PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Algebra and Functions Solve problems using algebraic expressions and symbols to represent relationships, patterns and functions of different types.	Grade 9	10. Identify independent and dependent variables in real-life relationships	10
	Grade 9	11. Use equivalent forms of equations and inequalities to solve real-life problems	11
	Grade 9	12. Evaluate polynomial expressions for given values of the variable	12
	Grade 9	13. Translate between the characteristics defining a line (i.e., slope, intercepts, points) and both its equation and graph	13
	Grade 9	14. Graph and interpret linear inequalities in one or two variables and systems of linear inequalities	14
	Grade 9	15. Translate among tabular, graphical, and algebraic representations of functions and reallife situations	15
	Grade 9	16. Interpret and solve systems of linear equations using graphing, substitution, elimination, with and without technology, and matrices using technology	16
	Grade 9	35. Determine if a relation is a function and use appropriate function notation	35
	Grade 9	36. Identify the domain and range of functions	36
	Grade 9	37. Analyze real-life relationships that can be modeled by linear functions	37
	Grade 9	38. Identify and describe the characteristics of families of linear functions, with and without technology	38
	Grade 9	39. Compare and contrast linear functions algebraically in terms of their rates of change and intercepts	39
	Grade 9	40. Explain how the graph of a linear function changes as the coefficients or constants are changed in the function's symbolic representation	40
	Grade 9	8. Use order of operations to simplify or rewrite variable expressions	8
	Grade 9	9. Model real-life situations using linear expressions, equations, and inequalities	9
	Grade 10	26. Generalize and represent patterns symbolically, with and without technology	26

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Algebra and Functions Solve problems using algebraic expressions and symbols to represent relationships, patterns and functions of different types.	Grade 10	27. Translate among tabular, graphical, and symbolic representations of patterns in real-life situations, with and without technology	27
	Grade 10	5. Write the equation of a line of best fit for a set of 2-variable real-life data presented in table or scatter plot form, with or without technology	5
	Grade 10	6. Write the equation of a line parallel or perpendicular to a given line through a specific point	6
	Grades: 11-12	10. Model and solve problems involving quadratic, polynomial, exponential, logarithmic, step function, rational, and absolute value equations using technology	10
	Grades: 11-12	24. Model a given set of real-life data with a non-linear function	24
	Grades: 11-12	25. Apply the concept of a function and function notation to represent and evaluate functions	25
	Grades: 11-12	26. Represent and solve problems involving nth terms and sums for arithmetic and geometric series	26
	Grades: 11-12	27. Compare and contrast the properties of families of polynomial, rational, exponential, and logarithmic functions, with and without technology	27
	Grades: 11-12	28. Represent and solve problems involving the translation of functions in the coordinate plane	28
	Grades: 11-12	29. Determine the family or families of functions that can be used to represent a given set of real-life data, with and without technology	29
	Grades: 11-12	4. Translate and show the relationships among non-linear graphs, related tables of values, and algebraic symbolic representations	4
	Grades: 11-12	5. Factor simple quadratic expressions including general trinomials, perfect squares, difference of two squares, and polynomials with common factors	5
	Grades: 11-12	6. Analyze functions based on zeros, asymptotes, and local and global characteristics of the function	6
	Grades: 11-12	7. Explain, using technology, how the graph of a function is affected by change of degree, coefficient, and constants in polynomial, rational, radical, exponential, and logarithmic functions	7

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004 Course/ Level	Standard	Standard ID
Algebra and Functions Solve problems using algebraic expressions and symbols to represent relationships, patterns and functions of different types.	Grades: 11-12	8. Categorize non-linear graphs and their equations as quadratic, cubic, exponential, logarithmic, step function, rational, trigonometric, or absolute value	8
	Grades: 11-12	9. Solve quadratic equations by factoring, completing the square, using the quadratic formula, and graphing	9
Communication Express mathematical ideas precisely and communicate them coherently and clearly in the language and notation of mathematics.	Grade 9	1. Identify and describe differences among natural numbers, whole numbers, integers, rational numbers, and irrational numbers	1
	Grade 9	10. Identify independent and dependent variables in real-life relationships	10
	Grade 9	17. Distinguish between precision and accuracy	17
	Grade 9	18. Demonstrate and explain how the scale of a measuring instrument determines the precision of that instrument	18
	Grade 9	20. Demonstrate and explain how relative measurement error is compounded when determining absolute error	20
	Grade 9	25. Explain slope as a representation of "rate of change"	25
	Grade 9	27. Determine the most appropriate measure of central tendency for a set of data based on its distribution	27
	Grade 9	28. Identify trends in data and support conclusions by using distribution characteristics such as patterns, clusters, and outliers	28
	Grade 9	31. Define probability in terms of sample spaces, outcomes, and events	31
	Grade 9	33. Explain the relationship between the probability of an event occurring, and the odds of an event occurring and compute one given the other	33
	Grade 9	35. Determine if a relation is a function and use appropriate function notation	35
	Grade 9	36. Identify the domain and range of functions	36
	Grade 9	38. Identify and describe the characteristics of families of linear functions, with and without technology	38

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Communication Express mathematical ideas precisely and communicate them coherently and clearly in the language and notation of mathematics.	Grade 9	4. Distinguish between an exact and an approximate answer, and recognize errors introduced by the use of approximate numbers with technology	4
	Grade 9	40. Explain how the graph of a linear function changes as the coefficients or constants are changed in the function's symbolic representation	40
	Grade 9	5. Demonstrate computational fluency with all rational numbers (e.g., estimation, mental math, technology, paper/pencil)	5
	Grade 10	22. Interpret and summarize a set of experimental data presented in a table, bar graph, line graph, scatter plot, matrix, or circle graph	22
	Grades: 11-12	15. Identify conic sections, including the degenerate conics, and describe the relationship of the plane and double-napped cone that forms each conic	15
	Grades: 11-12	17. Discuss the differences between samples and populations	17
	Grades: 11-12	19. Correlate/match data sets or graphs and their representations and classify them as exponential, logarithmic, or polynomial functions	19
	Grades: 11-12	20. Interpret and explain, with the use of technology, the regression coefficient and the correlation coefficient for a set of data	20
	Grades: 11-12	22. Explain the limitations of predictions based on organized sample sets of data	22
	Grades: 11-12	7. Explain, using technology, how the graph of a function is affected by change of degree, coefficient, and constants in polynomial, rational, radical, exponential, and logarithmic functions	7
	Grades: 11-12	8. Categorize non-linear graphs and their equations as quadratic, cubic, exponential, logarithmic, step function, rational, trigonometric, or absolute value	8
Connections Connect ideas from different areas of mathematics (particularly geometry and algebra) to state or solve abstract or applied problems.	Grade 9	37. Analyze real-life relationships that can be modeled by linear functions	37
	Grade 9	9. Model real-life situations using linear expressions, equations, and inequalities	9
	Grade 10	14. Develop and apply coordinate rules for translations and reflections of geometric figures	14

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Connections Connect ideas from different areas of mathematics (particularly geometry and algebra) to state or solve abstract or applied problems.	Grade 10	24. Use counting procedures and techniques to solve real-life problems	24
	Grade 10	4. Use ratios and proportional reasoning to solve a variety of real-life problems including similar figures and scale drawings	4
Data, Statistics, and Probability Analyze data, understand descriptive statistics, make inferences and determine the likelihood that certain events will occur.	Grade 9	27. Determine the most appropriate measure of central tendency for a set of data based on its distribution	27
	Grade 9	28. Identify trends in data and support conclusions by using distribution characteristics such as patterns, clusters, and outliers	28
	Grade 9	29. Create a scatter plot from a set of data and determine if the relationship is linear or nonlinear	29
	Grade 9	30. Use simulations to estimate probabilities	30
	Grade 9	31. Define probability in terms of sample spaces, outcomes, and events	31
	Grade 9	32. Compute probabilities using geometric models and basic counting techniques such as combinations and permutations	32
	Grade 9	33. Explain the relationship between the probability of an event occurring, and the odds of an event occurring and compute one given the other	33
	Grade 9	34. Follow and interpret processes expressed in flow charts	34
	Grade 10	20. Show or justify the correlation (match) between a linear or non-linear data set and a graph	20
	Grade 10	21. Determine the probability of conditional and multiple events, including mutually and nonmutually exclusive events	21
	Grade 10	22. Interpret and summarize a set of experimental data presented in a table, bar graph, line graph, scatter plot, matrix, or circle graph	22

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Data, Statistics, and Probability Analyze data, understand descriptive statistics, make inferences and determine the likelihood that certain events will occur.	Grade 10	23. Draw and justify conclusions based on the use of logic (e.g., conditional statements, converse, inverse, contrapositive)	23
	Grade 10	24. Use counting procedures and techniques to solve real-life problems	24
	Grade 10	25. Use discrete math to model real life situations (e.g., fair games, elections)	25
	Grades: 11-12	17. Discuss the differences between samples and populations	17
	Grades: 11-12	18. Devise and conduct well-designed experiments/surveys involving randomization and considering the effects of sample size and bias	18
	Grades: 11-12	19. Correlate/match data sets or graphs and their representations and classify them as exponential, logarithmic, or polynomial functions	19
	Grades: 11-12	20. Interpret and explain, with the use of technology, the regression coefficient and the correlation coefficient for a set of data	20
	Grades: 11-12	22. Explain the limitations of predictions based on organized sample sets of data	22
	Grades: 11-12	23. Represent data and solve problems involving Euler and Hamiltonian paths	23
Geometry and Measurement Solve problems based on understanding the properties of shapes, such as triangles and circles, and the spatial relationships between angles and lines.	Grade 9	17. Distinguish between precision and accuracy	17
	Grade 9	18. Demonstrate and explain how the scale of a measuring instrument determines the precision of that instrument	18
	Grade 9	19. Use significant digits in computational problems	19
	Grade 9	20. Demonstrate and explain how relative measurement error is compounded when determining absolute error	20
	Grade 9	21. Determine appropriate units and scales to use when solving measurement problems	21
	Grade 9	22. Solve problems using indirect measurement	22

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Geometry and Measurement Solve problems based on understanding the properties of shapes, such as triangles and circles, and the spatial relationships between angles and lines.	Grade 9	23. Use coordinate methods to solve and interpret problems (e.g., slope as rate of change, intercept as initial value, intersection as common solution, midpoint as equidistant)	23
	Grade 9	24. Graph a line when the slope and a point or when two points are known	24
	Grade 9	25. Explain slope as a representation of "rate of change"	25
	Grade 9	26. Perform translations and line reflections on the coordinate plane	26
	Grade 10	10. Form and test conjectures concerning geometric relationships including lines, angles, and polygons (i.e., triangles, quadrilaterals, and n-gons), with and without technology	10
	Grade 10	11. Determine angle measurements using the properties of parallel, perpendicular, and intersecting lines in a plane	11
	Grade 10	12. Apply the Pythagorean theorem in both abstract and real-life settings	12
	Grade 10	13. Solve problems and determine measurements involving chords, radii, arcs, angles, secants, and tangents of a circle	13
	Grade 10	14. Develop and apply coordinate rules for translations and reflections of geometric figures	14
	Grade 10	15. Draw or use other methods, including technology, to illustrate dilations of geometric figures	15
	Grade 10	16. Represent and solve problems involving distance on a number line or in the plane	16
	Grade 10	17. Compare and contrast inductive and deductive reasoning approaches to justify conjectures and solve problems	17
	Grade 10	18. Determine angle measures and side lengths of right and similar triangles using trigonometric ratios and properties of similarity, including congruence	18
	Grade 10	19. Develop formal and informal proofs (e.g., Pythagorean theorem, flow charts, paragraphs)	19
	Grade 10	7. Find volume and surface area of pyramids, spheres, and cones	7

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Geometry and Measurement Solve problems based on understanding the properties of shapes, such as triangles and circles, and the spatial relationships between angles and lines.	Grade 10	9. Construct 2- and 3-dimensional figures when given the name, description, or attributes, with and without technology	9
	Grades: 11-12	11. Calculate angle measures in degrees, minutes, and seconds	11
	Grades: 11-12	15. Identify conic sections, including the degenerate conics, and describe the relationship of the plane and double-napped cone that forms each conic	15
	Grades: 11-12	16. Represent translations, reflections, rotations, and dilations of plane figures using sketches, coordinates, vectors, and matrices	16
Number and Operations Understand types of numbers (integers, fractions, decimals), their properties and the correct order of operations. Perform computations correctly.	Grade 9	1. Identify and describe differences among natural numbers, whole numbers, integers, rational numbers, and irrational numbers	1
	Grade 9	2. Evaluate and write numerical expressions involving integer exponents	2
	Grade 9	3. Apply scientific notation to perform computations, solve problems, and write representations of numbers	3
	Grade 9	4. Distinguish between an exact and an approximate answer, and recognize errors introduced by the use of approximate numbers with technology	4
	Grade 9	5. Demonstrate computational fluency with all rational numbers (e.g., estimation, mental math, technology, paper/pencil)	5
	Grade 9	6. Simplify and perform basic operations on numerical expressions involving radicals (e.g., 2 x the square root of 3 + 5 x the square root of 3 = 7 x the square root of 3)	6
	Grade 9	7. Use proportional reasoning to model and solve real-life problems involving direct and inverse variation	7
	Grade 10	1. Simplify and determine the value of radical expressions	1
	Grade 10	2. Predict the effect of operations on real numbers (e.g., the quotient of a positive number divided by a positive number less than 1 is greater than the original dividend)	2

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004 Course/ Level	Standard	Standard ID
Number and Operations Understand types of numbers (integers, fractions, decimals), their properties and the correct order of operations. Perform computations correctly.	Grade 10	4. Use ratios and proportional reasoning to solve a variety of real-life problems including similar figures and scale drawings	4
	Grades: 11-12	2. Evaluate and perform basic operations on expressions containing rational exponents	2
Problem Solving Solve abstract and practical problems, applying and adapting a variety of strategies. Monitor progress and evaluate answers in terms of questions asked.	Grade 9	11. Use equivalent forms of equations and inequalities to solve real-life problems	11
	Grade 9	12. Evaluate polynomial expressions for given values of the variable	12
	Grade 9	16. Interpret and solve systems of linear equations using graphing, substitution, elimination, with and without technology, and matrices using technology	16
	Grade 9	19. Use significant digits in computational problems	19
	Grade 9	2. Evaluate and write numerical expressions involving integer exponents	2
	Grade 9	21. Determine appropriate units and scales to use when solving measurement problems	21
	Grade 9	22. Solve problems using indirect measurement	22
	Grade 9	23. Use coordinate methods to solve and interpret problems (e.g., slope as rate of change, intercept as initial value, intersection as common solution, midpoint as equidistant)	23
	Grade 9	24. Graph a line when the slope and a point or when two points are known	24
	Grade 9	26. Perform translations and line reflections on the coordinate plane	26
	Grade 9	3. Apply scientific notation to perform computations, solve problems, and write representations of numbers	3
	Grade 9	32. Compute probabilities using geometric models and basic counting techniques such as combinations and permutations	32
	Grade 9	6. Simplify and perform basic operations on numerical expressions involving radicals (e.g., 2 x the square root of 3 + 5 x the square root of 3 = 7 x the square root of 3)	6

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Problem Solving Solve abstract and practical problems, applying and adapting a variety of strategies. Monitor progress and evaluate answers in terms of questions asked.	Grade 9	7. Use proportional reasoning to model and solve real-life problems involving direct and inverse variation	7
	Grade 10	1. Simplify and determine the value of radical expressions	1
	Grade 10	10. Form and test conjectures concerning geometric relationships including lines, angles, and polygons (i.e., triangles, quadrilaterals, and n-gons), with and without technology	10
	Grade 10	11. Determine angle measurements using the properties of parallel, perpendicular, and intersecting lines in a plane	11
	Grade 10	13. Solve problems and determine measurements involving chords, radii, arcs, angles, secants, and tangents of a circle	13
	Grade 10	16. Represent and solve problems involving distance on a number line or in the plane	16
	Grade 10	18. Determine angle measures and side lengths of right and similar triangles using trigonometric ratios and properties of similarity, including congruence	18
	Grade 10	21. Determine the probability of conditional and multiple events, including mutually and nonmutually exclusive events	21
	Grade 10	25. Use discrete math to model real life situations (e.g., fair games, elections)	25
	Grade 10	7. Find volume and surface area of pyramids, spheres, and cones	7
	Grades: 11-12	10. Model and solve problems involving quadratic, polynomial, exponential, logarithmic, step function, rational, and absolute value equations using technology	10
	Grades: 11-12	11. Calculate angle measures in degrees, minutes, and seconds	11
	Grades: 11-12	2. Evaluate and perform basic operations on expressions containing rational exponents	2
	Grades: 11-12	23. Represent data and solve problems involving Euler and Hamiltonian paths	23
	Grades: 11-12	24. Model a given set of real-life data with a non-linear function	24
	Grades: 11-12	25. Apply the concept of a function and function notation to represent and evaluate functions	25

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Problem Solving Solve abstract and practical problems, applying and adapting a variety of strategies. Monitor progress and evaluate answers in terms of questions asked.	Grades: 11-12	26. Represent and solve problems involving nth terms and sums for arithmetic and geometric series	26
	Grades: 11-12	28. Represent and solve problems involving the translation of functions in the coordinate plane	28
	Grades: 11-12	5. Factor simple quadratic expressions including general trinomials, perfect squares, difference of two squares, and polynomials with common factors	5
	Grades: 11-12	9. Solve quadratic equations by factoring, completing the square, using the quadratic formula, and graphing	9
Reasoning Develop and use mathematical arguments and proofs to explore the truth of conjectures and justify conclusions.	Grade 9	14. Graph and interpret linear inequalities in one or two variables and systems of linear inequalities	14
	Grade 9	30. Use simulations to estimate probabilities	30
	Grade 9	34. Follow and interpret processes expressed in flow charts	34
	Grade 9	39. Compare and contrast linear functions algebraically in terms of their rates of change and intercepts	39
	Grade 10	12. Apply the Pythagorean theorem in both abstract and real-life settings	12
	Grade 10	17. Compare and contrast inductive and deductive reasoning approaches to justify conjectures and solve problems	17
	Grade 10	19. Develop formal and informal proofs (e.g., Pythagorean theorem, flow charts, paragraphs)	19
	Grade 10	2. Predict the effect of operations on real numbers (e.g., the quotient of a positive number divided by a positive number less than 1 is greater than the original dividend)	2
	Grade 10	20. Show or justify the correlation (match) between a linear or non-linear data set and a graph	20
	Grade 10	23. Draw and justify conclusions based on the use of logic (e.g., conditional statements, converse, inverse, contrapositive)	23

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Reasoning Develop and use mathematical arguments and proofs to explore the truth of conjectures and justify conclusions.	Grades: 11-12	18. Devise and conduct well-designed experiments/surveys involving randomization and considering the effects of sample size and bias	18
	Grades: 11-12	27. Compare and contrast the properties of families of polynomial, rational, exponential, and logarithmic functions, with and without technology	27
	Grades: 11-12	6. Analyze functions based on zeros, asymptotes, and local and global characteristics of the function	6
Representation Use and translate among representations including verbal, numerical, symbolic and graphical to communicate mathematical ideas and solve problems.	Grade 9	13. Translate between the characteristics defining a line (i.e., slope, intercepts, points) and both its equation and graph	13
	Grade 9	15. Translate among tabular, graphical, and algebraic representations of functions and reallife situations	15
	Grade 9	29. Create a scatter plot from a set of data and determine if the relationship is linear or nonlinear	29
	Grade 9	8. Use order of operations to simplify or rewrite variable expressions	8
	Grade 10	15. Draw or use other methods, including technology, to illustrate dilations of geometric figures	15
	Grade 10	26. Generalize and represent patterns symbolically, with and without technology	26
	Grade 10	27. Translate among tabular, graphical, and symbolic representations of patterns in real-life situations, with and without technology	27
	Grade 10	5. Write the equation of a line of best fit for a set of 2-variable real-life data presented in table or scatter plot form, with or without technology	5
	Grade 10	6. Write the equation of a line parallel or perpendicular to a given line through a specific point	6
	Grade 10	9. Construct 2- and 3-dimensional figures when given the name, description, or attributes, with and without technology	9
	Grades: 11-12	16. Represent translations, reflections, rotations, and dilations of plane figures using sketches, coordinates, vectors, and matrices	16

PSAT/NMSQT Skill Category and Description of Skills	Louisiana Math: Grade Level Expectations 2004		
	Course/ Level	Standard	Standard ID
Representation Use and translate among representations including verbal, numerical, symbolic and graphical to communicate mathematical ideas and solve problems.	Grades: 11-12	29. Determine the family or families of functions that can be used to represent a given set of real-life data, with and without technology	29
	Grades: 11-12	4. Translate and show the relationships among non-linear graphs, related tables of values, and algebraic symbolic representations	4

PSAT/NMSQT Skills Insight™ Alignment to State Standards
Executive Summary, July 2010

Purpose
PSAT/NMSQT *Skills Insight*™ is a free online tool designed to help students and educators gain a better understanding of how PSAT/NMSQT® scores relate to specific academic skills. It provides a description of the academic skills that are typical of students scoring at each score band, suggestions for improvement, and practice test questions. Learn more by visiting www.collegeboard.com/psatskills.

The information provided by PSAT/NMSQT *Skills Insight* is organized by skill category. There are five skill categories for the critical reading section, nine for the mathematics section (4 content skill categories; 5 process skill categories), and 5 for the writing skills section. This report shows the alignment between state standards in English Language Arts and Mathematics and the content and skills measured by the PSAT/NMSQT.

Using Alignment Results with PSAT/NMSQT Reports
Schools and districts that administer the PSAT/NMSQT have access to the *Summary of Answers and Skills* (SOAS) report[1]. SOAS reports summarize performance on test sections, skill categories, and individual test questions, and compare local results to the state or nation. Using SOAS and the alignment information provided in this report, schools and districts can develop remediation strategies to help students improve their college readiness skills, future SAT scores, and performance on state assessments.

Mathematics: Alignment Approach and Findings
- There are nine Skills Categories in Mathematics, representing both content and process skills: *Number and Operations*; *Algebra and Functions*; *Geometry and Measurement*; *Data, Statistics and Probability; Problem Solving*; *Representation*; *Reasoning*; *Connections* and *Communication.*
- Only standards for grades 9-12 were considered for these alignments. Within grades 9-12, the areas with the greatest concentration of alignments are the Number and Operations, Algebra and Geometry strands of the state standards. In most cases, Precalculus and Trigonometry were excluded from the alignment study.
- The organization and hierarchy of standards varies on a state-by-state basis. During the alignment process, the College Board aligned the PSAT/NMSQT skills to the most specific level of the state's standards.
- States often integrate process and content standards. In such cases, the state standard received an alignment to both a process skill category and a content skill category.
- Generally, there is strong correspondence between the PSAT/NMSQT Skills Categories in Mathematics and state standards. Coverage of the Skills Categories across a state standards document is dependent upon the specific state standards and on the degree of specificity of language employed within the standards.
- The PSAT/NMSQT is administered to students in grades 10 and 11; consequently, the strongest areas of alignment are in the content categories of *Number and Operations*, *Algebra and Functions* and *Geometry and Measurement* and in the process categories of *Problem Solving*, *Reasoning* and *Representations*. Considering the design and purpose of the PSAT/NMSQT, extensive alignments in upper levels of high school mathematics standards, including Trigonometry, are not intended or expected.

[1] Using the access code printed on the PSAT/NMSQT *Roster of Student Scores and Plans*, SOAS reports can be downloaded from www.collegeboard.com/reports beginning in the first week of January.

- The College Board content specialists who conducted the alignments have a deep understanding of the PSAT/NMSQT test specifications. Therefore, although multiple Skills Categories might link to a particular standard, these alignments display only the strongest and most appropriate matches.

English Language Arts: Alignment Approach and Findings

- Reading and Writing each have five PSAT/NMSQT Skills Categories. In Reading, the categories are *Determining the Meaning of Words*, *Author's Craft*, *Reasoning and Inferencing*, *Organization and Ideas* and *Understanding Literary Elements*. In Writing, the categories are *Manage Word Choice and Grammatical Relationships Between Words*, *Manage Grammatical Structures Used to Modify or Compare*, *Manage Phrases and Clauses in a Sentence*; *Recognize Correctly Formed Sentences* and *Manage Order and Relationships of Sentences and Paragraphs*.
- The PSAT/NMSQT is administered to students in grades 10 and 11, and the College Board targeted the English Language Arts alignments at these specific grade levels. In states where the standards are organized by grade band (grades 9-10, 11-12) or by one high school band (grades 9-12), the College Board aligned to all high school grade levels.
- Given the purpose and design of the PSAT/NMSQT, the English Language Arts alignment is focused on the areas of reading and writing and does not include state standards in speaking, listening, or media literacy. Additionally, these alignments excluded genre-specific state standards (such as those related to American, British, or World literature), although the essential PSAT/NMSQT skills in Reading can be used to support instruction in literature.
- The organization and hierarchy of standards varies on a state-by-state basis. During the alignment process, the College Board aligned the PSAT/NMSQT skills to the most specific level of the state's standards. Coverage of the Skills Categories across a state standards document is dependent upon the specific state standards and on the degree of specificity of language employed within the standards.
- In Writing, generally there is strong correspondence between the PSAT/NMSQT Skills Categories and state standards that focus on grammar, usage, language conventions, and the role of editing and revising in writing.
- In Reading, there is strong correspondence between the PSAT/NMSQT Skills Categories and state standards in the essential areas of vocabulary development (determine the meaning of unfamiliar words or of words with multiple meanings by understanding context and by analyzing roots, prefixes, and suffixes) and reading comprehension (determine the main idea and supporting details; understand the organization of passages; analyze the various elements of an author's craft, including purpose, perspective, word choice, and use of rhetorical and literary devices and understand literary elements such as plot, characterization, and setting).

Summary

In summary, the PSAT/NMSQT Skills Categories correspond well to state standards. Educators can use these alignments to connect the PSAT/NMSQT to their local curricula and state standards to monitor student learning and to build a coherent instructional plan for their students.