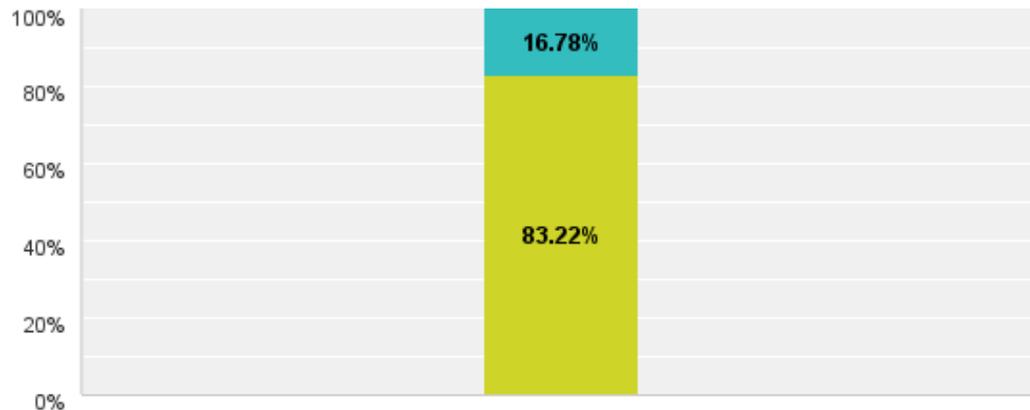
Q1: Grade 6 || Understand ratio concepts and use ratio reasoning to solve problems.

Answered: 303 Skipped: 0



Q2: Grade 6 || Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

Answered: 292 Skipped: 11



6.NS.1: Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story contex...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

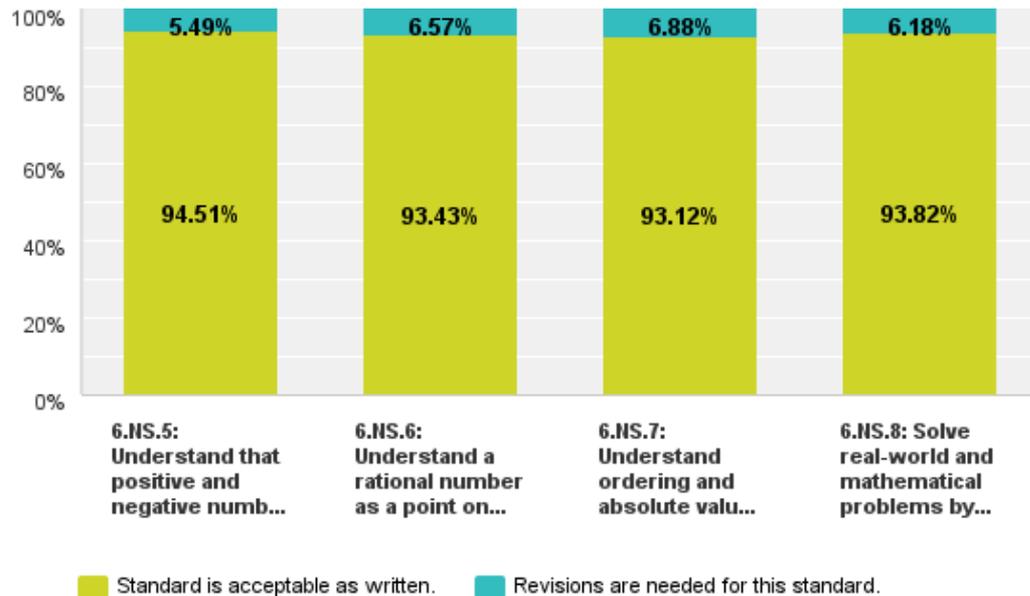
Q3: Grade 6 || Compute fluently with multi-digit numbers and find common factors and multiples.

Answered: 287 Skipped: 16



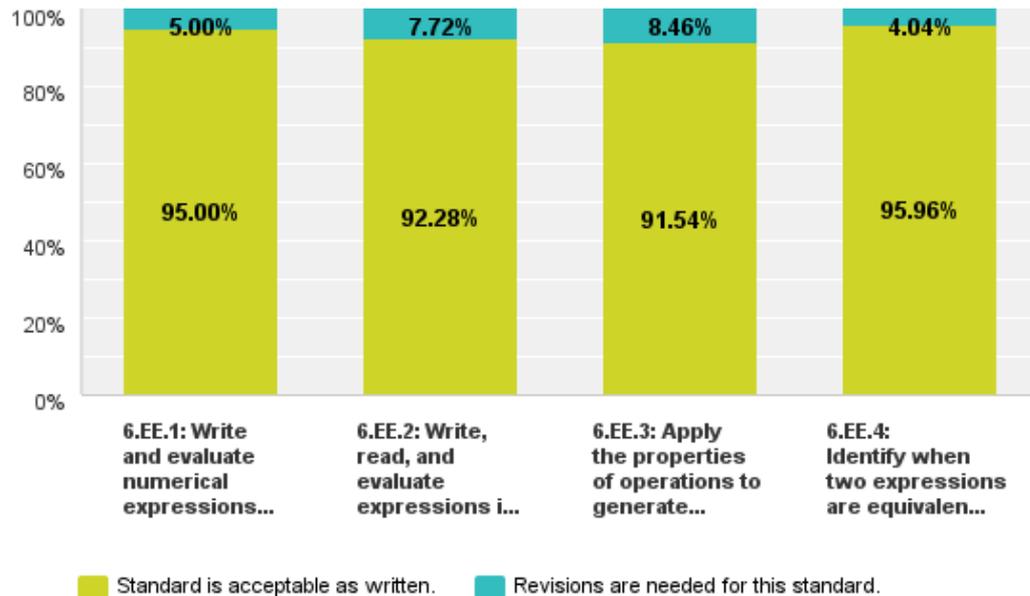
Q4: Grade 6 || Apply and extend previous understandings of numbers to the system of rational numbers.

Answered: 277 Skipped: 26



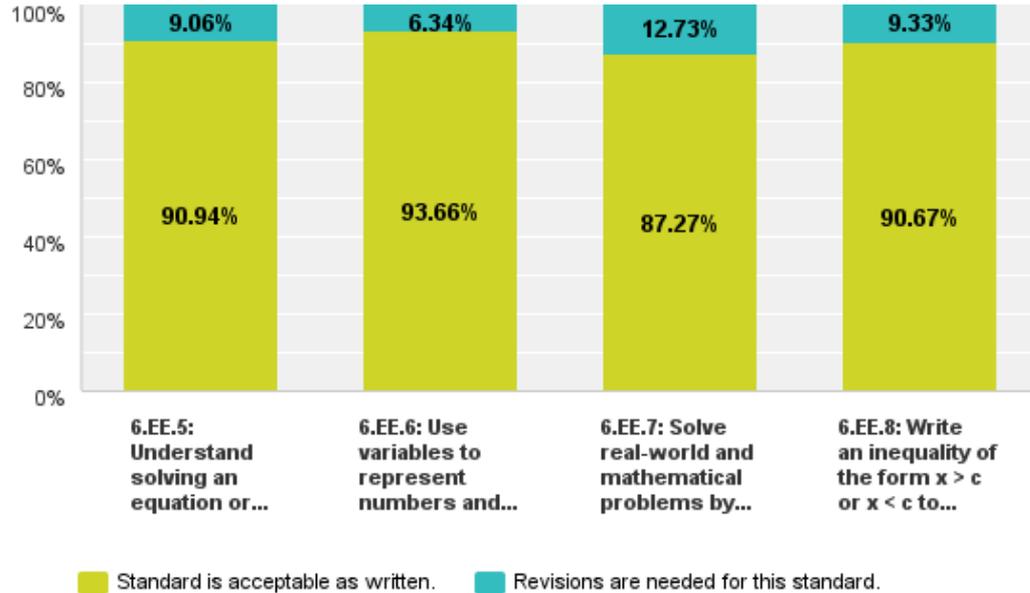
Q5: Grade 6 || Apply and extend previous understandings of arithmetic to algebraic expressions.

Answered: 273 Skipped: 30



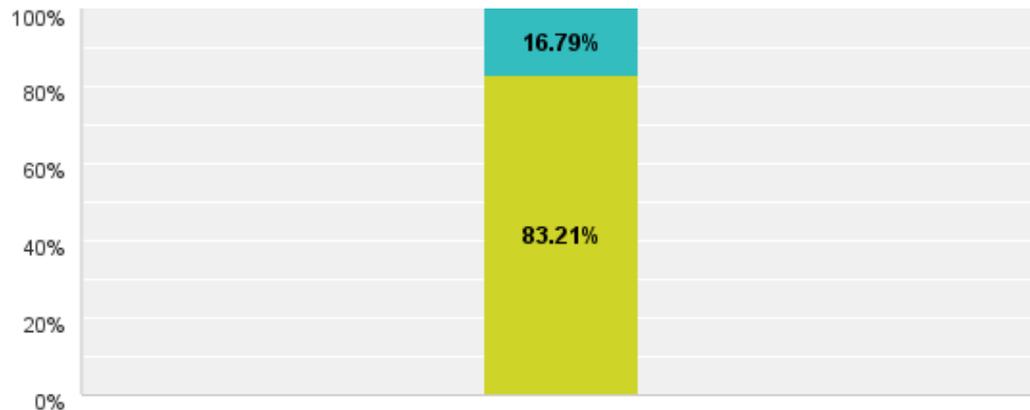
Q6: Grade 6 || Reason about and solve one-variable equations and inequalities.

Answered: 268 Skipped: 35



Q7: Grade 6 || Represent and analyze quantitative relationships between dependent and independent variables.

Answered: 268 Skipped: 35

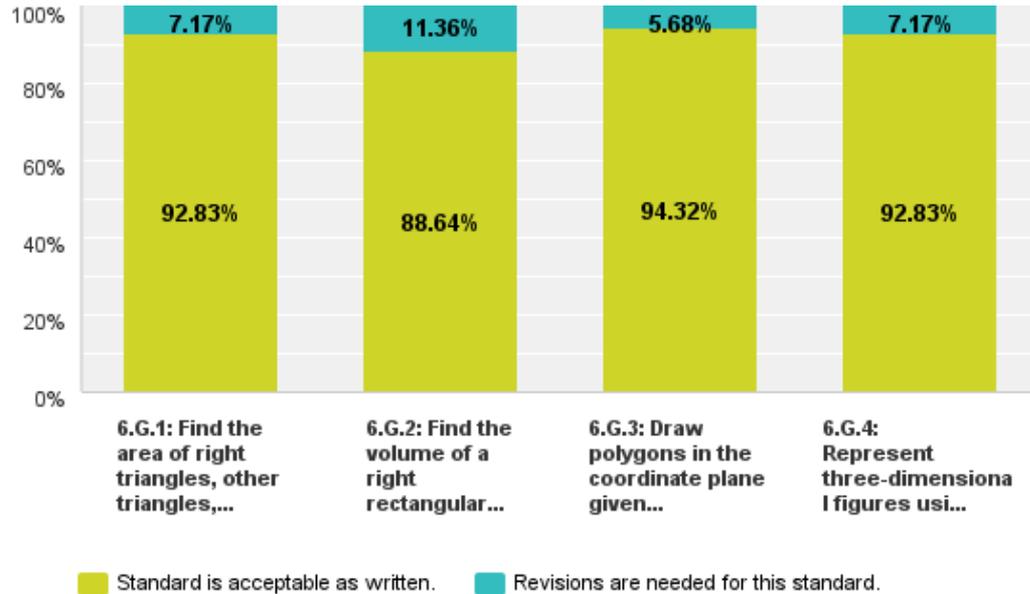


6.EE.9: Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought ...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q8: Grade 6 || Solve real-world and mathematical problems involving area, surface area, and volume.

Answered: 265 Skipped: 38



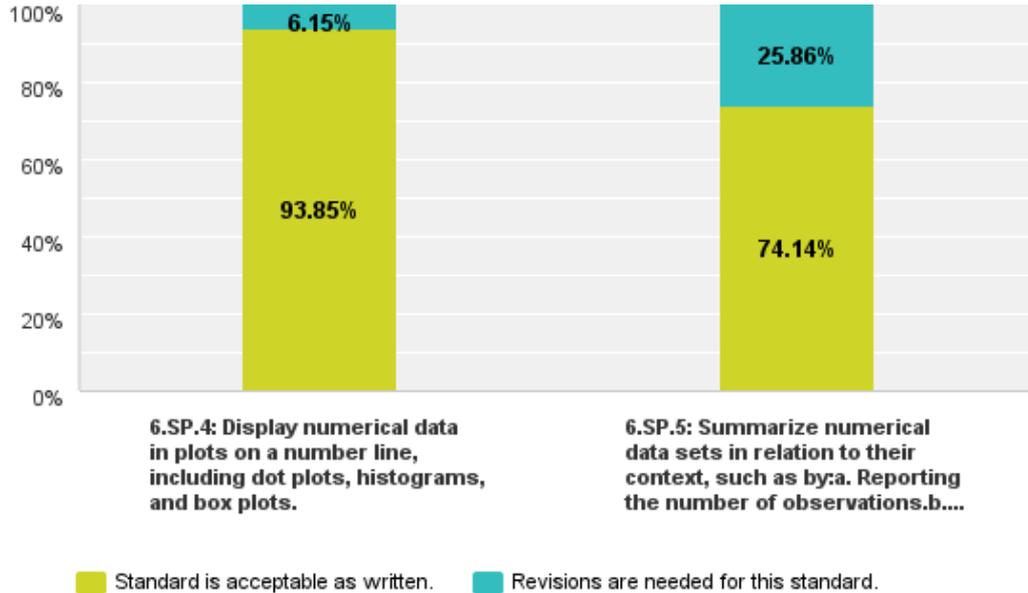
Q9: Grade 6 || Develop understanding of statistical variability.

Answered: 265 Skipped: 38



Q10: Grade 6 || Summarize and describe distributions.

Answered: 265 Skipped: 38



NCDPI Standards Review Math 7

Tuesday, January 13, 2015

Q1: Grade 7 || Analyze proportional relationships and use them to solve real-world and mathematical problems.

Answered: 249 Skipped: 0



Q2: Grade 7 || Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Answered: 240 Skipped: 9



Q3: Grade 7 || Use properties of operations to generate equivalent expressions.

Answered: 237 Skipped: 12



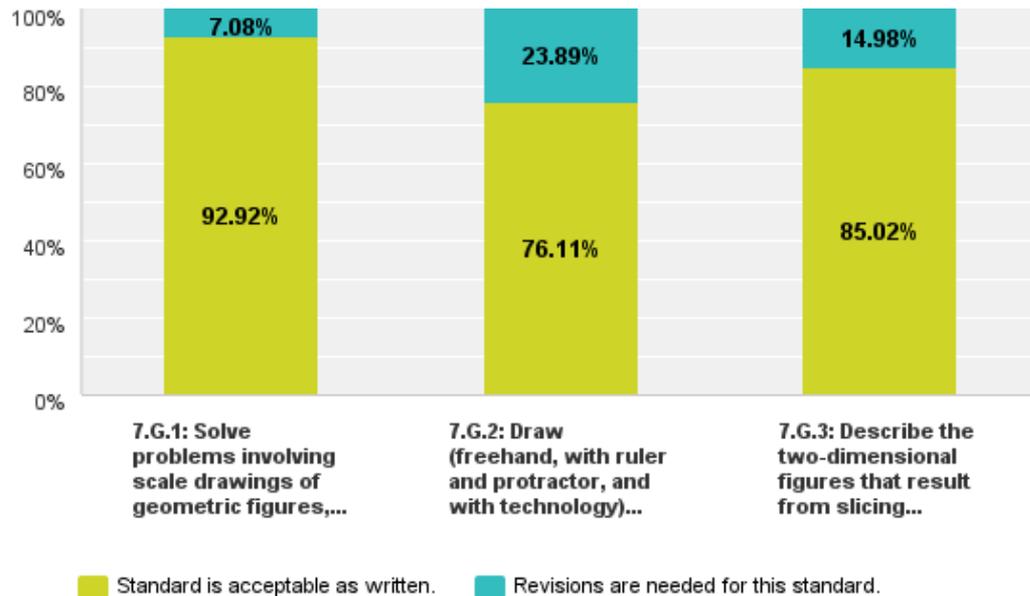
Q4: Grade 7 || Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Answered: 231 Skipped: 18



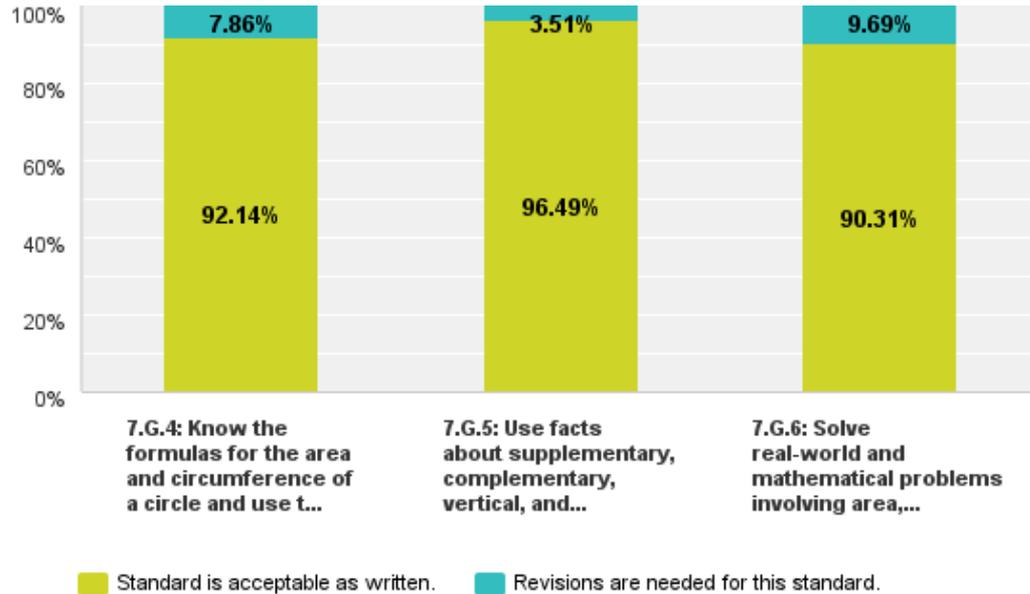
Q5: Grade 7 || Draw construct, and describe geometrical figures and describe the relationships between them.

Answered: 229 Skipped: 20



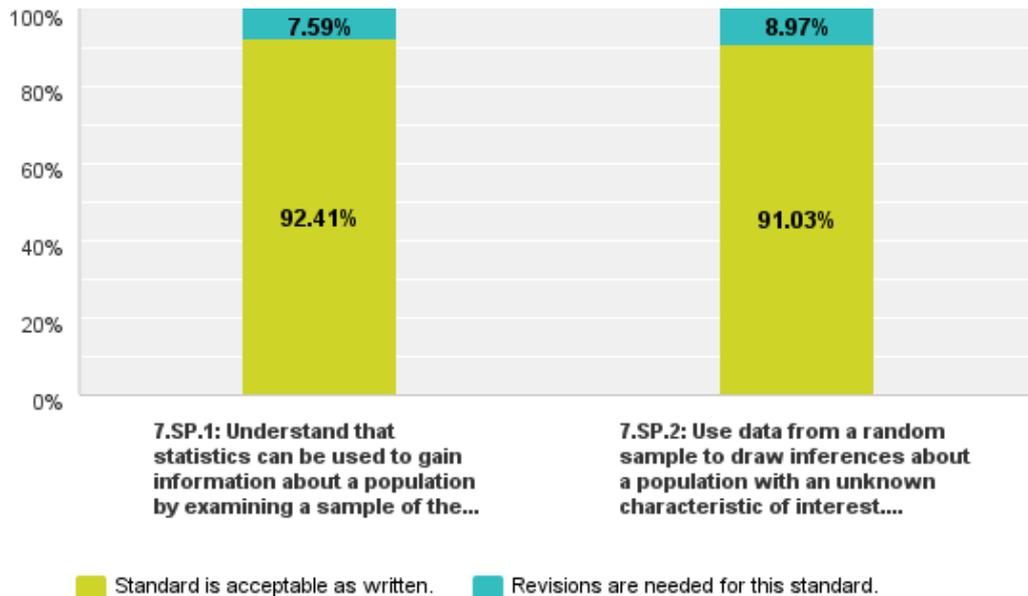
Q6: Grade 7 || Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Answered: 229 Skipped: 20



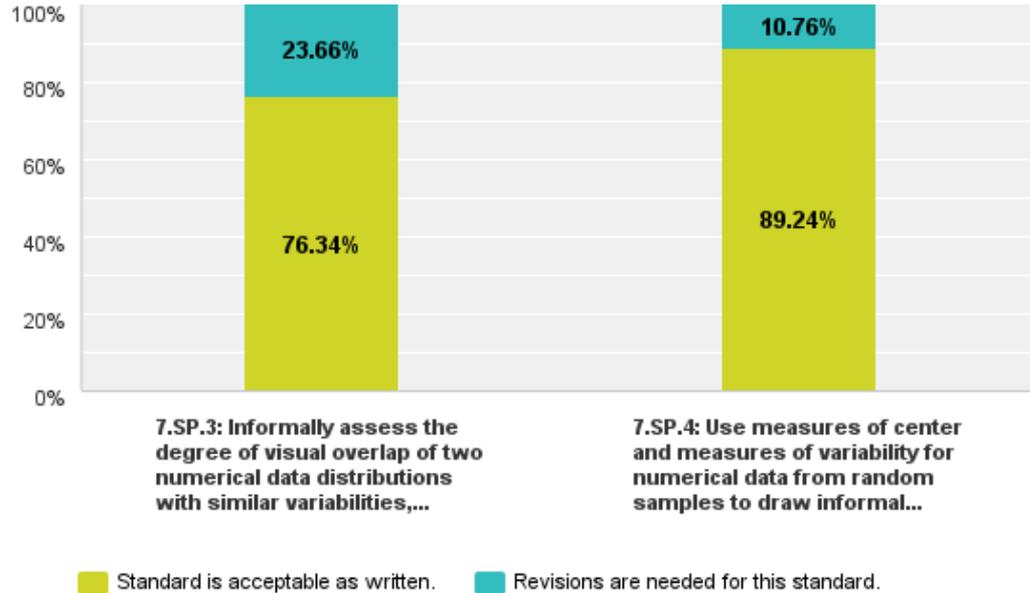
Q7: Grade 7 || Use random sampling to draw inferences about a population.

Answered: 225 Skipped: 24



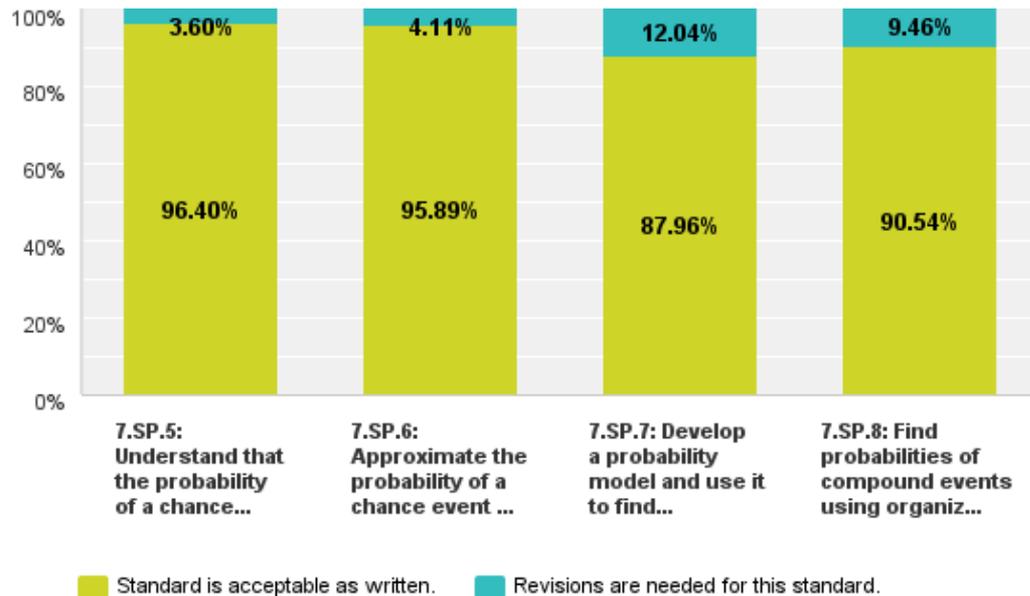
Q8: Grade 7 || Draw informal comparative inferences about two populations.

Answered: 224 Skipped: 25



Q9: Grade 7 || Investigate chance processes and develop, use, and evaluate probability models.

Answered: 223 Skipped: 26

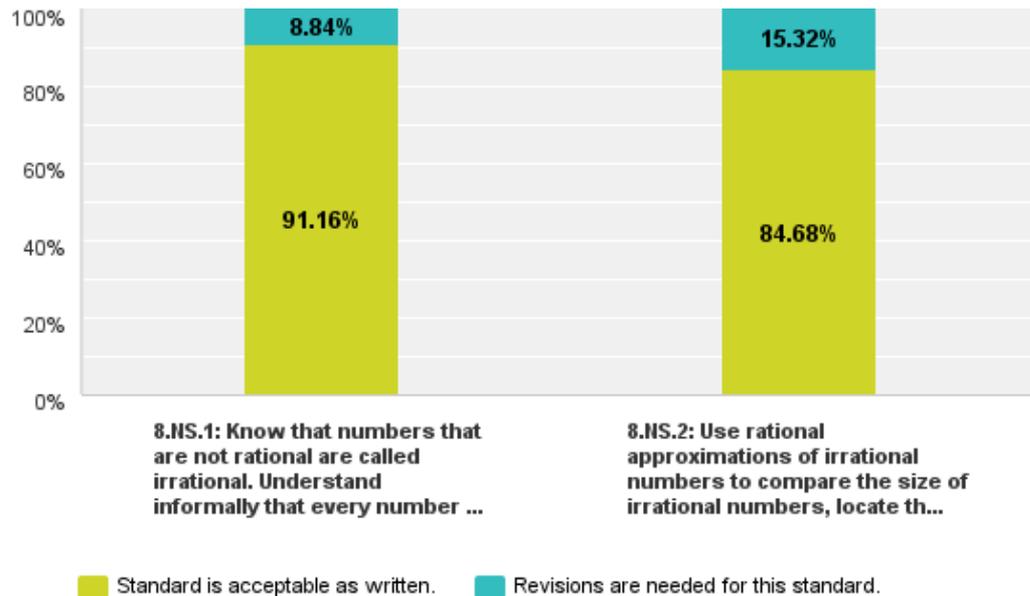


NCDPI Standards Review Math 8

Tuesday, January 13, 2015

Q1: Grade 8 || Know that there are numbers that are not rational, and approximate them by rational numbers.

Answered: 249 Skipped: 0



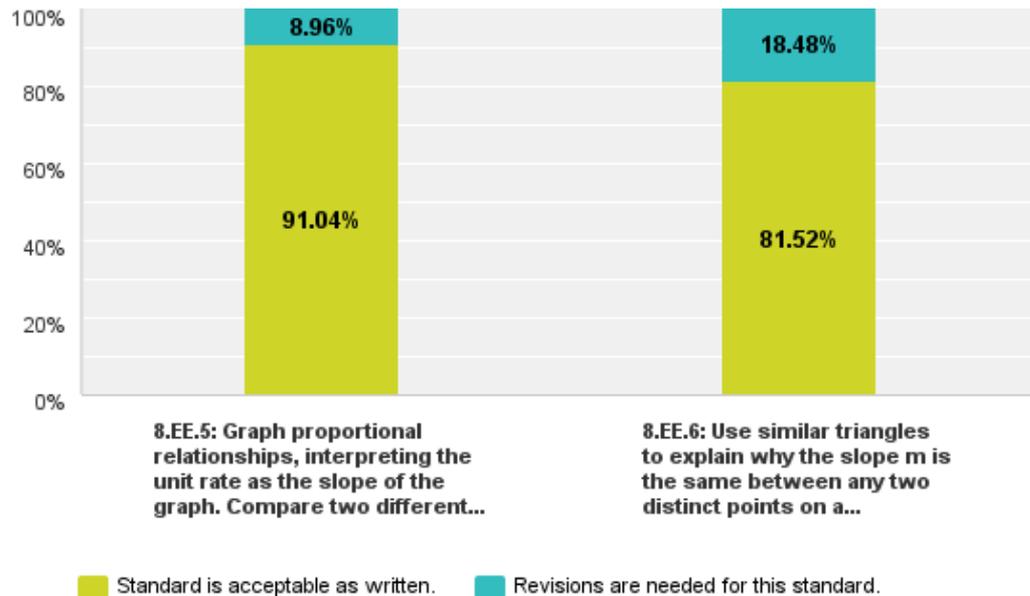
Q2: Grade 8 || Work with radicals and integer exponents.

Answered: 224 Skipped: 25



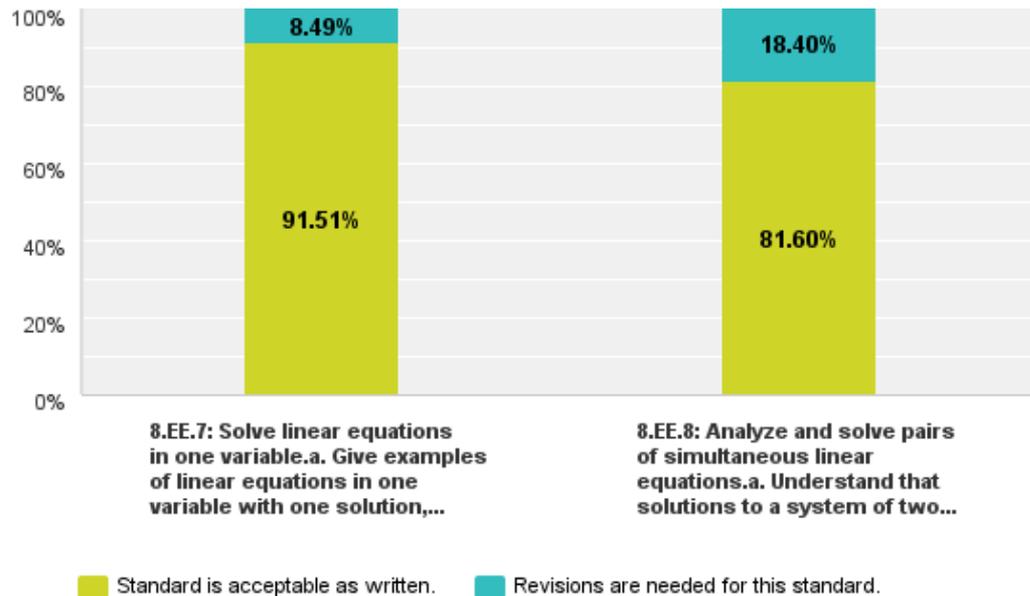
Q3: Grade 8 || Understand the connections between proportional relationships, lines, and linear equations.

Answered: 214 Skipped: 35



Q4: Grade 8 || Analyze and solve linear equations and pairs of simultaneous linear equations.

Answered: 213 Skipped: 36



Q5: Grade 8 || Define, evaluate, and compare functions.

Answered: 210 Skipped: 39



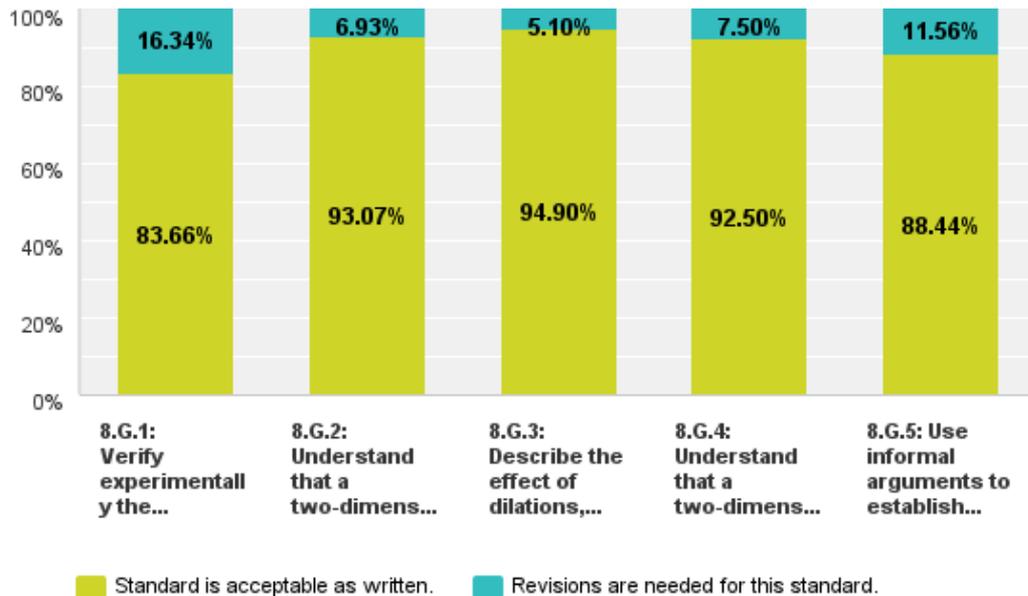
Q6: Grade 8 || Use functions to model relationships between quantities.

Answered: 206 Skipped: 43



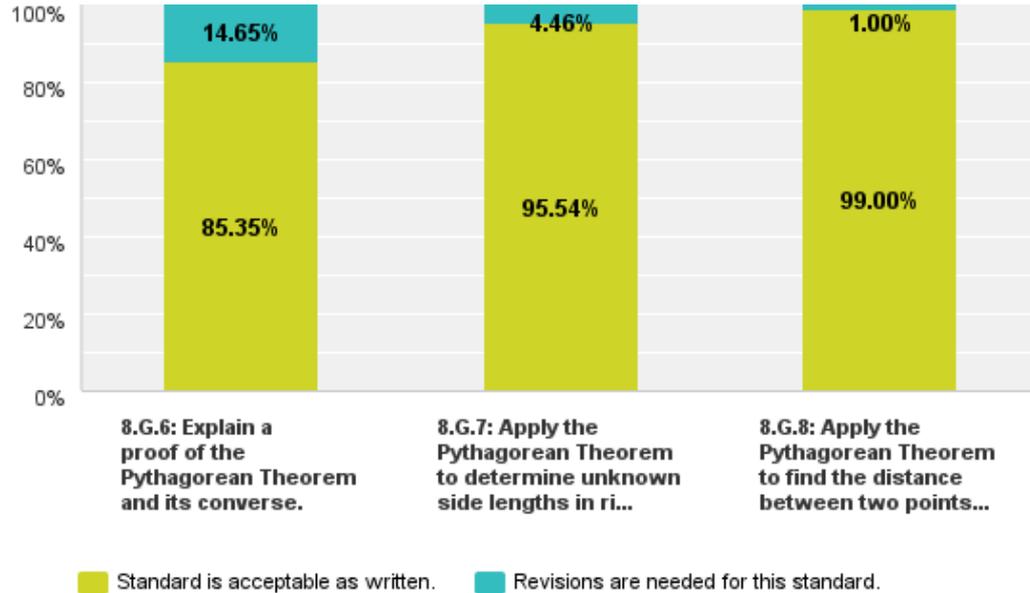
Q7: Grade 8 || Understand congruence and similarity using physical models, transparencies, or geometry software.

Answered: 202 Skipped: 47



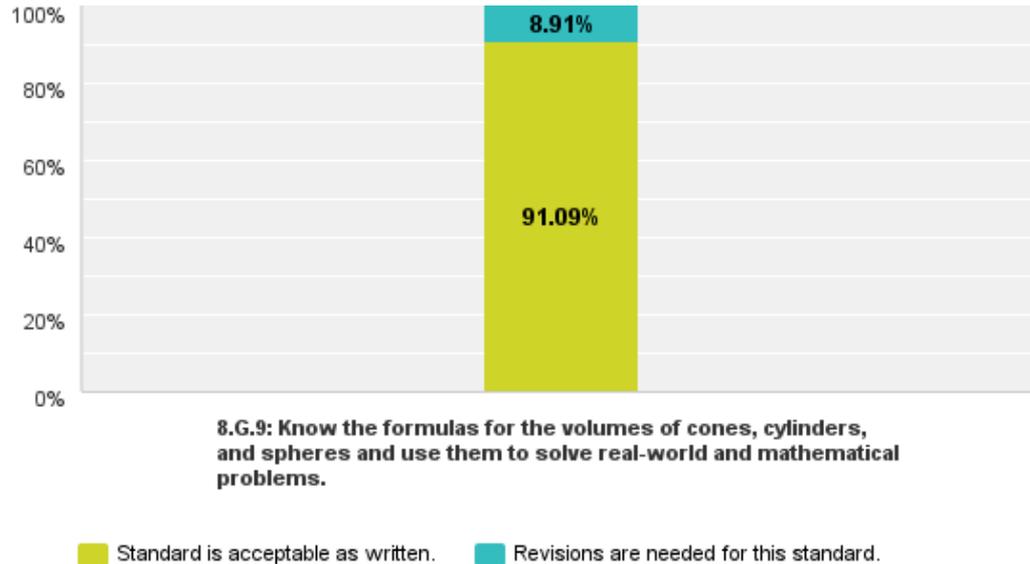
Q8: Grade 8 || Understand and apply the Pythagorean Theorem.

Answered: 202 Skipped: 47



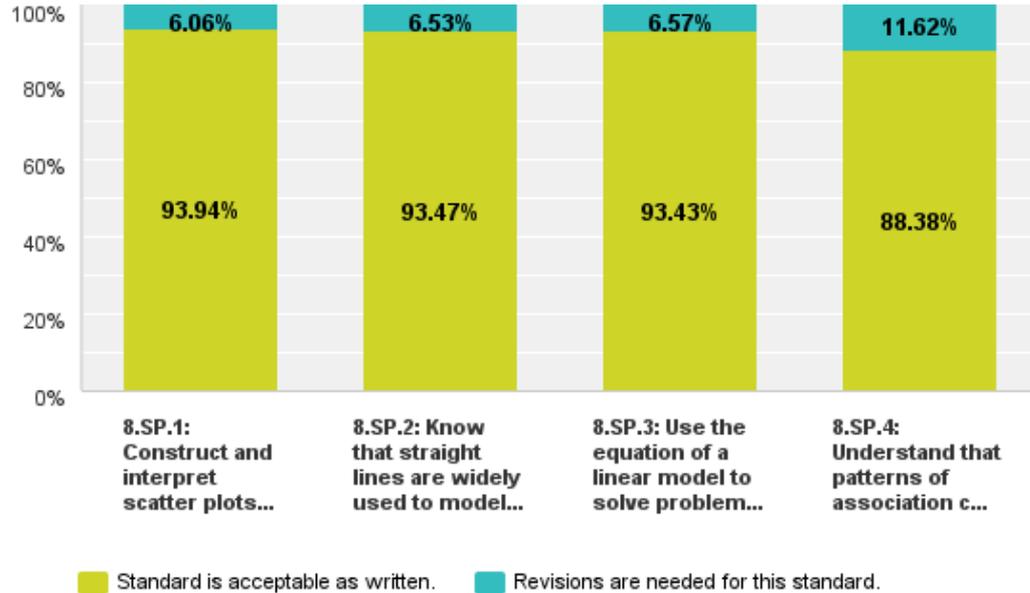
Q9: Grade 8 || Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

Answered: 202 Skipped: 47



Q10: Grade 8 || Investigate patterns of association in bivariate data.

Answered: 199 Skipped: 50

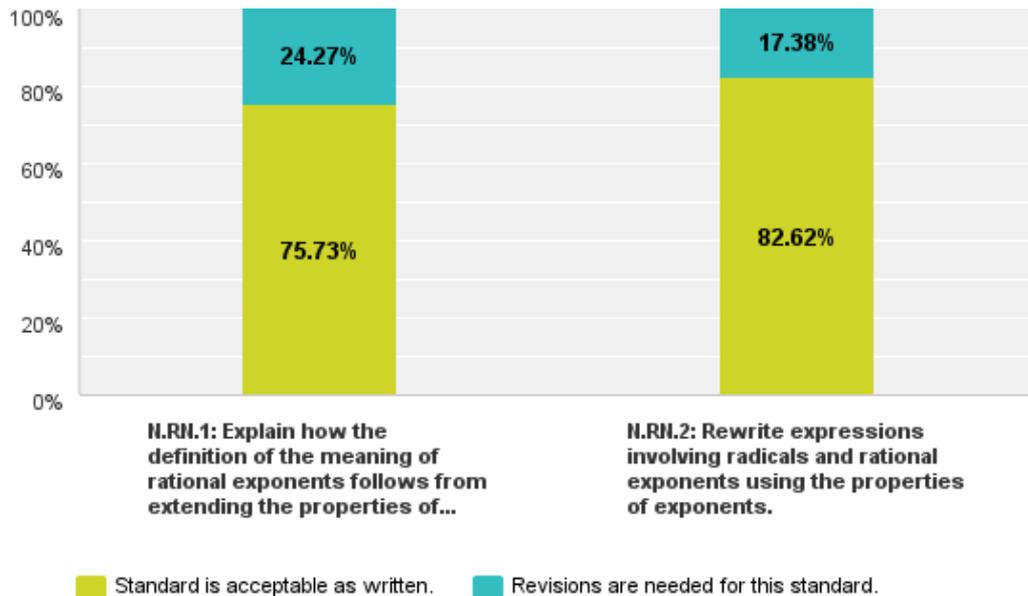


NCDPI Standards Review Math Math I

Tuesday, January 13, 2015

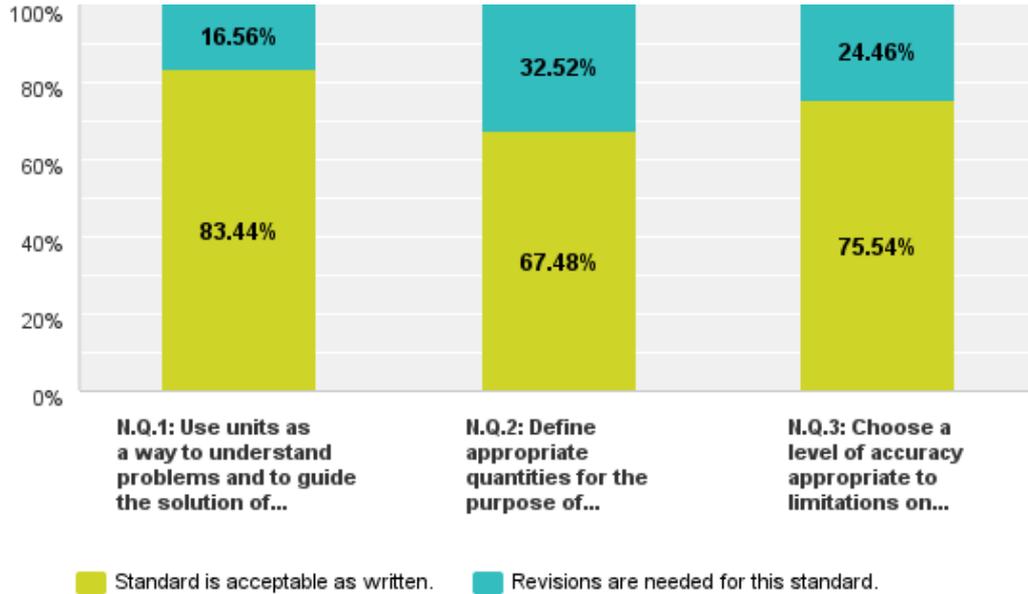
Q1: Math I || Extend the properties of exponents to rational exponents.

Answered: 382 Skipped: 0



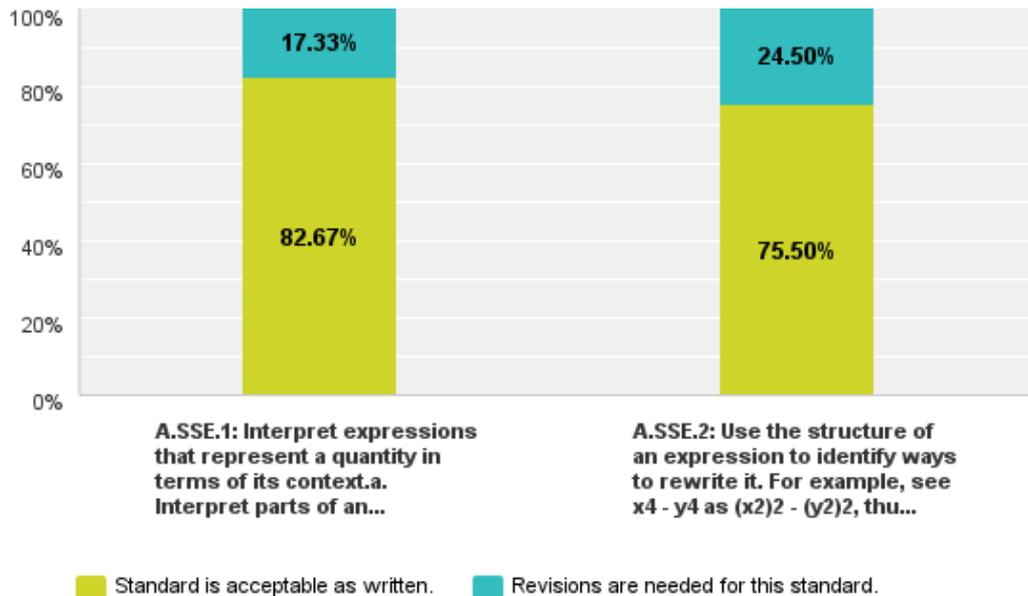
Q2: Math I || Reason quantitatively and use units to solve problems.

Answered: 329 Skipped: 53



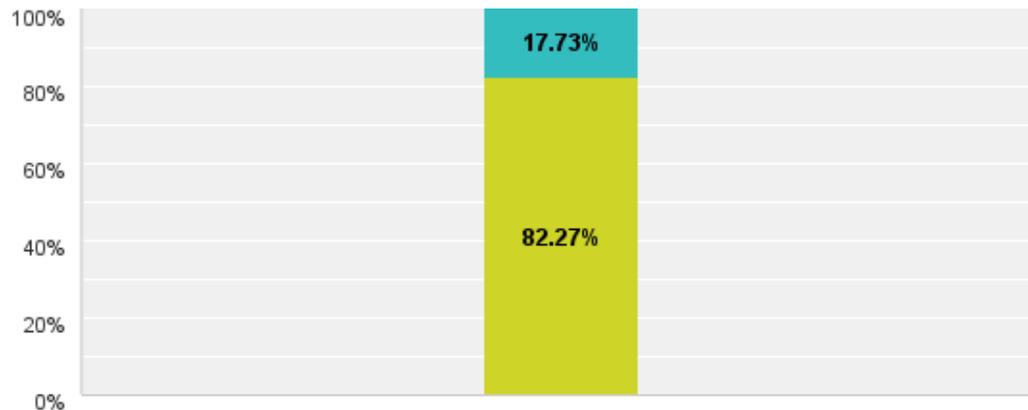
Q3: Math I || Interpret the structure of expressions.

Answered: 304 Skipped: 78



Q4: Math I || Write expressions in equivalent forms to solve problems.

Answered: 299 Skipped: 83

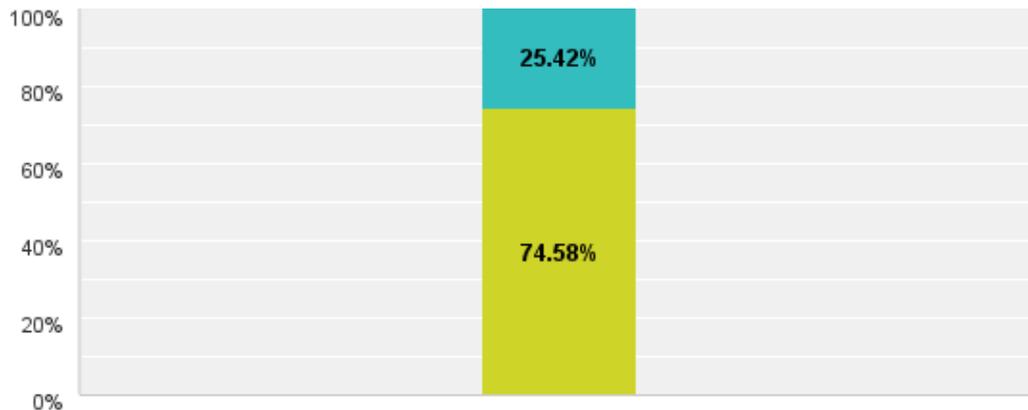


A.SSE.3: Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.a. Factor a quadratic expression to reveal the zeros of the function it defines.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q5: Math I || Perform arithmetic operations on polynomials.

Answered: 299 Skipped: 83

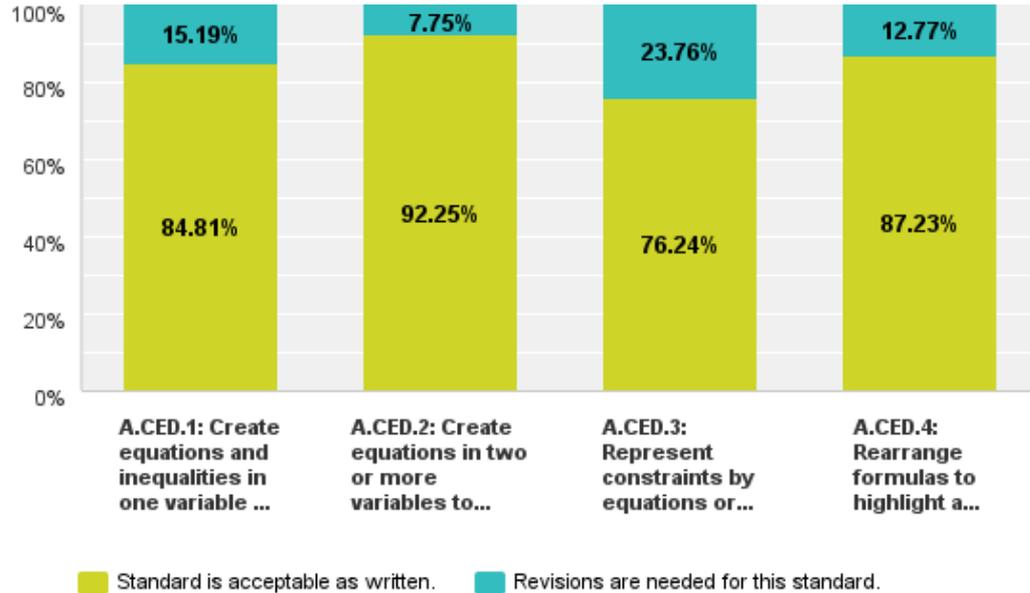


A.APR.1: Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

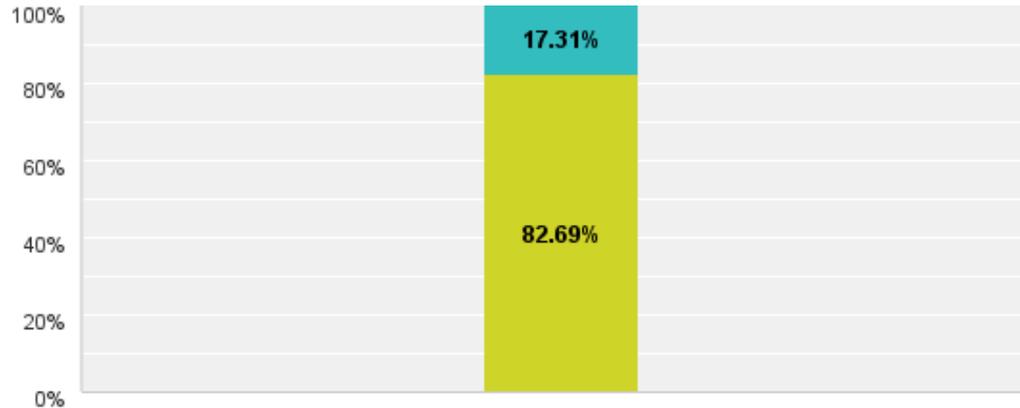
Q6: Math I || Create equations that describe numbers or relationships.

Answered: 286 Skipped: 96



Q7: Math I || Understand solving equations as a process of reasoning and explain the reasoning.

Answered: 283 Skipped: 99

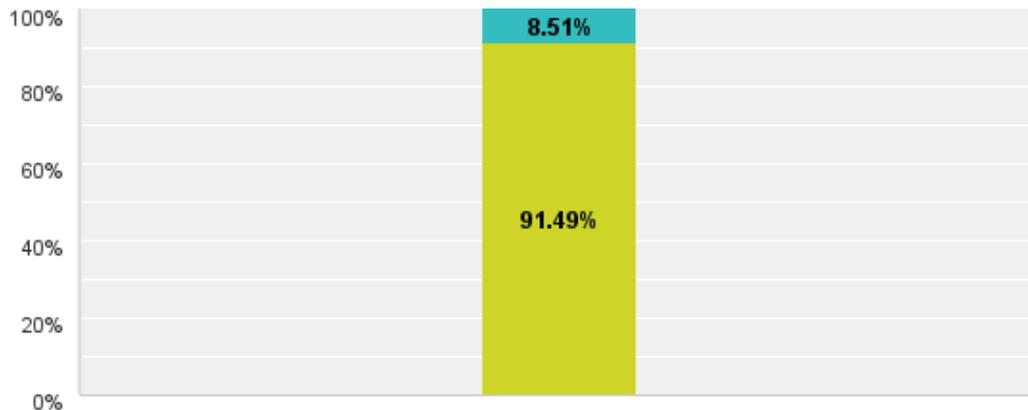


A.REI.1: Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q8: Math I || Solve equations and inequalities in one variable.

Answered: 282 Skipped: 100

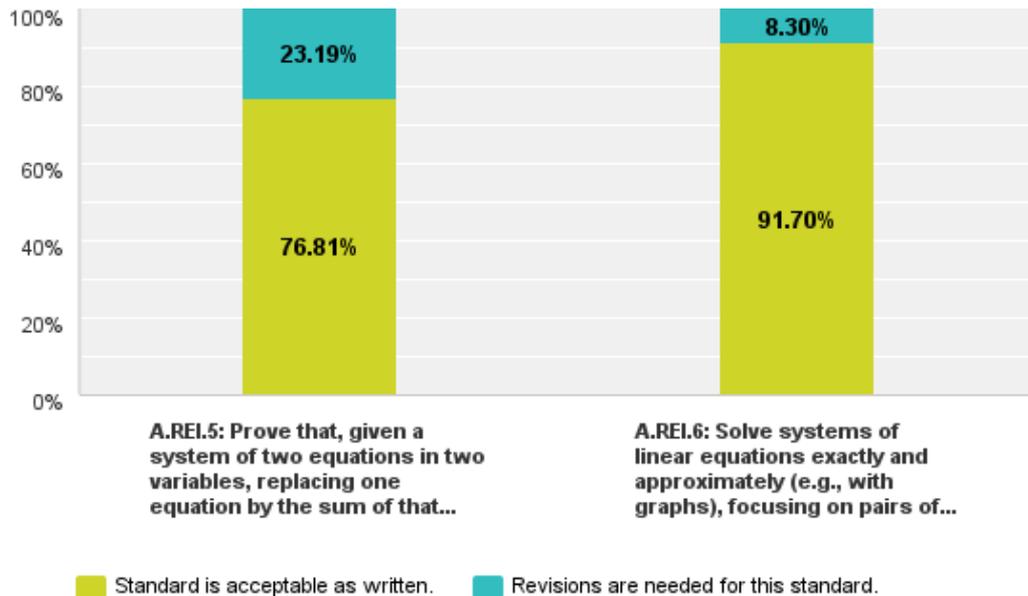


A.REI.3: Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

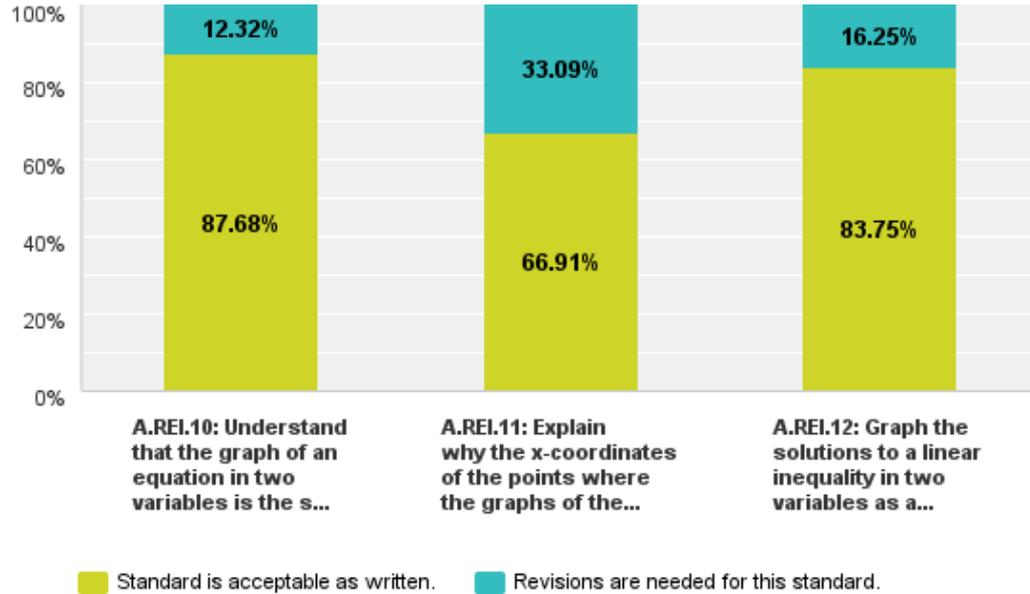
Q9: Math I || Solve systems of equations.

Answered: 280 Skipped: 102



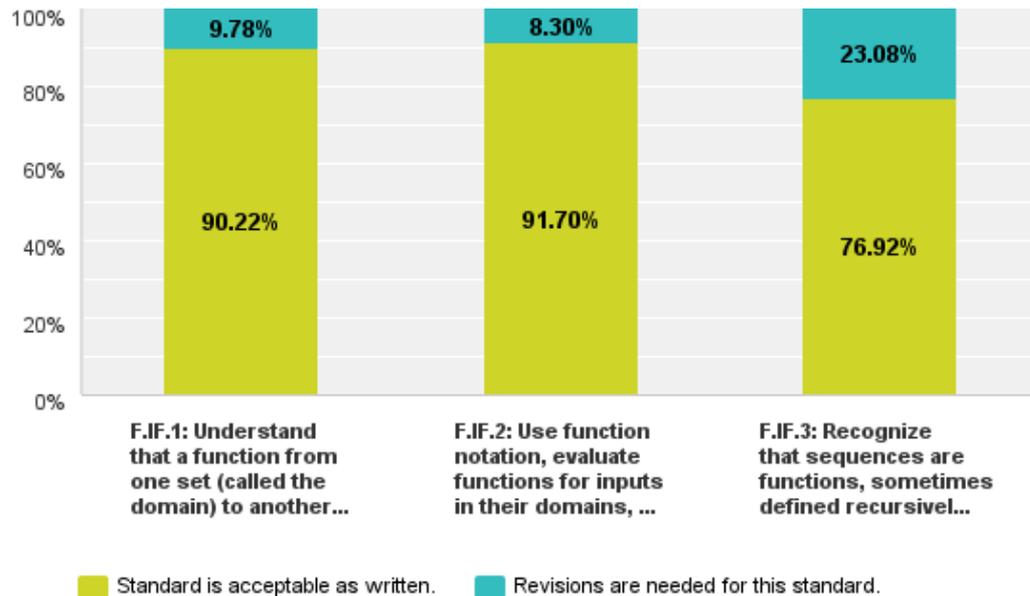
Q10: Math I || Represent and solve equations and inequalities graphically.

Answered: 280 Skipped: 102



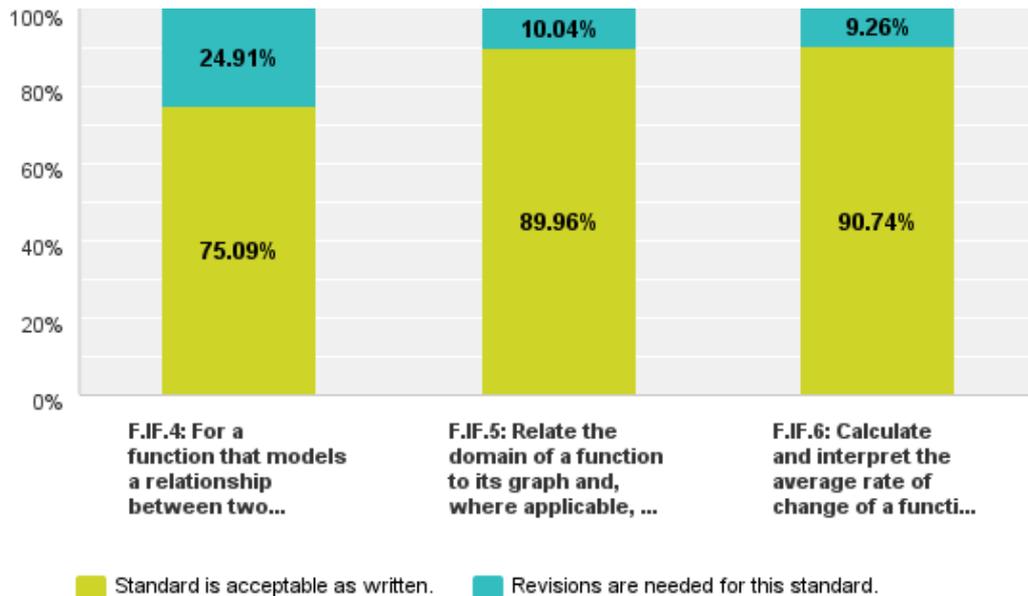
Q11: Math I || Understand the concept of a function and use function notation.

Answered: 277 Skipped: 105



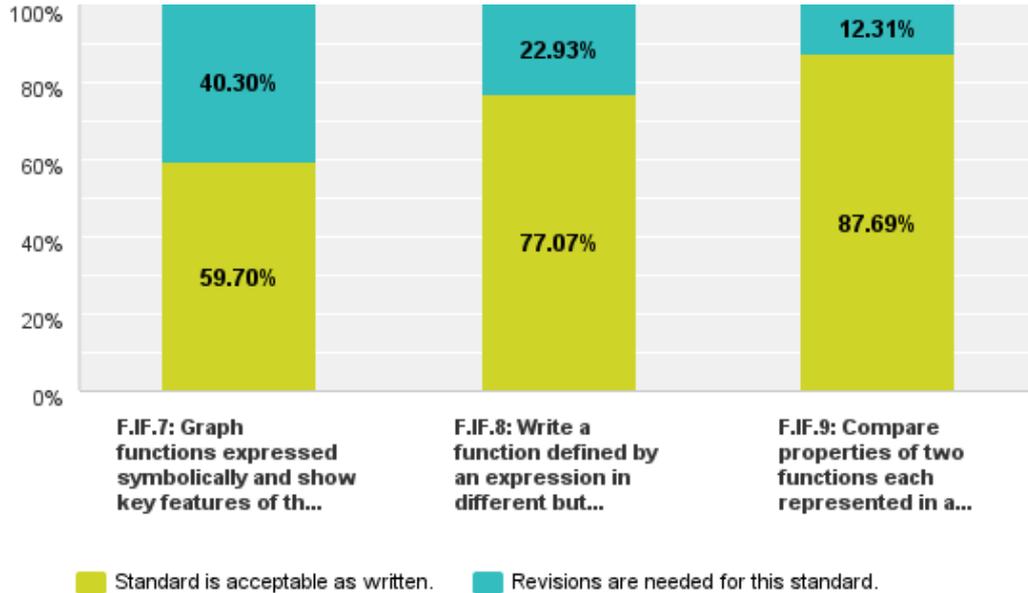
Q12: Math I || Interpret functions that arise in applications in terms of the context.

Answered: 272 Skipped: 110



Q13: Math I || Analyze functions using different representations.

Answered: 270 Skipped: 112



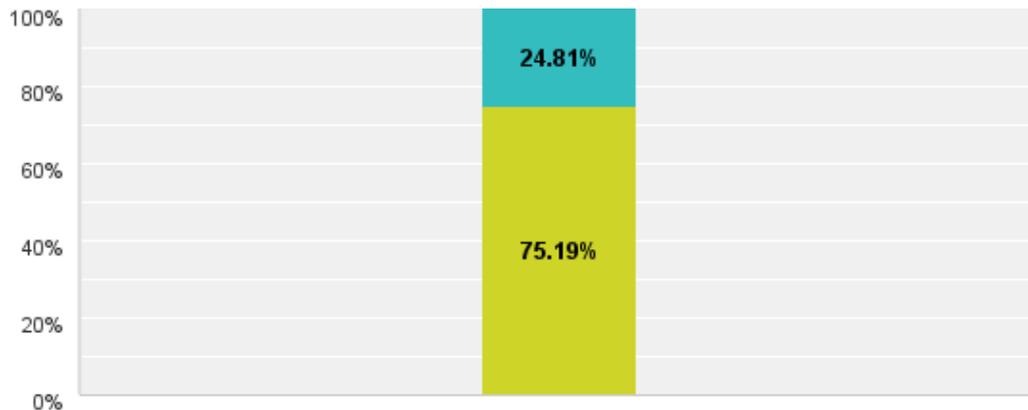
Q14: Math I || Build a function that models a relationship between two quantities.

Answered: 268 Skipped: 114



Q15: Math I || Build new functions from existing functions.

Answered: 266 Skipped: 116

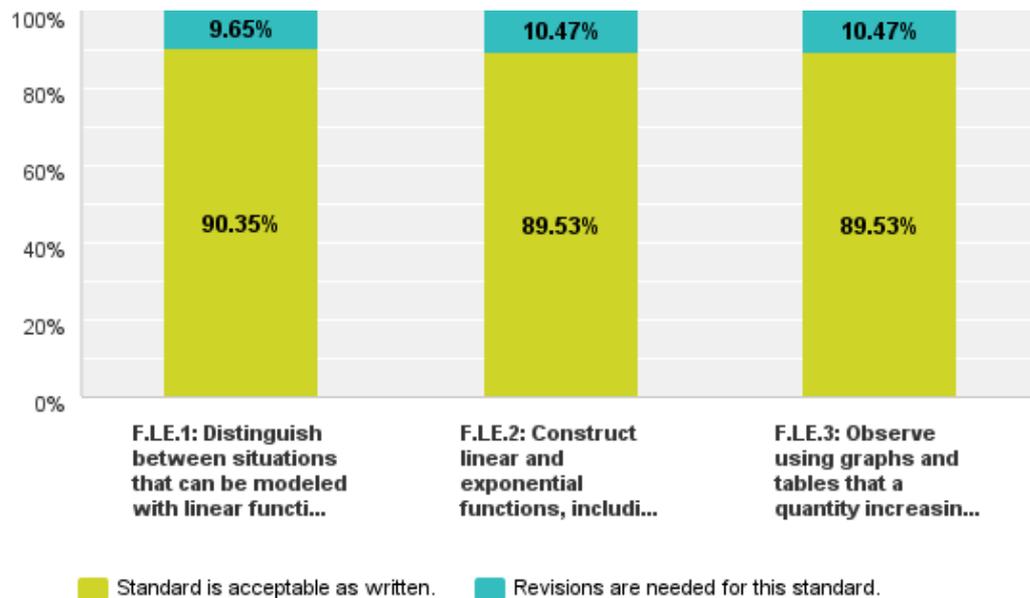


F.BF.3: Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation ...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

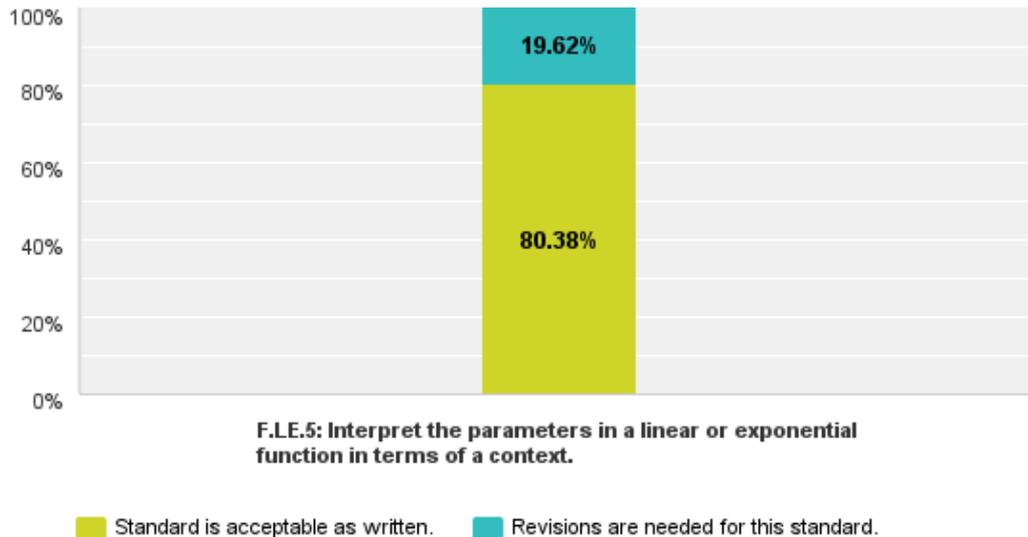
Q16: Math I || Construct and compare linear and exponential models and solve problems.

Answered: 260 Skipped: 122



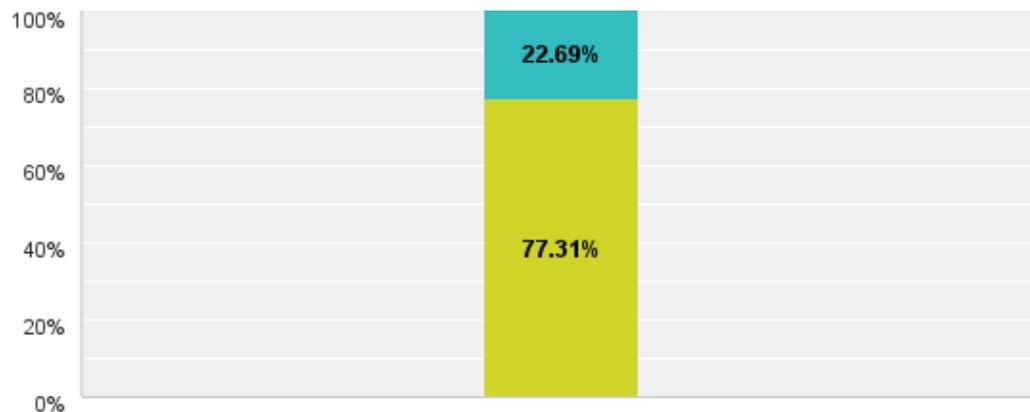
Q17: Math I || Interpret expressions for functions in terms of the situation they model.

Answered: 260 Skipped: 122



Q18: Math I || Experiment with transformations in the plane.

Answered: 260 Skipped: 122

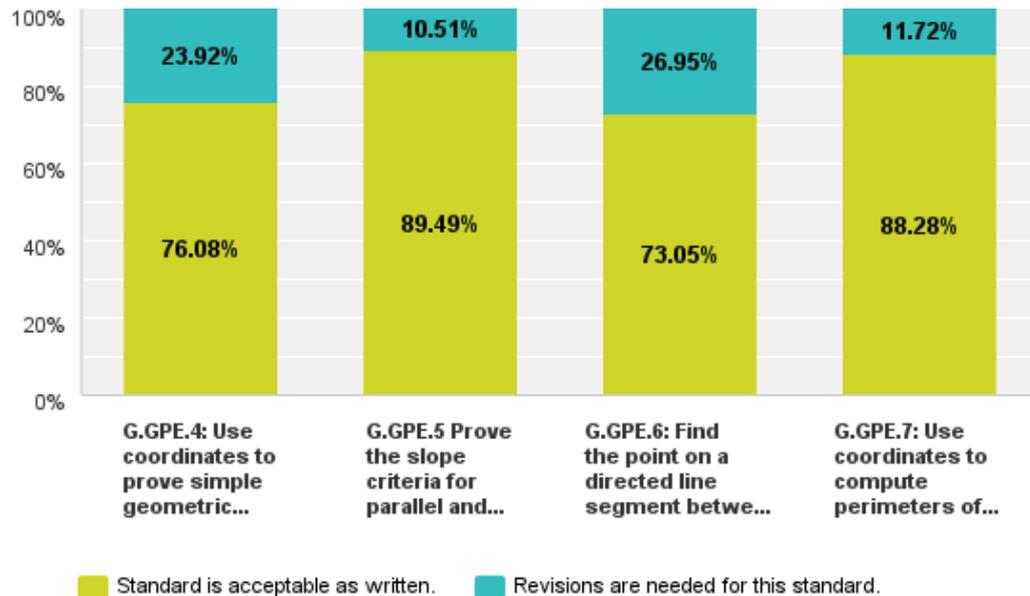


G.CO.1: Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

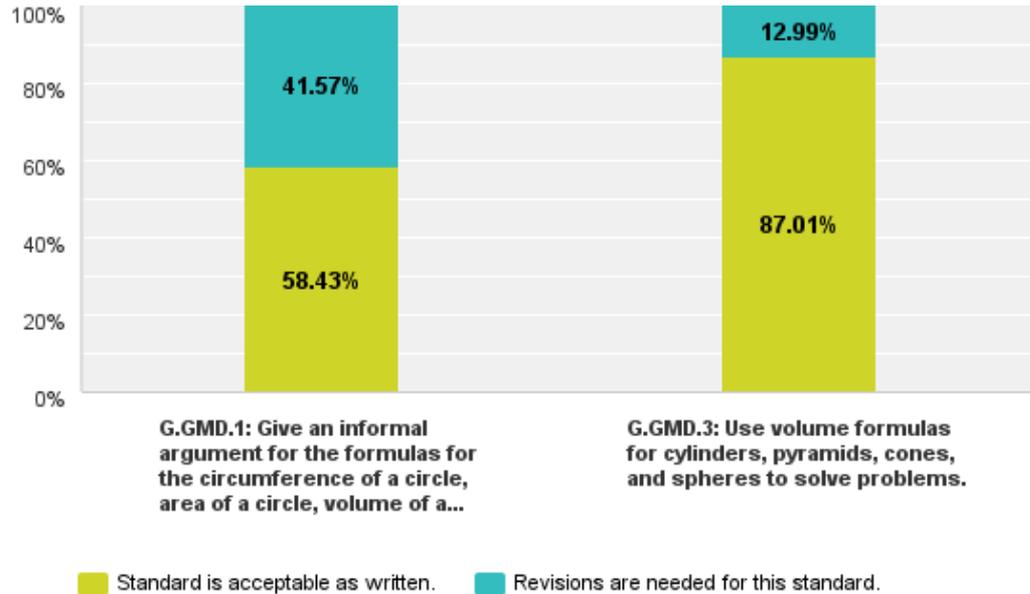
Q19: Math I || Use coordinates to prove simple geometric theorems algebraically.

Answered: 257 Skipped: 125



Q20: Math I || Explain volume formulas and use them to solve problems.

Answered: 256 Skipped: 126



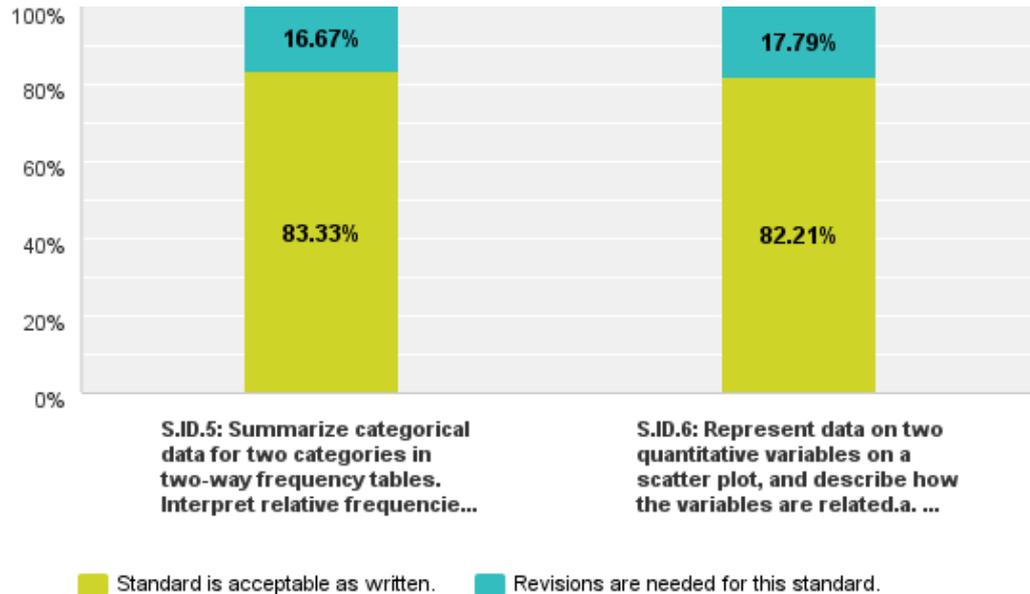
Q21: Math I || Summarize, represent, and interpret data on a single count or measurement variable.

Answered: 256 Skipped: 126



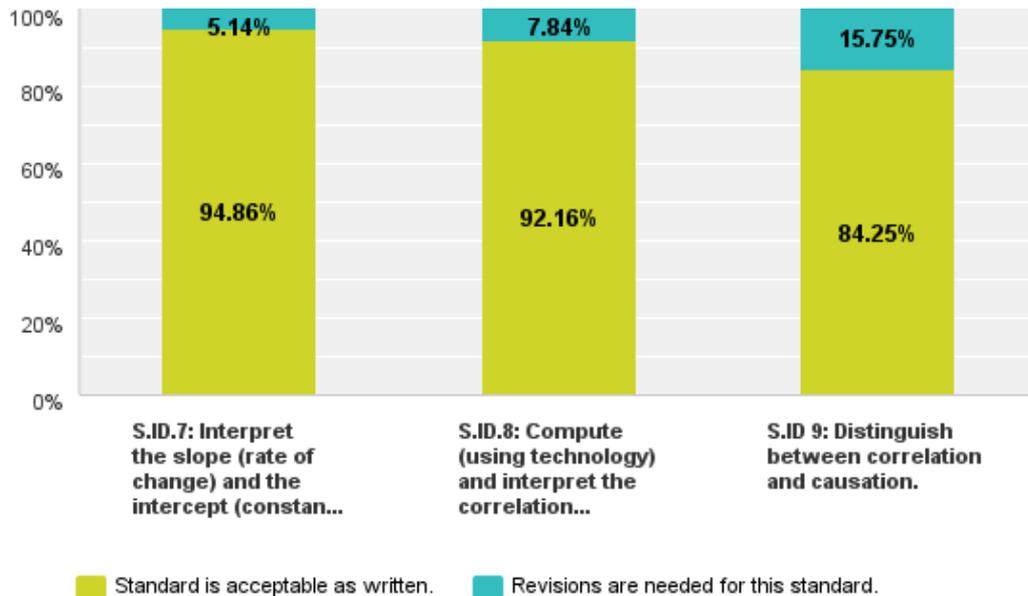
Q22: Math I || Summarize, represent, and interpret data on two categorical and quantitative variables.

Answered: 256 Skipped: 126



Q23: Math I || Interpret linear models.

Answered: 256 Skipped: 126

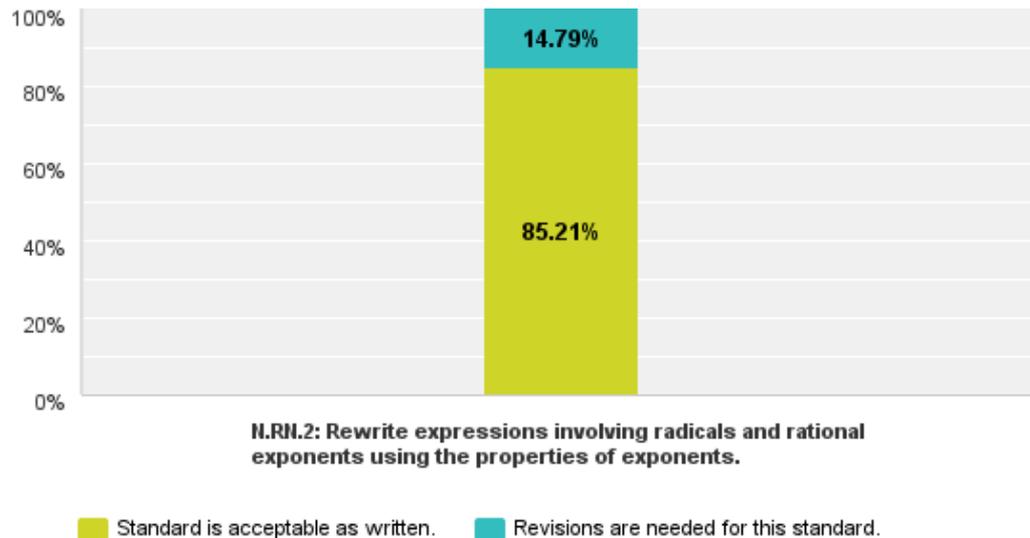


NCDPI Standards Review Math Math II

Tuesday, January 13, 2015

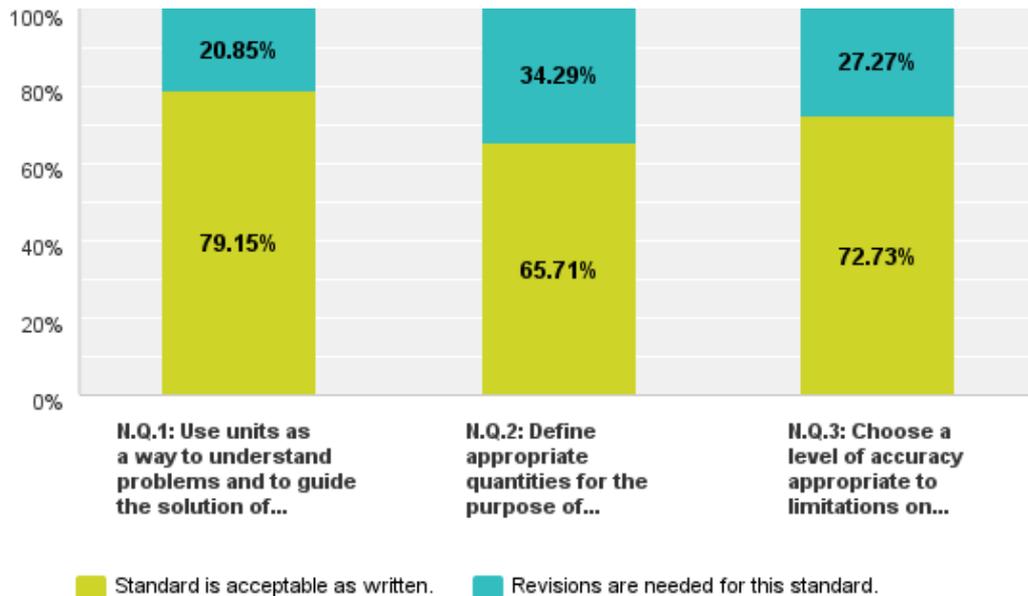
Q1: Math II || Extend the properties of exponents to rational exponents.

Answered: 284 Skipped: 0



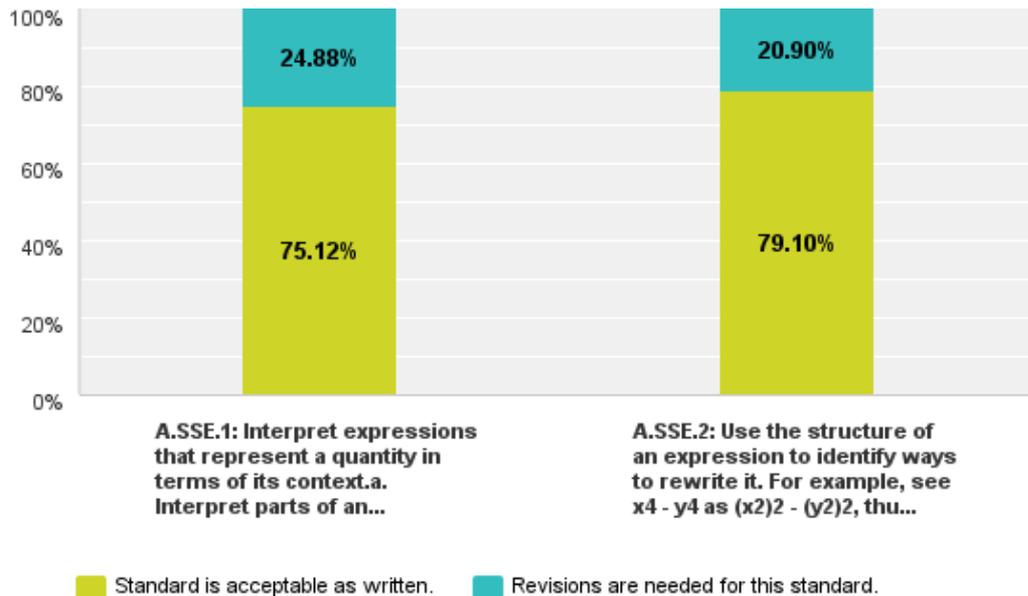
Q2: Math II || Reason quantitatively and use units to solve problems.

Answered: 212 Skipped: 72



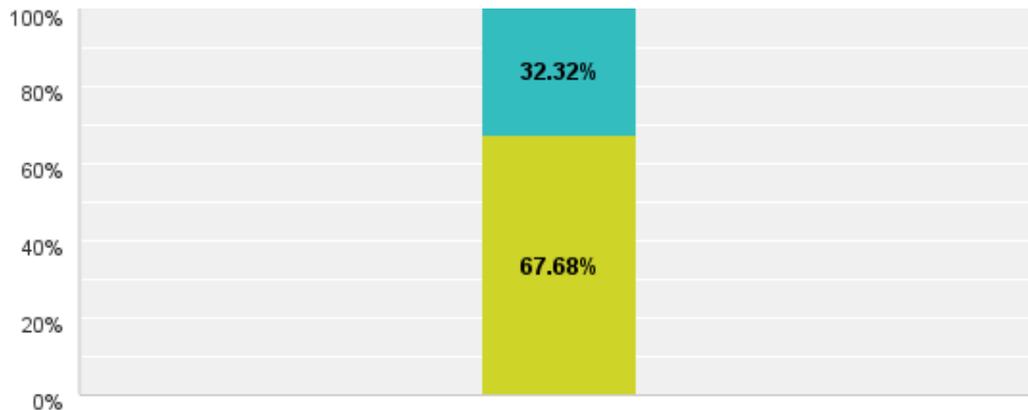
Q3: Math II || Interpret the structure of expressions.

Answered: 203 Skipped: 81



Q4: Math II || Write expressions in equivalent forms to solve problems.

Answered: 198 Skipped: 86

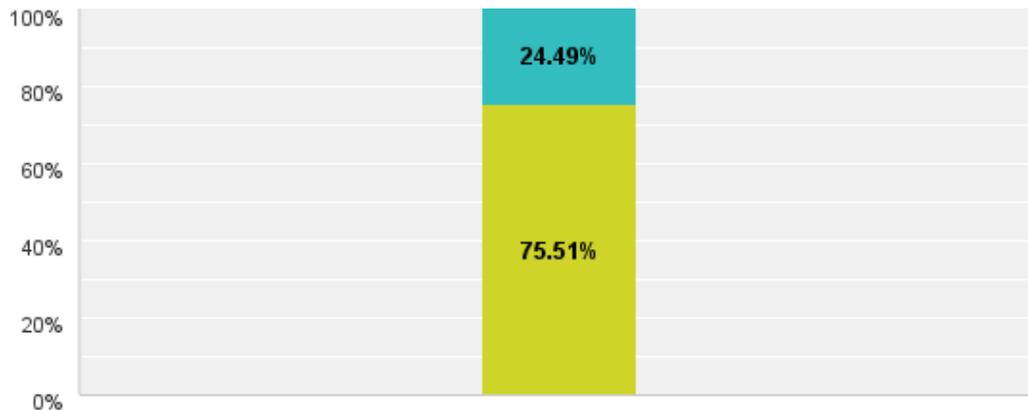


A.SSE.3: Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.c. Use the properties of exponents to transform expressions for exponential functions...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q5: Math II || Perform arithmetic operations on polynomials.

Answered: 196 Skipped: 88

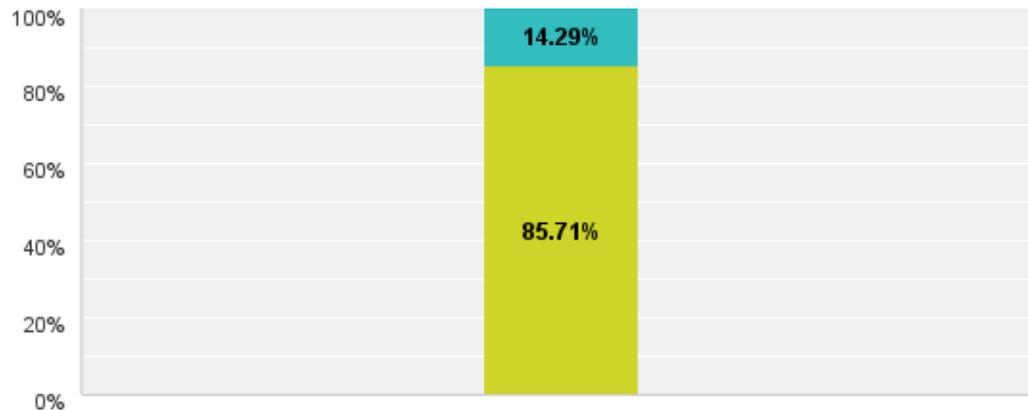


A.APR.1: Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q6: Math II || Understand the relationship between zeros and factors of polynomials.

Answered: 196 Skipped: 88

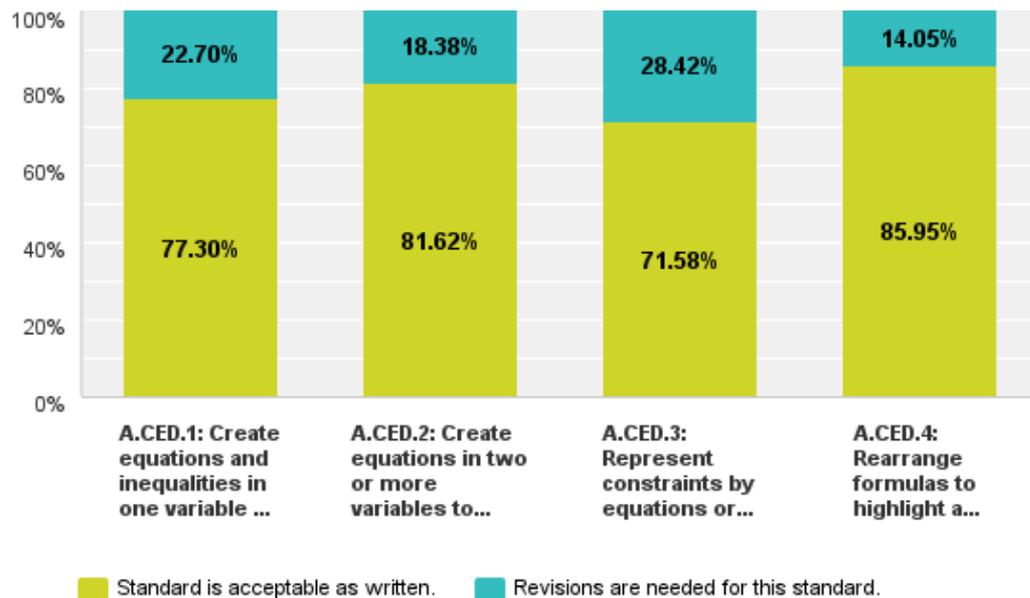


A.APR.3: Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

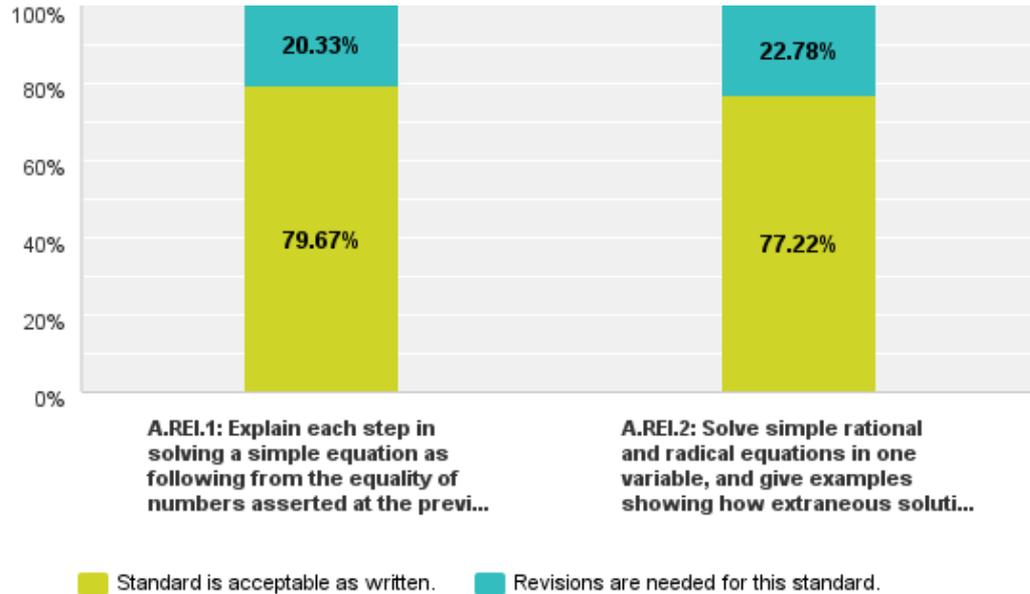
Q7: Math II || Create equations that describe numbers or relationships.

Answered: 185 Skipped: 99



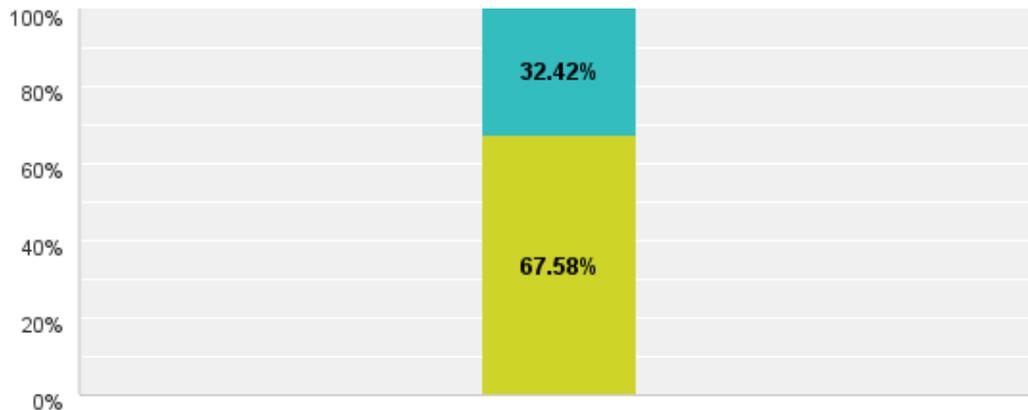
Q8: Math II || Understand solving equations as a process of reasoning and explain the reasoning.

Answered: 182 Skipped: 102



Q9: Math II || Solve equations and inequalities in one variable.

Answered: 182 Skipped: 102



A.REI.4: Solve quadratic equations in one variable.b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equatio...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q10: Math II || Solve systems of equations.

Answered: 181 Skipped: 103

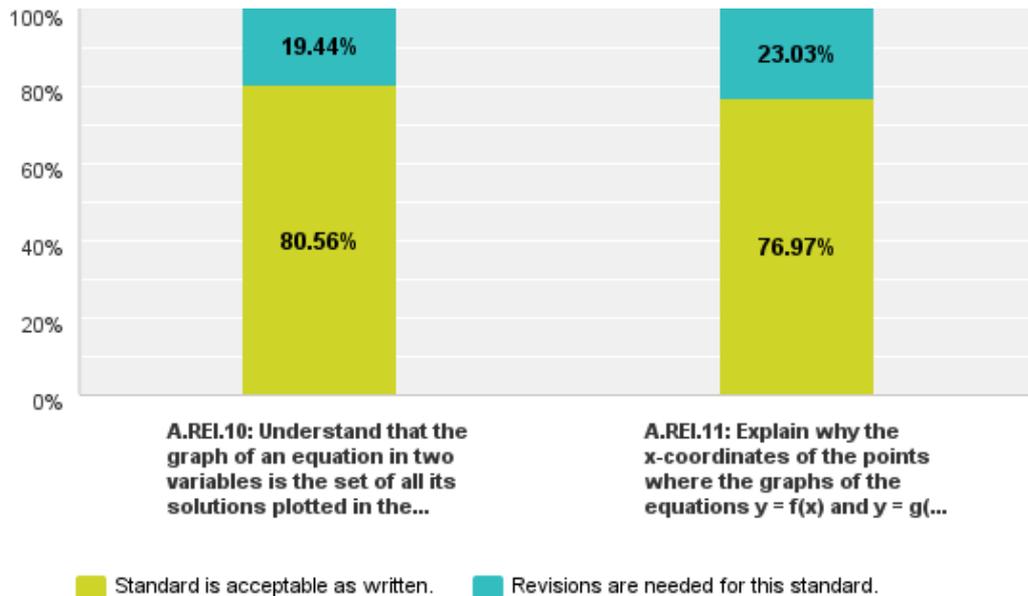


A.REI.7: Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

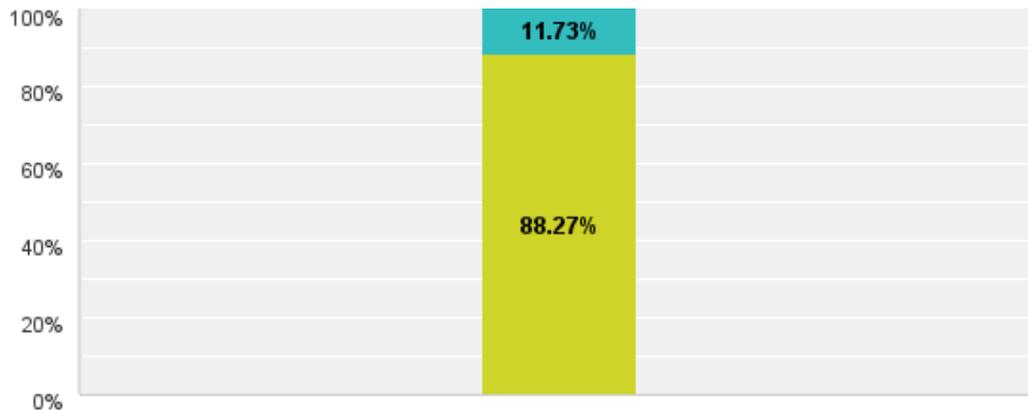
Q11: Math II || Represent and solve equations and inequalities graphically.

Answered: 180 Skipped: 104



Q12: Math II || Understand the concept of a function and use function notation.

Answered: 179 Skipped: 105

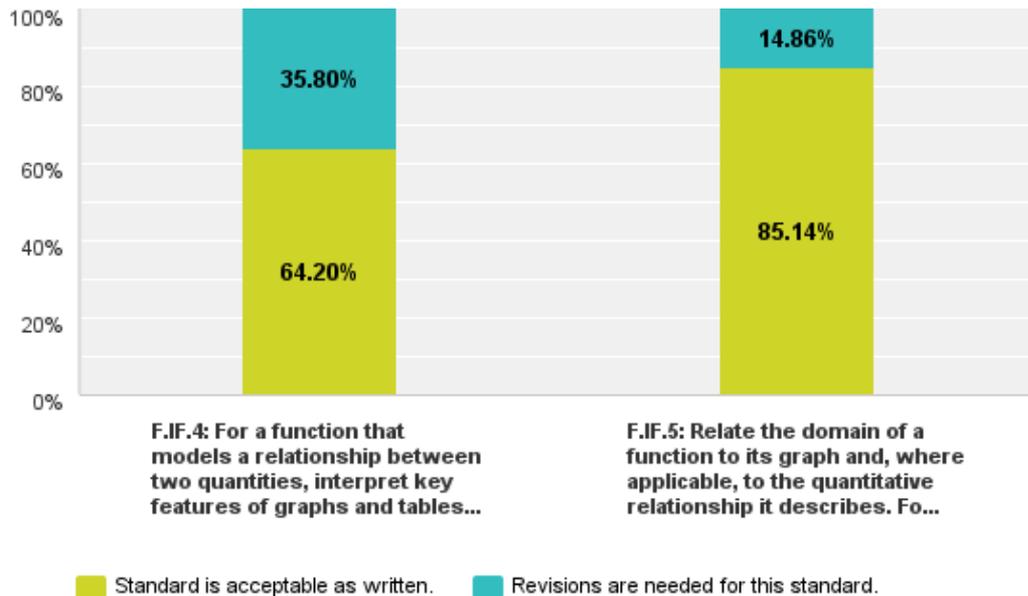


F.IF.2: Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

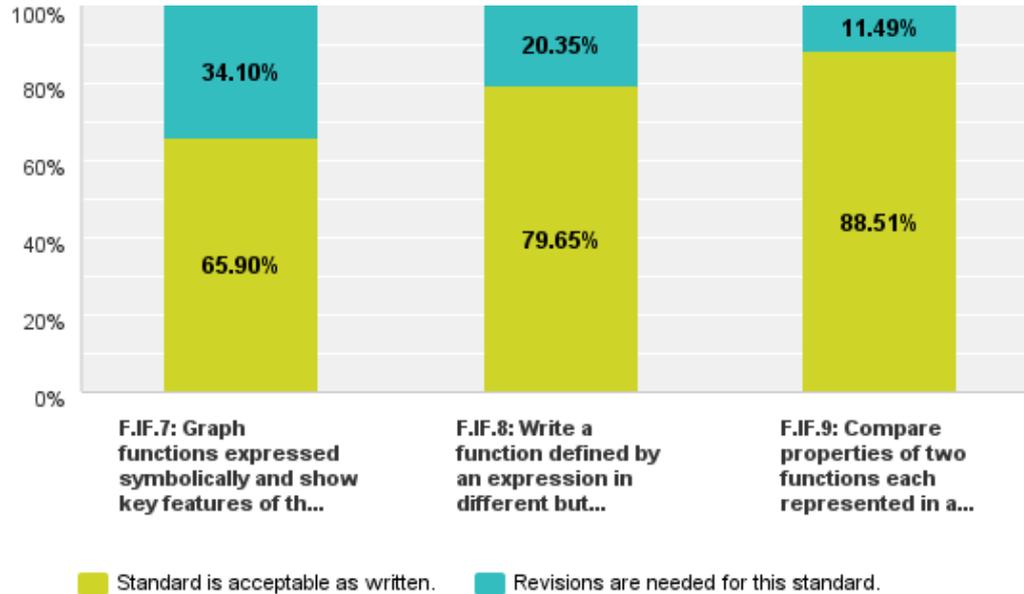
Q13: Math II || Interpret functions that arise in applications in terms of the context.

Answered: 176 Skipped: 108



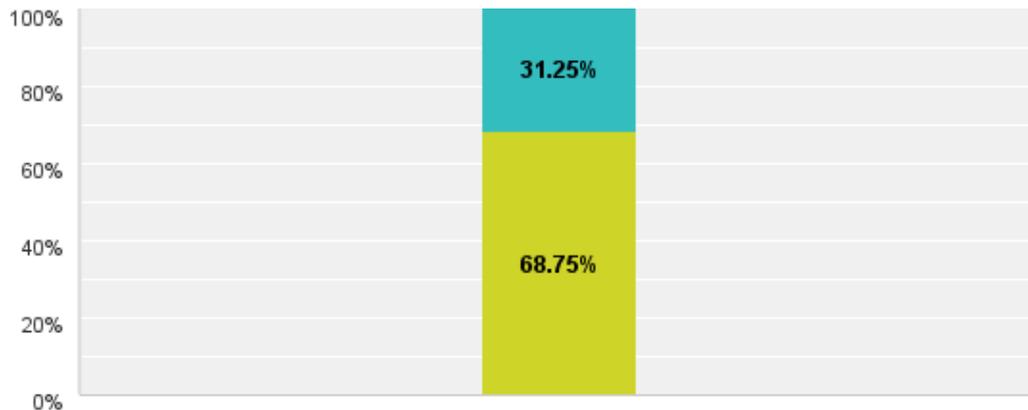
Q14: Math II || Analyze functions using different representations.

Answered: 176 Skipped: 108



Q15: Math II || Build a function that models a relationship between two quantities.

Answered: 176 Skipped: 108

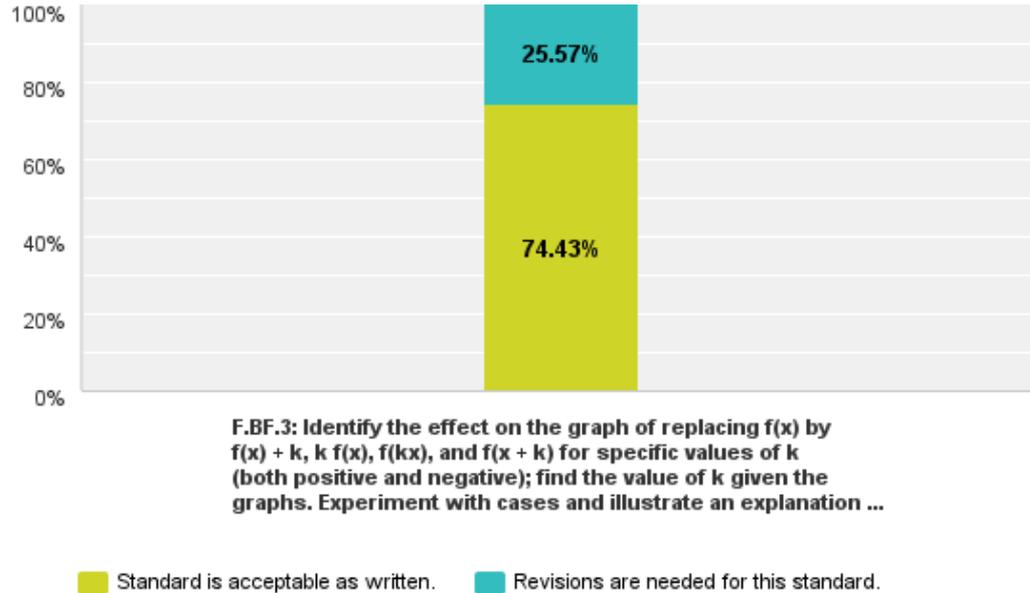


F.BF.1: Write a function that describes a relationship between two quantities.a. Determine an explicit expression, a recursive process, or steps for calculation from a context.b. Combine standard function types using arithmetic operations. For...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

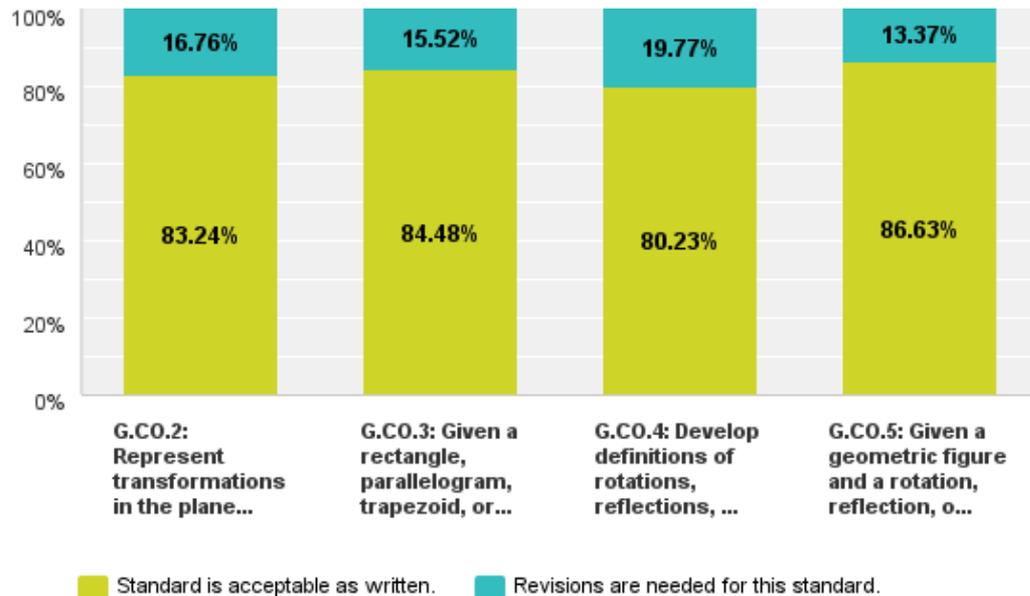
Q16: Math II || Build new functions from existing functions.

Answered: 176 Skipped: 108



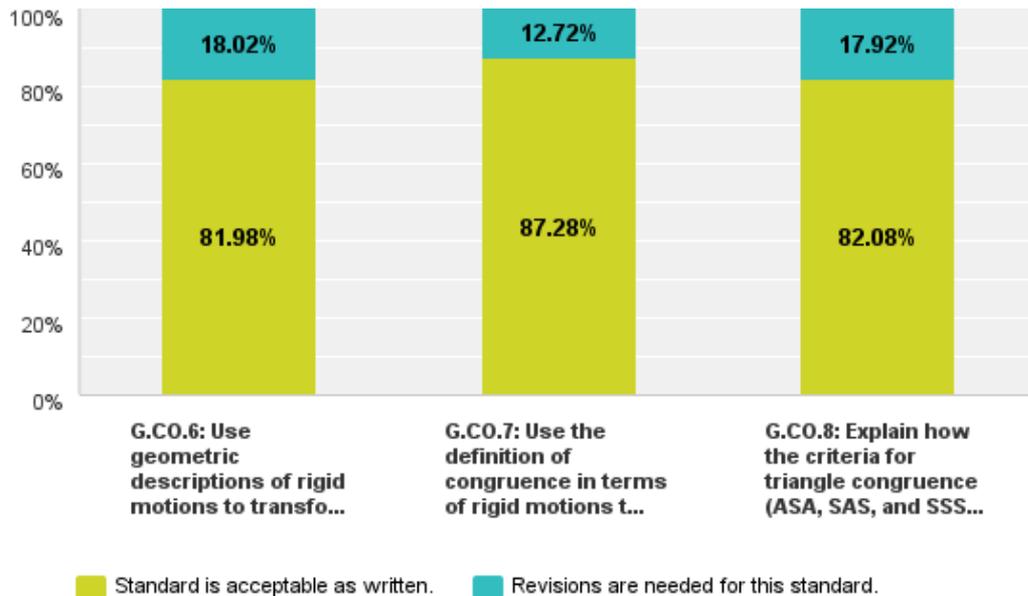
Q17: Math II || Experiment with transformations in the plane.

Answered: 174 Skipped: 110



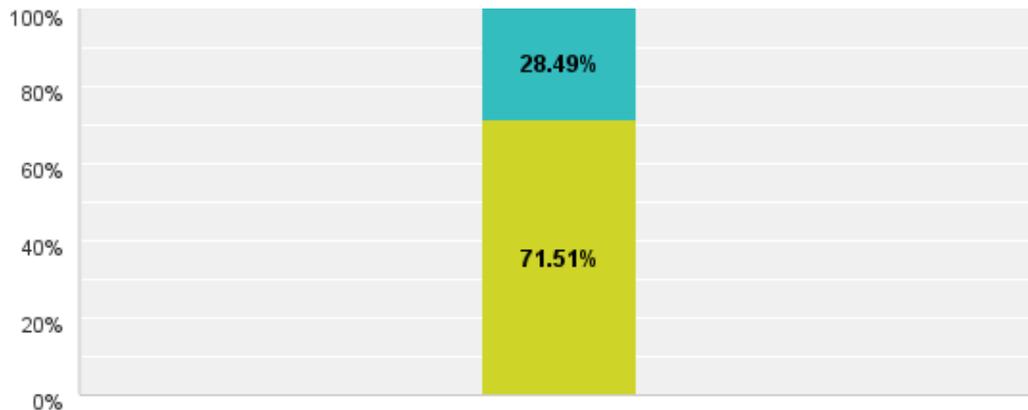
Q18: Math II || Understand congruence in terms of rigid motions

Answered: 173 Skipped: 111



Q19: Math II || Prove geometric theorems

Answered: 172 Skipped: 112

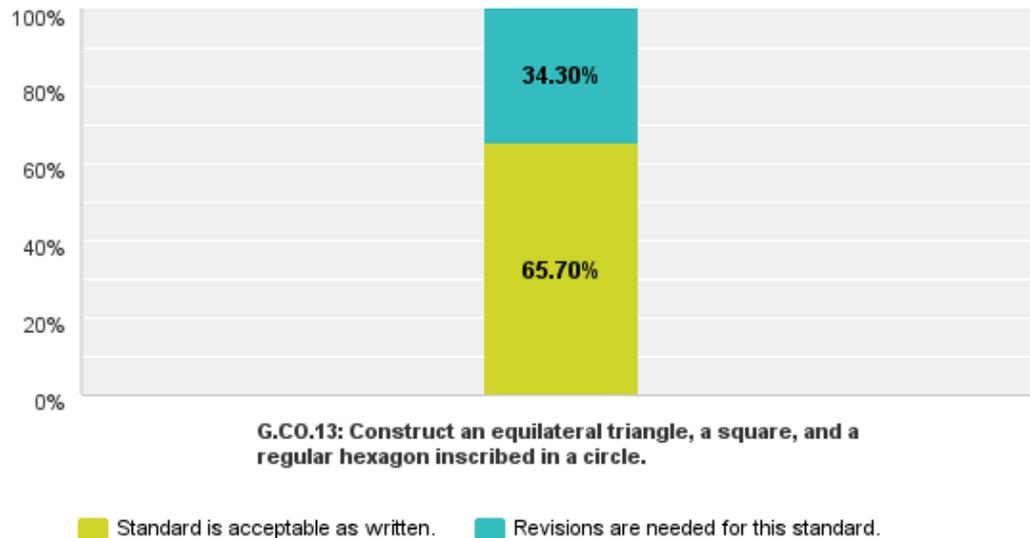


G.CO.10: Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to ...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q20: Math II || Make geometric constructions

Answered: 172 Skipped: 112



Q21: Math II || Understand similarity in terms of similarity transformations

Answered: 172 Skipped: 112

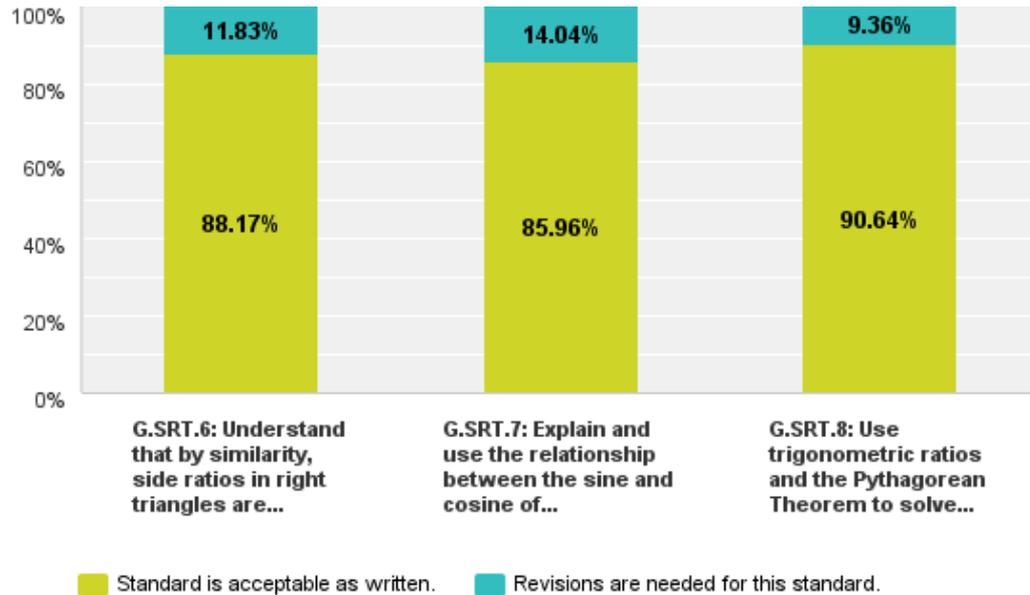


G.SRT.1: Verify experimentally the properties of dilations given by a center and a scale factor:a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

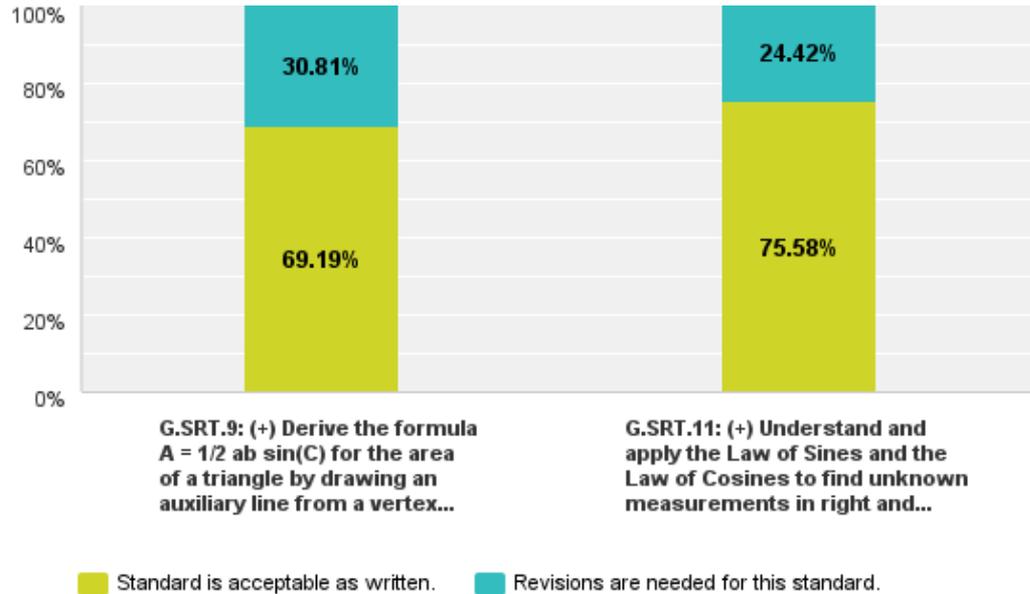
Q22: Math II || Define trigonometric ratios and solve problems involving right triangles

Answered: 172 Skipped: 112



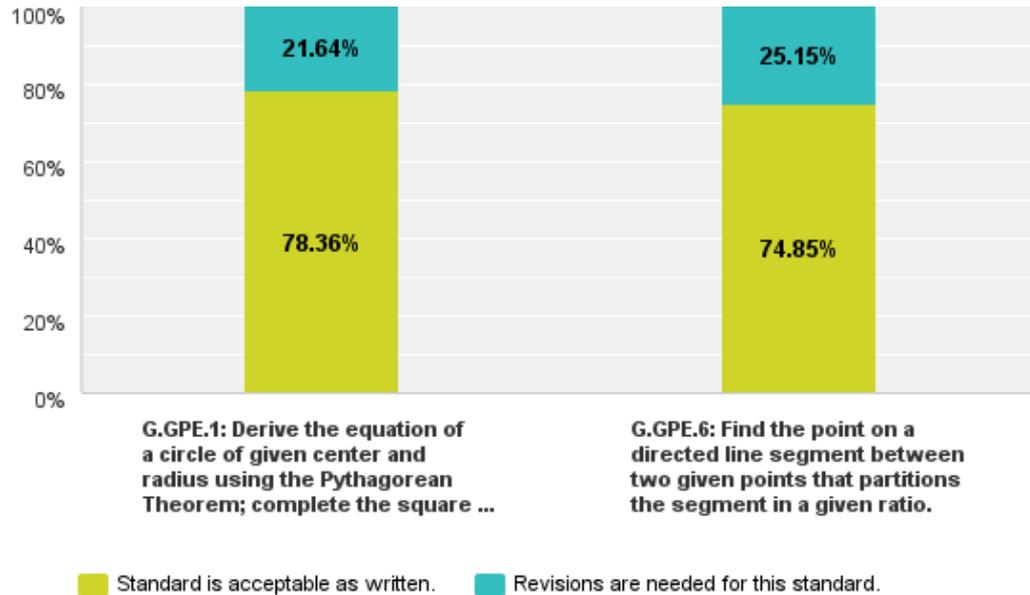
Q23: Math II || Apply trigonometry to general triangles

Answered: 172 Skipped: 112



Q24: Math II || Translate between the geometric description and the equation for a conic section

Answered: 171 Skipped: 113



Q25: Math II || Visualize relationships between two-dimensional and three-dimensional objects

Answered: 171 Skipped: 113



G.GMD.4: Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

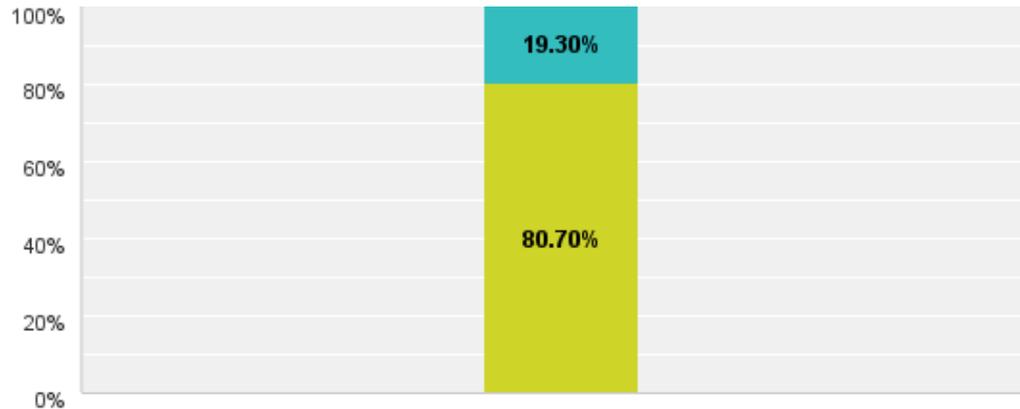
Q26: Math II || Apply geometric concepts in modeling situations

Answered: 171 Skipped: 113



Q27: Math II || Understand and evaluate random processes underlying statistical experiments

Answered: 171 Skipped: 113

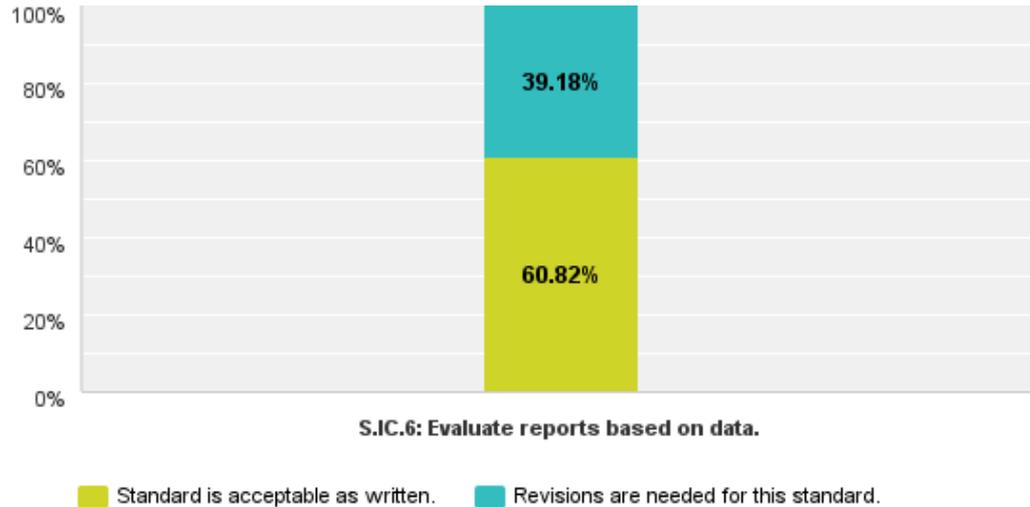


S.IC.2: Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause yo...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

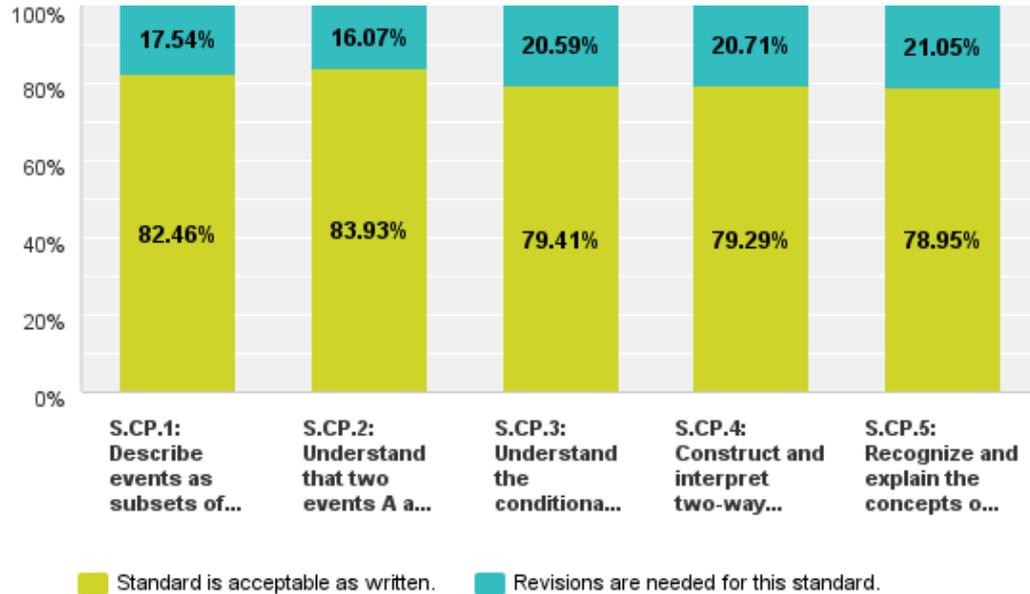
Q28: Math II || Make inferences and justify conclusions from sample surveys, experiments, and observational studies

Answered: 171 Skipped: 113



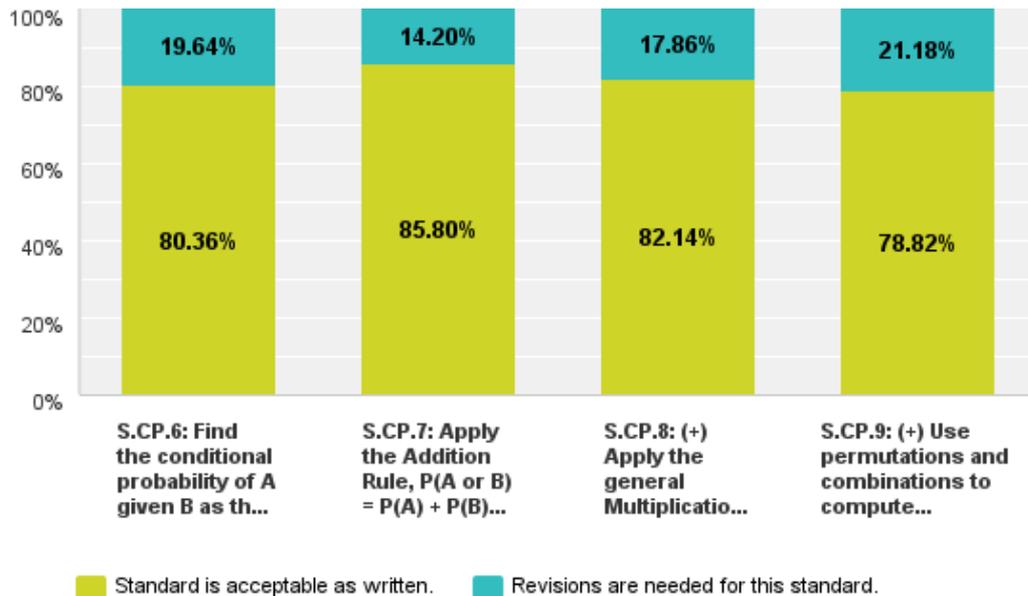
Q29: Math II || Understand independence and conditional probability and use them to interpret data

Answered: 171 Skipped: 113



Q30: Math II || Use the rules of probability to compute probabilities of compound events in a uniform probability model

Answered: 170 Skipped: 114

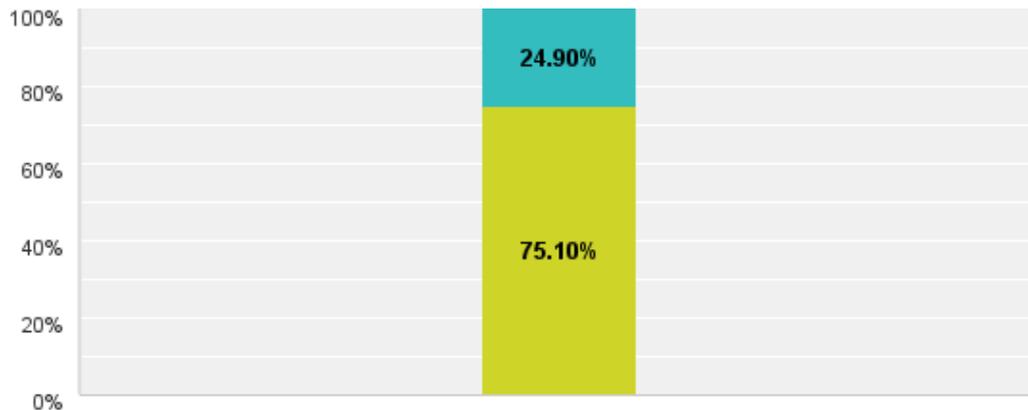


NCDPI Standards Review Math Math III

Tuesday, January 13, 2015

Q1: Math III || Use properties of rational and irrational numbers.

Answered: 257 Skipped: 0

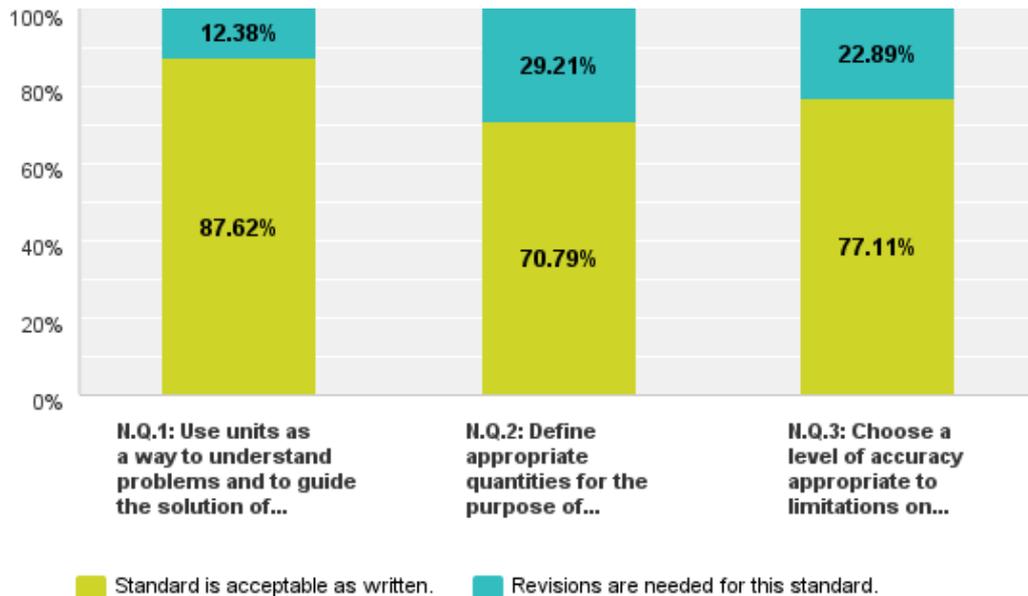


N.RN.3: Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

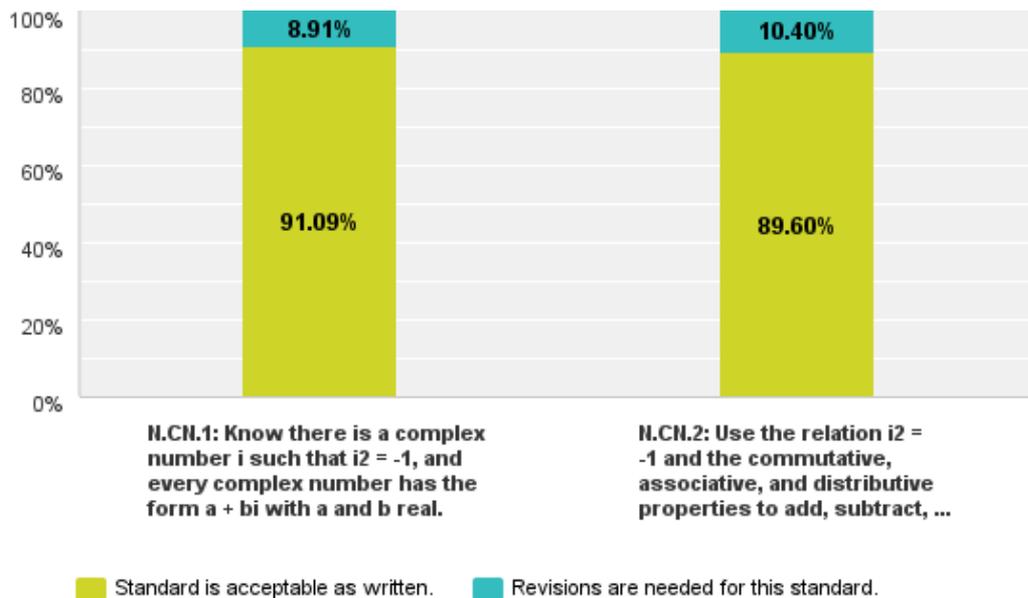
Q2: Math III || Reason quantitatively and use units to solve problems.

Answered: 204 Skipped: 53



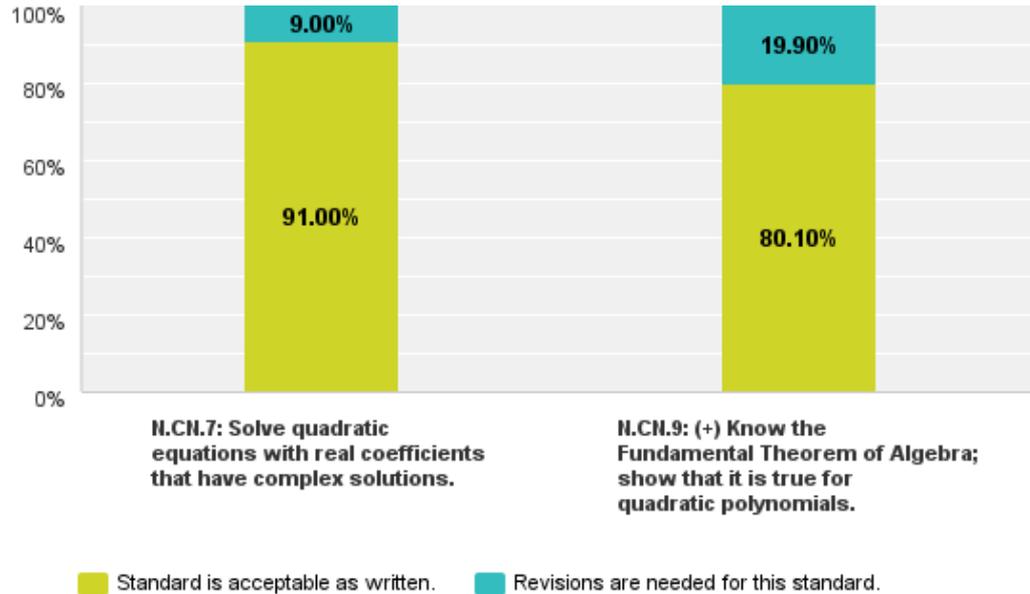
Q3: Math III || Perform arithmetic operations with complex numbers.

Answered: 202 Skipped: 55



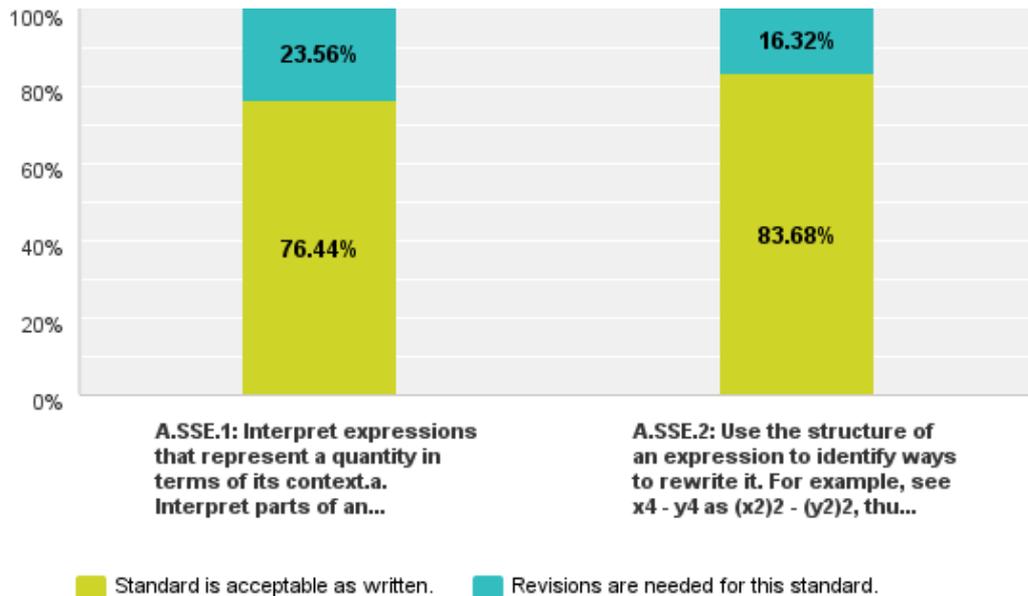
Q4: Math III || Use complex numbers in polynomial identities and equations.

Answered: 201 Skipped: 56



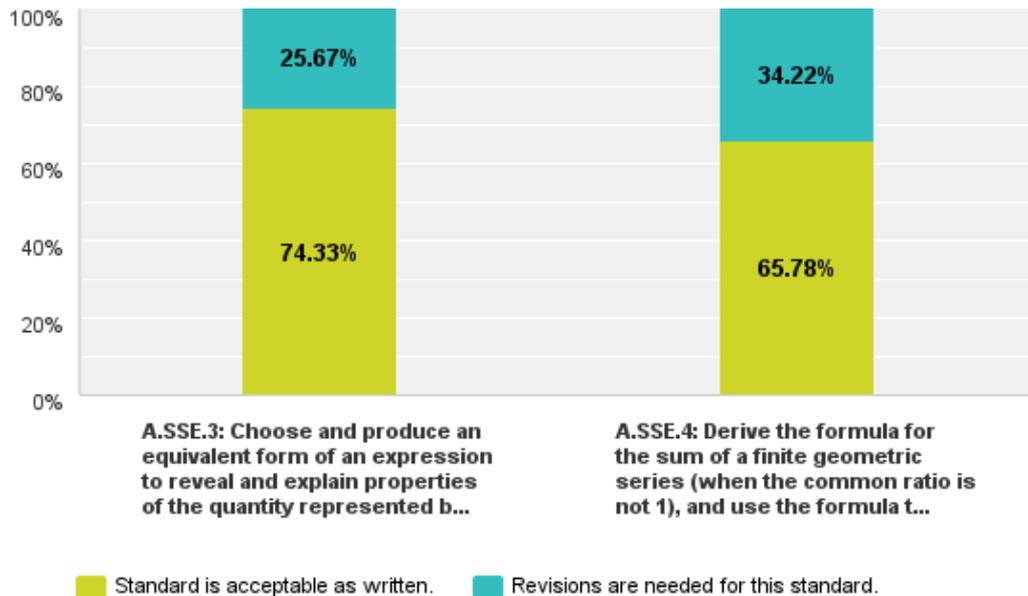
Q5: Math III || Interpret the structure of expressions.

Answered: 192 Skipped: 65



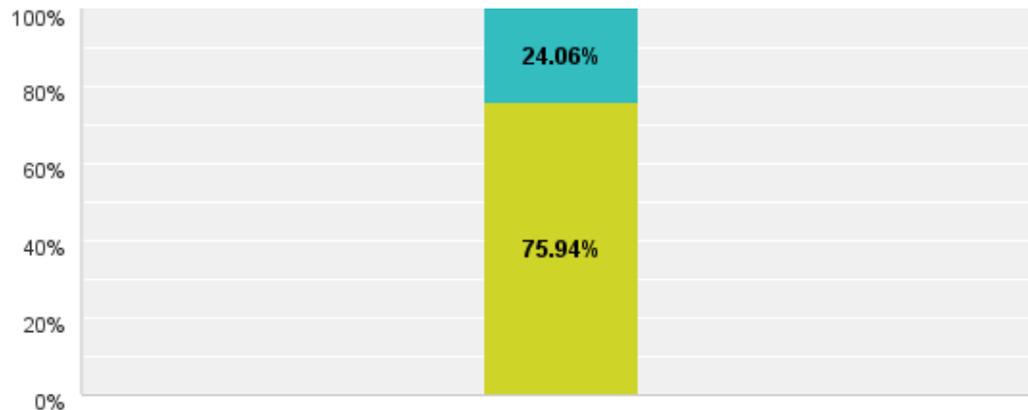
Q6: Math III || Write expressions in equivalent forms to solve problems.

Answered: 187 Skipped: 70



Q7: Math III || Perform arithmetic operations on polynomials.

Answered: 187 Skipped: 70

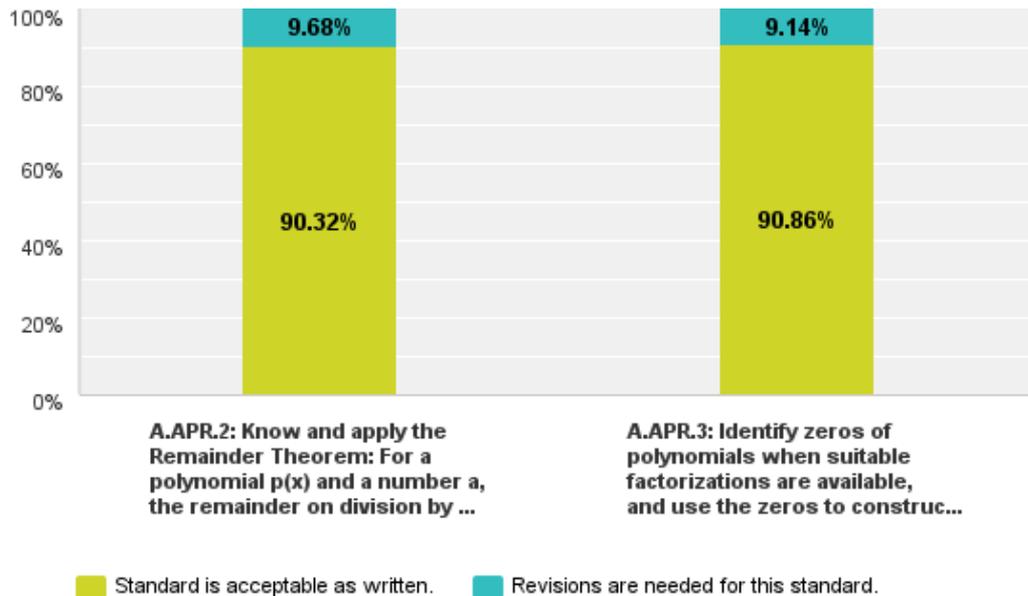


A.APR.1: Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

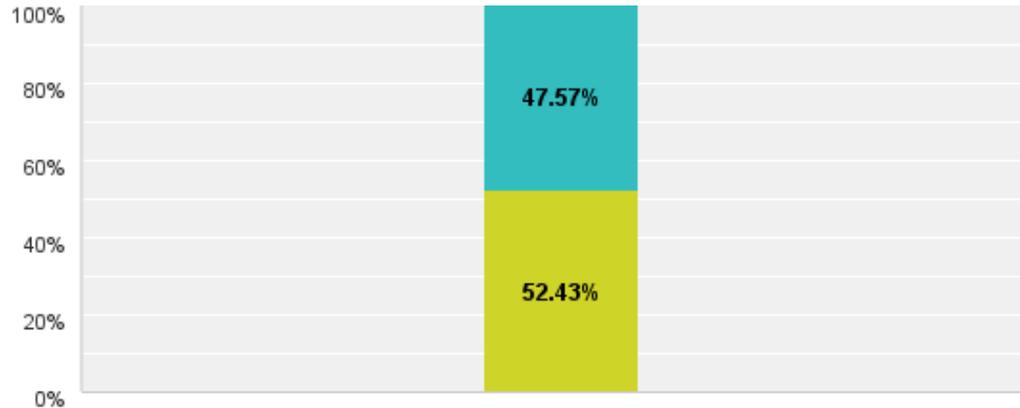
Q8: Math III || Understand the relationship between zeros and factors of polynomials.

Answered: 186 Skipped: 71



Q9: Math III || Use polynomial identities to solve problems.

Answered: 185 Skipped: 72

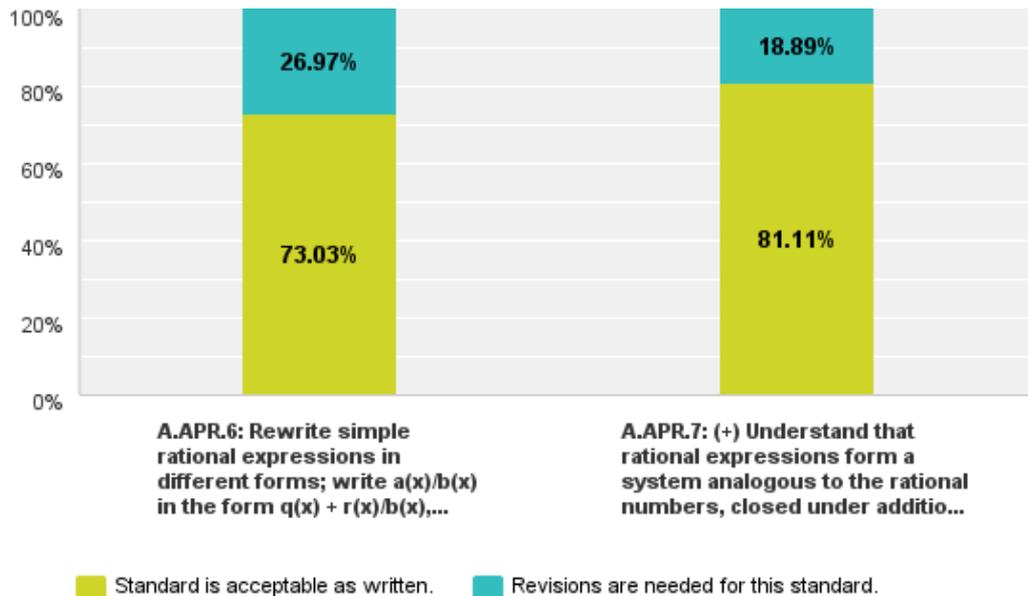


A.APR.4: Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

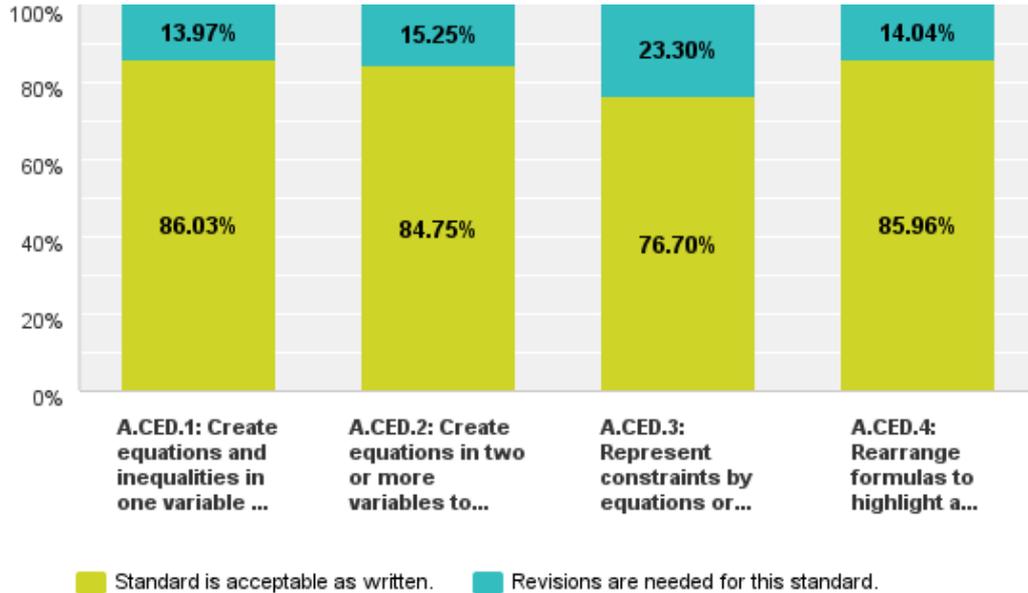
Q10: Math III || Rewrite rational expressions.

Answered: 182 Skipped: 75



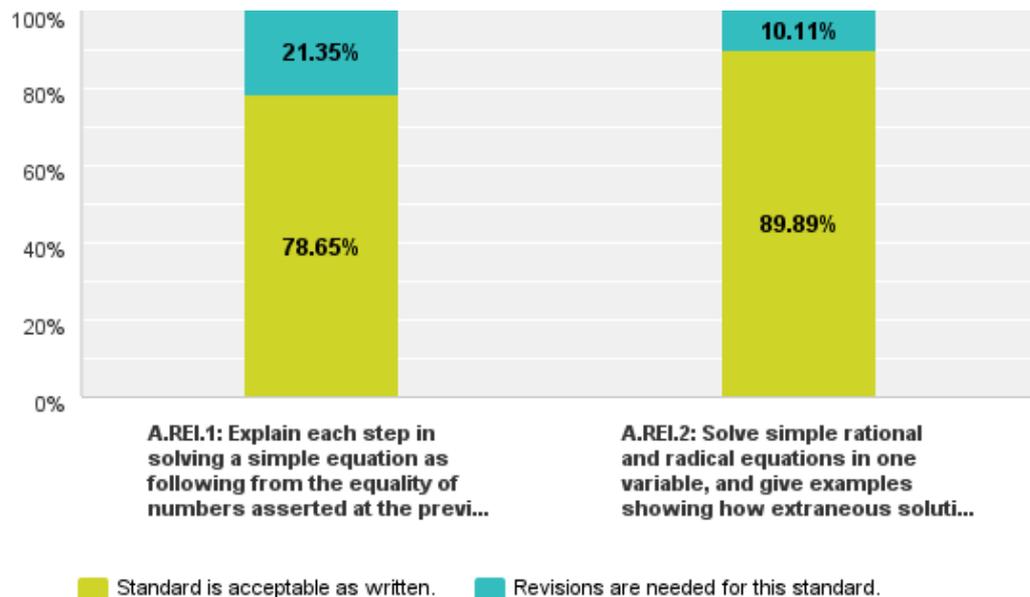
Q11: Math III || Create equations that describe numbers or relationships.

Answered: 179 Skipped: 78



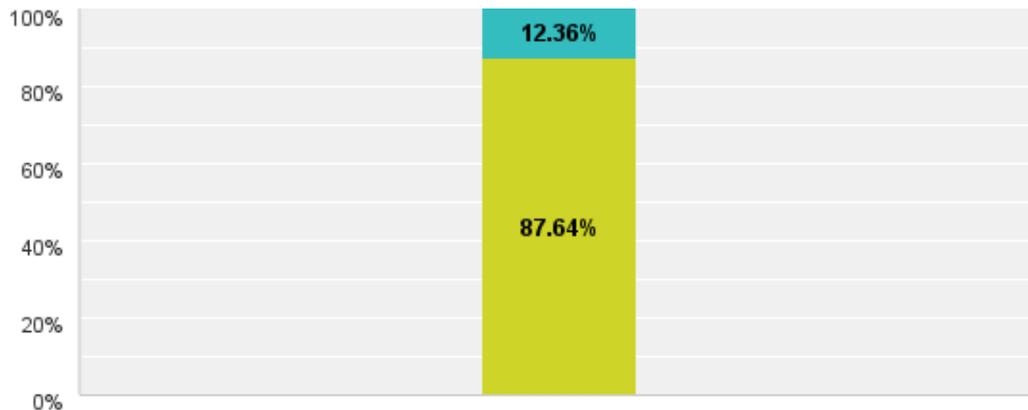
Q12: Math III || Understand solving equations as a process of reasoning and explain the reasoning.

Answered: 178 Skipped: 79



Q13: Math III || Solve equations and inequalities in one variable.

Answered: 178 Skipped: 79

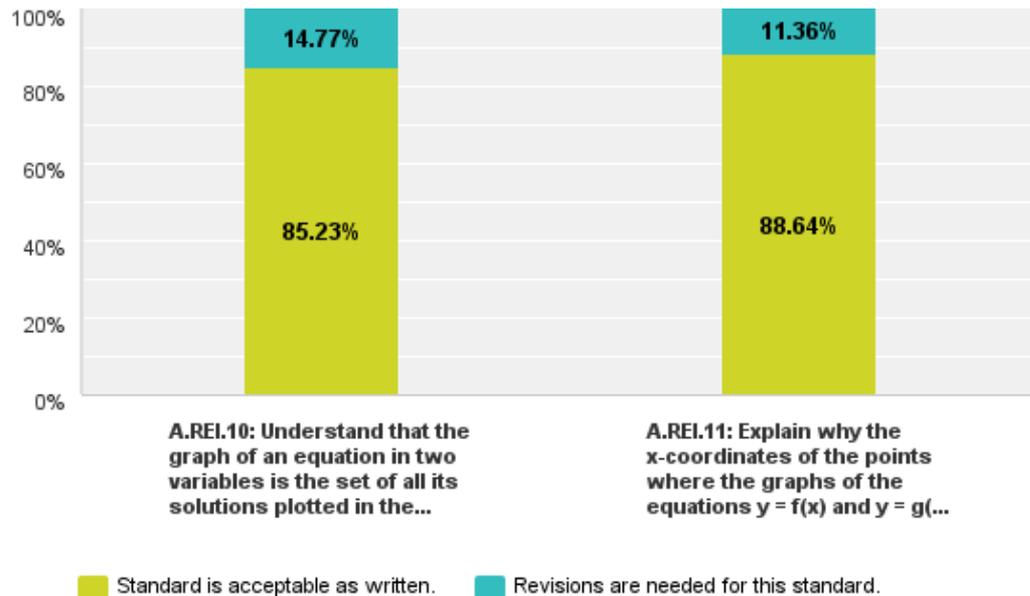


A.REI.4: Solve quadratic equations in one variable.a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from th...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q14: Math III || Represent and solve equations and inequalities graphically.

Answered: 177 Skipped: 80



Q15: Math III || Understand the concept of a function and use function notation.

Answered: 177 Skipped: 80

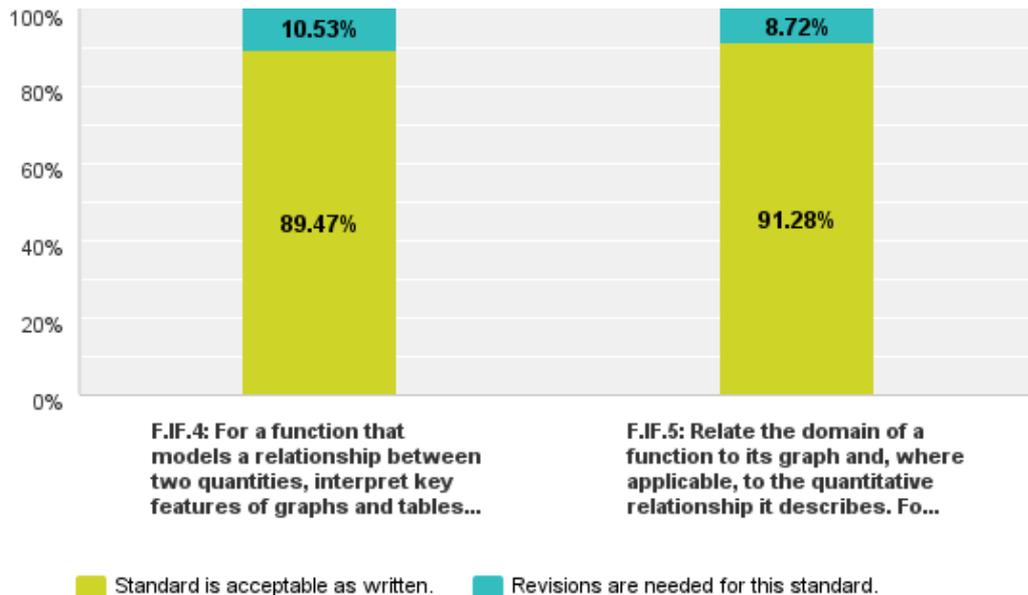


F.IF.2: Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

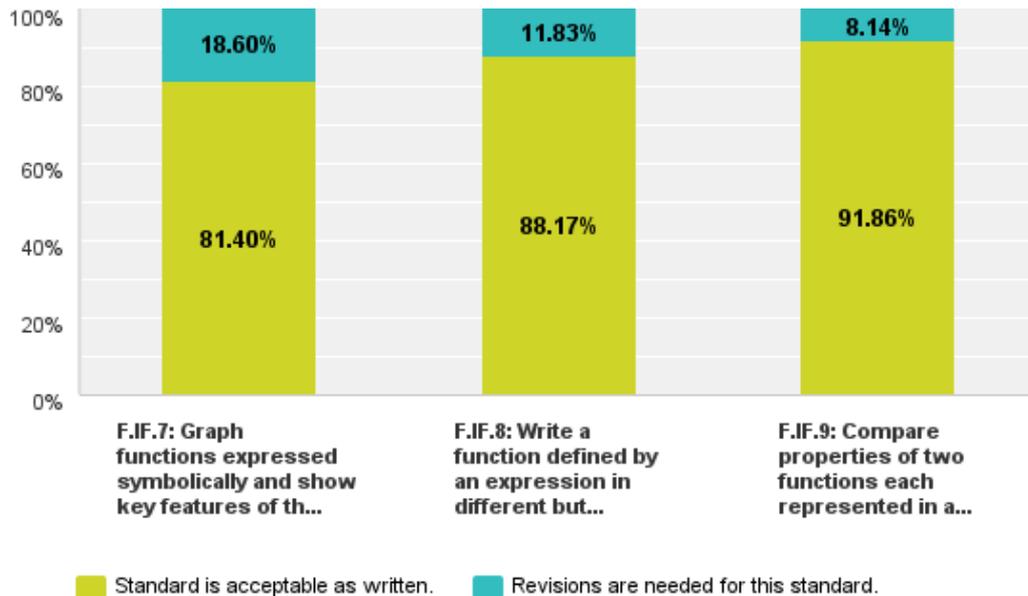
Q16: Math III || Interpret functions that arise in applications in terms of the context.

Answered: 173 Skipped: 84



Q17: Math III || Analyze functions using different representations.

Answered: 173 Skipped: 84



Q18: Math III || Build a function that models a relationship between two quantities.

Answered: 171 Skipped: 86



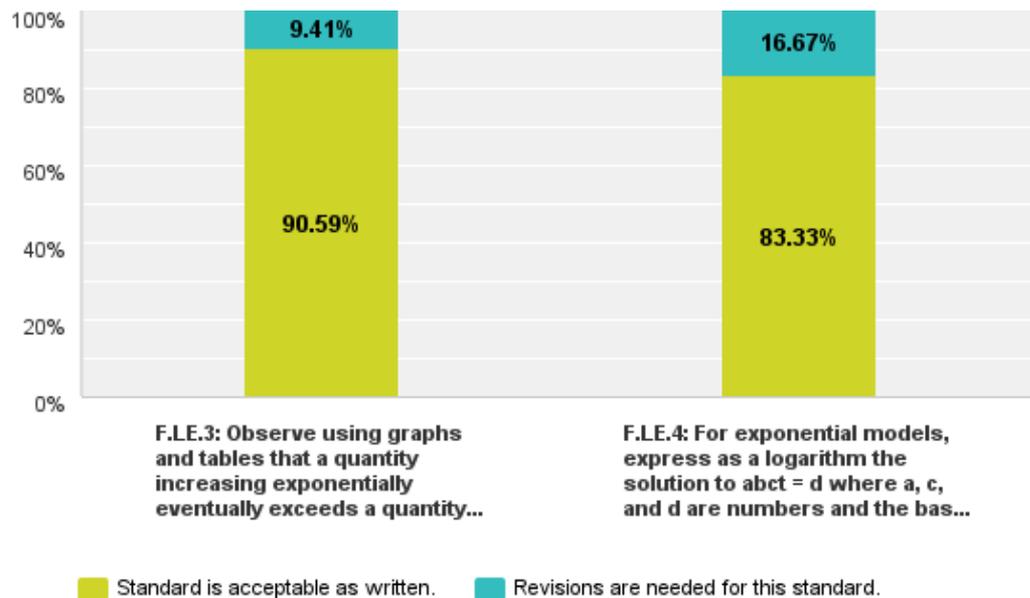
Q19: Math III || Build new functions from existing functions.

Answered: 171 Skipped: 86



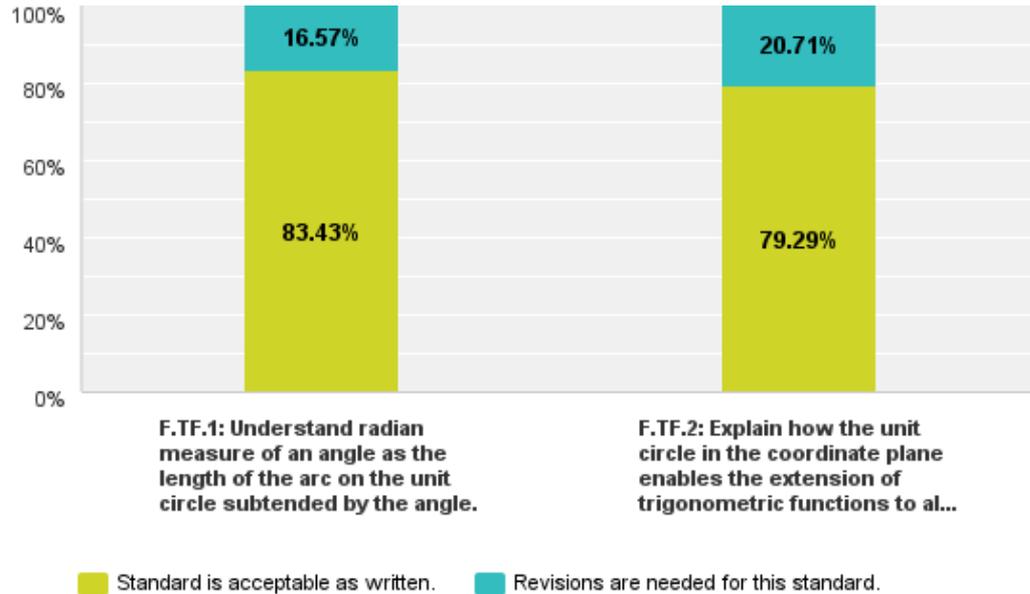
Q20: Math III || Construct and compare linear, quadratic, and exponential models and solve problems.

Answered: 170 Skipped: 87



Q21: Math III || Extend the domain of trigonometric functions using the unit circle.

Answered: 169 Skipped: 88



Q22: Math III || Model periodic phenomena with trigonometric functions.

Answered: 168 Skipped: 89

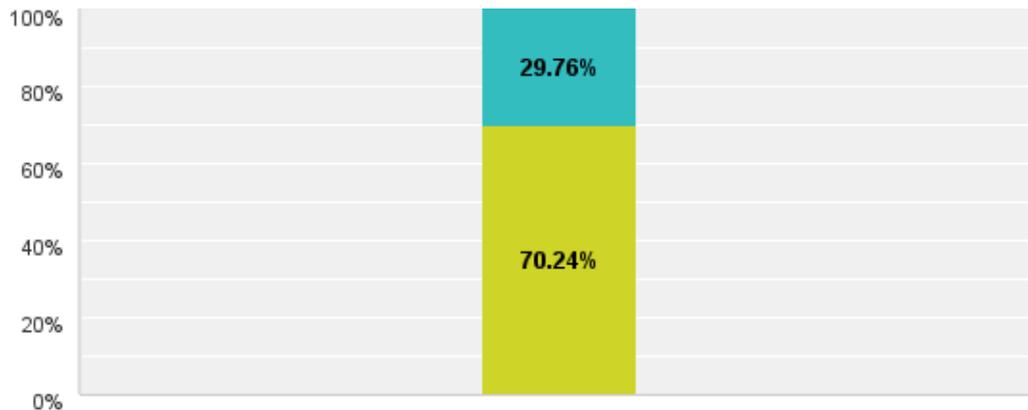


F.TF.5: Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q23: Math III || Prove and apply trigonometric identities.

Answered: 168 Skipped: 89

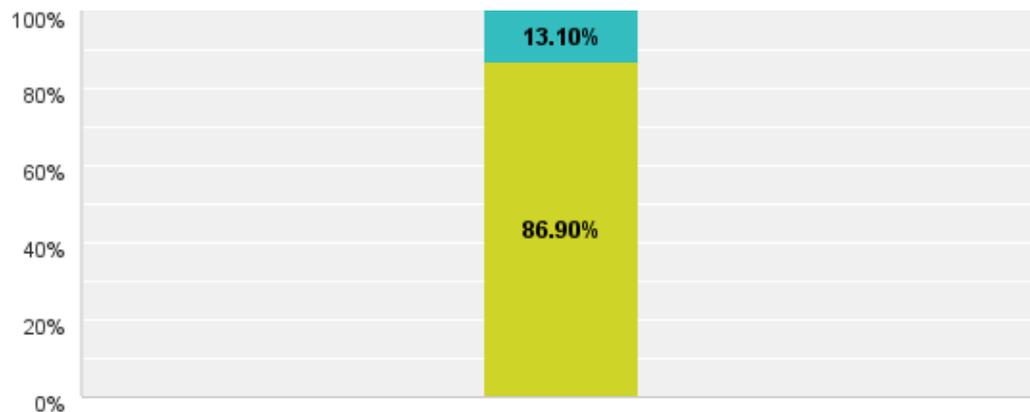


F.TF.8: Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to find $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ given $\sin(\theta)$, $\cos(\theta)$, or $\tan(\theta)$ and the quadrant of the angle.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q24: Math III || Experiment with transformations in the plane

Answered: 168 Skipped: 89

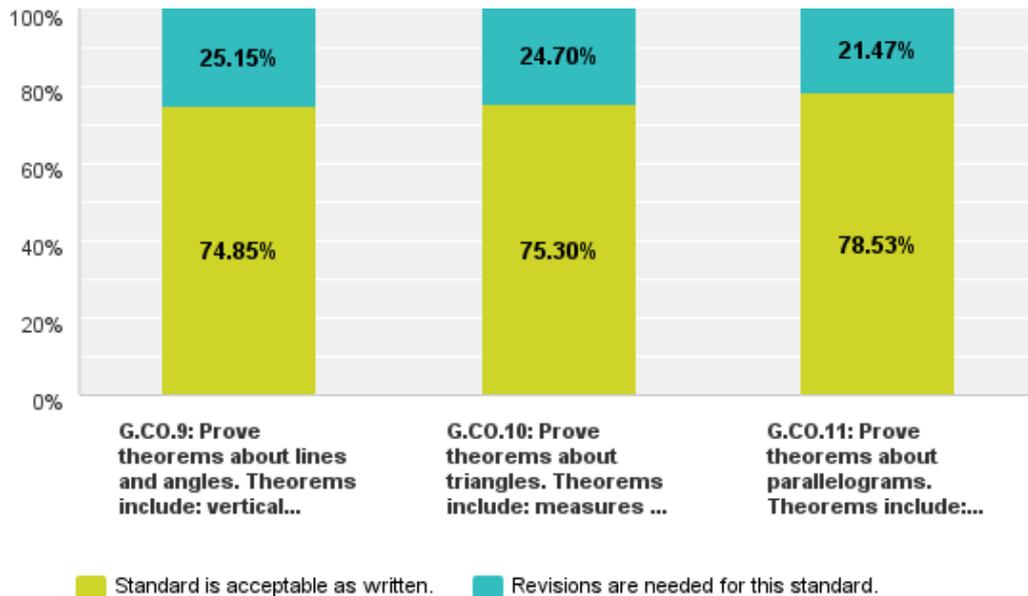


G.CO.1: Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

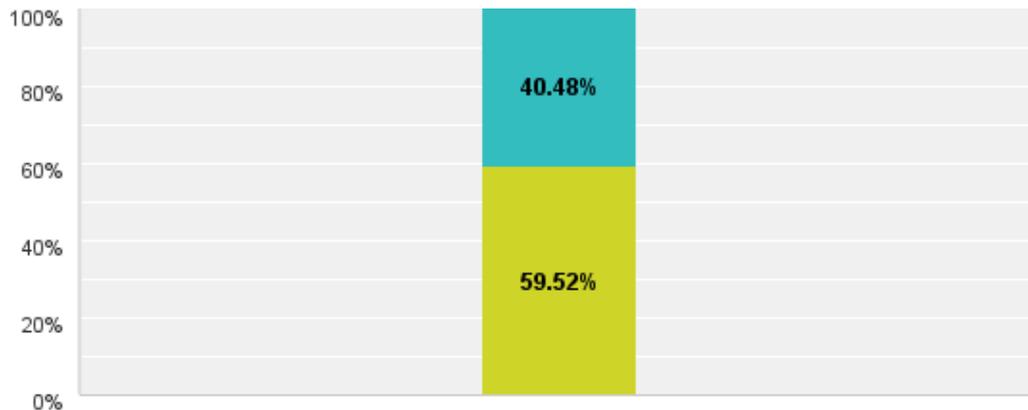
Q25: Math III || Prove geometric theorems

Answered: 168 Skipped: 89



Q26: Math III || Make geometric constructions

Answered: 168 Skipped: 89



G.CO.12: Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment;...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

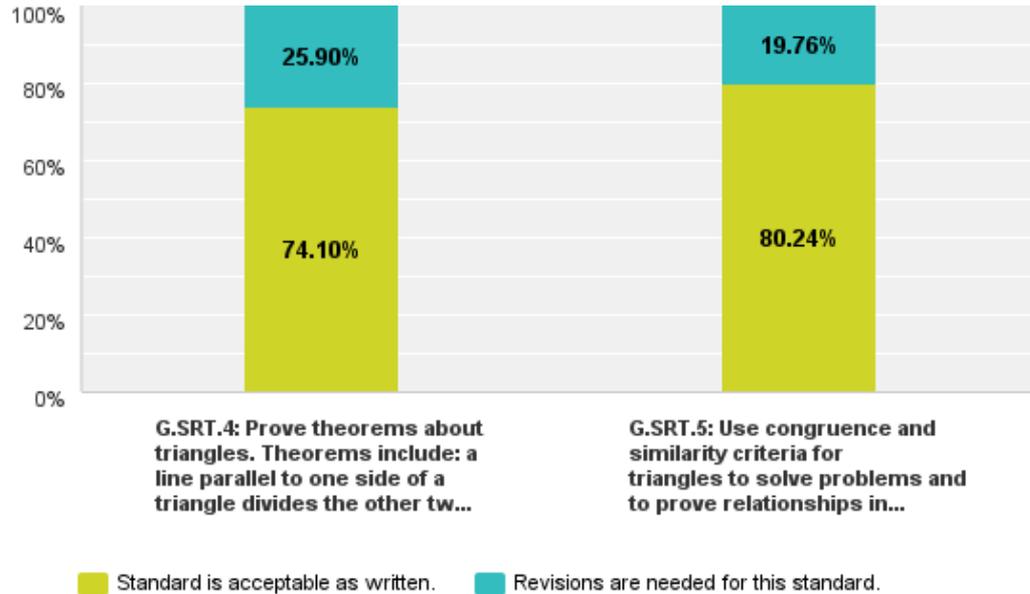
Q27: Math III || Understand similarity in terms of similarity transformations

Answered: 168 Skipped: 89



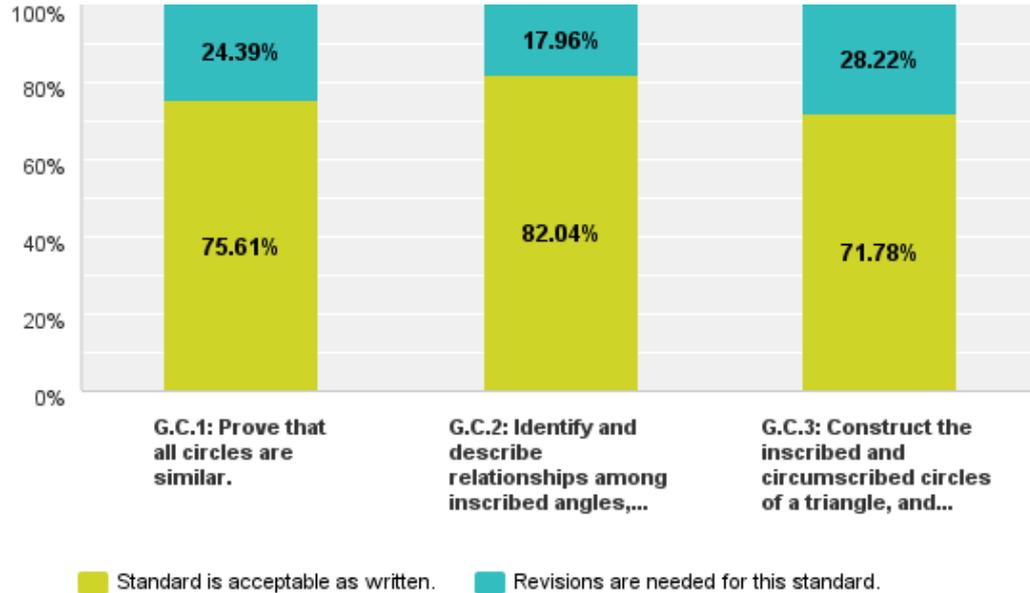
Q28: Math III || Prove theorems involving similarity

Answered: 168 Skipped: 89



Q29: Math III || Understand and apply theorems about circles

Answered: 168 Skipped: 89



Q30: Math III || Find arc lengths and areas of sectors of circles

Answered: 168 Skipped: 89

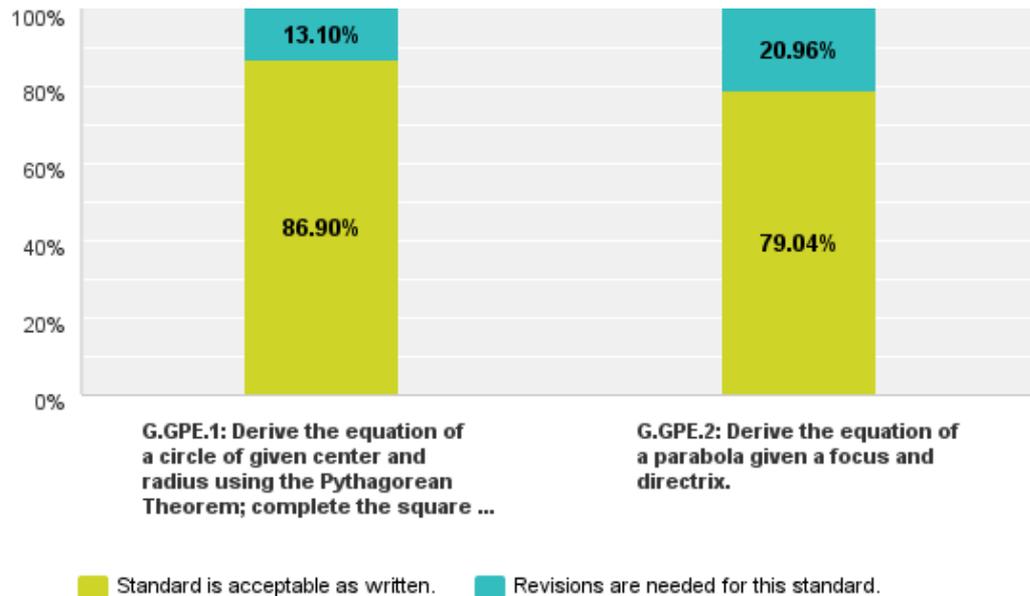


G.C.5: Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

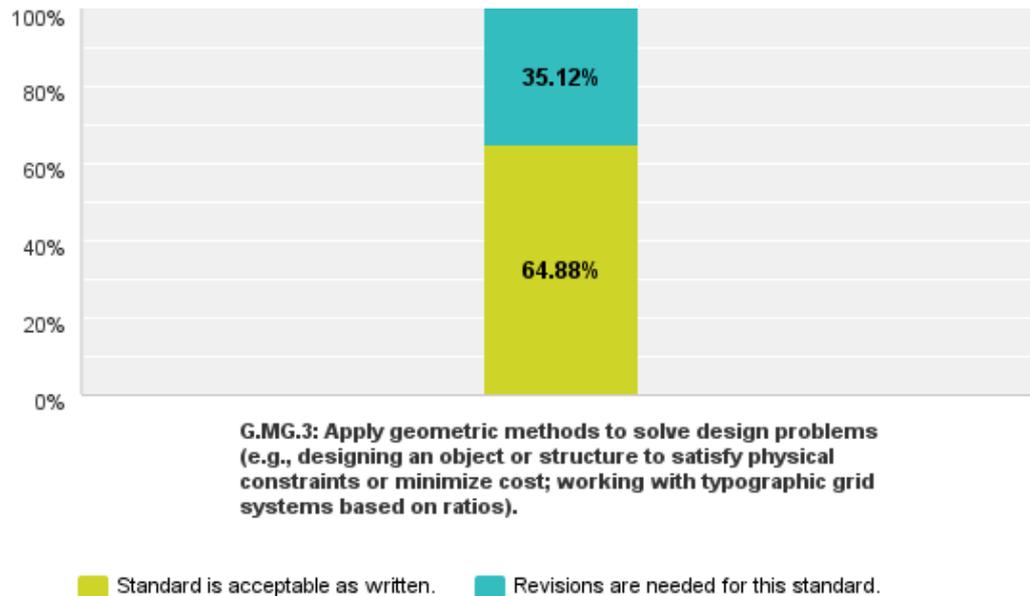
Q31: Math III || Translate between the geometric description and the equation for a conic section

Answered: 168 Skipped: 89



Q32: Math III || Apply geometric concepts in modeling situations

Answered: 168 Skipped: 89



G.MG.3: Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

Q33: Math III || Summarize, represent, and interpret data on a single count or measurement variable

Answered: 167 Skipped: 90

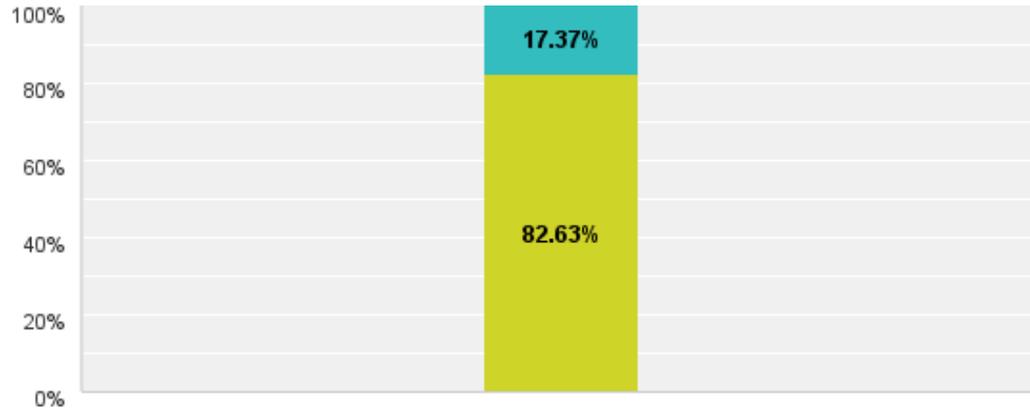


S.ID.4: Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheet...

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q34: Math III || Understand and evaluate random processes underlying statistical experiments

Answered: 167 Skipped: 90



S.IC.1: Understand statistics as a process for making inferences about population parameters based on a random sample from that population.

■ Standard is acceptable as written. ■ Revisions are needed for this standard.

Q35: Math III || Make inferences and justify conclusions from sample surveys, experiments, and observational studies

Answered: 165 Skipped: 92



Q36: Math III || Use probability to evaluate outcomes of decisions

Answered: 165 Skipped: 92

