TABLE 2: Mathematics College Readiness Standards for Score Range 13–15			
Mathematics Standards	For each skill, knowledge, or process:		
	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Perform one-operation computation with whole numbers and decimals			
Solve problems in one or two steps using whole numbers			
Perform common conversions (e.g., inches to feet or hours to minutes)			
Calculate the average of a list of positive whole numbers			
Perform a single computation using information from a table or chart			
Recognize equivalent fractions and fractions in lowest terms			
Exhibit knowledge of basic expressions (e.g., identify an expression for a total as $b + g$)			
Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals			
Identify the location of a point with a positive coordinate on the number line			
Estimate or calculate the length of a line segment based on other lengths given on a geometric figure			

TABLE 2 (continued): Mathematics College Readiness Standards for Score Range 16–19

Mathematics Standards	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent			
Solve some routine two-step arithmetic problems			
Calculate the average of a list of numbers			
Calculate the average, given the number of data values and the sum of the data values			
Read tables and graphs			
Perform computations on data from tables and graphs			
Use the relationship between the probability of an event and the probability of its complement			
Recognize one-digit factors of a number			
Identify a digit's place value			
Substitute whole numbers for unknown quantities to evaluate expressions			
Solve one-step equations having integer or decimal answers			
Combine like terms (e.g., $2x + 5x$)			
Locate points on the number line and in the first quadrant			
Exhibit some knowledge of the angles associated with parallel lines			
Compute the perimeter of polygons when all side lengths are given			
Compute the area of rectangles when whole number dimensions are given			

TABLE 2 (continued): Mathematics College Readiness Standards for Score Range 20–23

Mathematics Standards	For each skill, knowledge, or process:		
	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Solve routine two-step or three-step arithmetic problems involving concepts such as rate and proportion, tax added, percentage off, and computing with a given average			
Calculate the missing data value, given the average and all data values but one			
Translate from one representation of data to another (e.g., a bar graph to a circle graph)			
Determine the probability of a simple event			
Exhibit knowledge of simple counting techniques*			
Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor			
Evaluate algebraic expressions by substituting integers for unknown quantities			
Add and subtract simple algebraic expressions			
Solve routine first-degree equations			
Perform straightforward word-to-symbol translations			
Multiply two binomials*			
Locate points in the coordinate plane			
Comprehend the concept of length on the number line*			
Exhibit knowledge of slope*			
Find the measure of an angle using properties of parallel lines			
Exhibit knowledge of basic angle properties and special sums of angle measures (e.g., 90°, 180°, and 360°)			
Compute the area and perimeter of triangles and rectangles in simple problems			
Use geometric formulas when all necessary information is given			
Evaluate quadratic functions, expressed in function notation, at integer values†			

*PLAN and ACT only
†ACT only

Mathematics Standards	For each skill, knowledge, or process:		
	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Solve multistep arithmetic problems that involve planning or converting units of measure (e.g., feet per second to miles per hour)			
Calculate the average, given the frequency counts of all the data values			
Manipulate data from tables and graphs			
Compute straightforward probabilities for common situations			
Use Venn diagrams in counting*			
Find and use the least common multiple			
Order fractions			
Work with numerical factors			
Work with scientific notation			
Work with squares and square roots of numbers			
Work problems involving positive integer exponents*			
Work with cubes and cube roots of numbers*			
Determine when an expression is undefined*			
Exhibit some knowledge of the complex numbers[†]			
Solve real-world problems using first-degree equations			
Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions)			
Identify solutions to simple quadratic equations			
Add, subtract, and multiply polynomials*			
Factor simple quadratics (e.g., the difference of squares and perfect square trinomials)*			
Solve first-degree inequalities that do not require reversing the inequality sign*			
Identify the graph of a linear inequality on the number line*			
Determine the slope of a line from points or equations*			
Match linear graphs with their equations*			
Find the midpoint of a line segment*			
Use several angle properties to find an unknown angle measure			
Recognize Pythagorean triples*			
Use properties of isosceles triangles*			
Compute the area of triangles and rectangles when one or more additional simple steps are required			
Compute the area and circumference of circles after identifying necessary information			
Compute the perimeter of simple composite geometric figures with unknown side lengths*			
Evaluate polynomial functions, expressed in function notation, at integer values[†]			
Express the sine, cosine, and tangent of an angle in a right triangle as a ratio of given side lengths[†]			

*PLAN and ACT only
[†]ACT only

TABLE 2 (continued): Mathematics College Readiness Standards for Score Range 28–32

Mathematics Standards (PLAN and ACT only)	For each skill, knowledge, or process:		
	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Solve word problems containing several rates, proportions, or percentages			
Calculate or use a weighted average			
Interpret and use information from figures, tables, and graphs			
Apply counting techniques			
Compute a probability when the event and/or sample space are not given or obvious			
Apply number properties involving prime factorization			
Apply number properties involving even/odd numbers and factors/multiples			
Apply number properties involving positive/negative numbers			
Apply rules of exponents			
Multiply two complex numbers[†]			
Manipulate expressions and equations			
Write expressions, equations, and inequalities for common algebra settings			
Solve linear inequalities that require reversing the inequality sign			
Solve absolute value equations			
Solve quadratic equations			
Find solutions to systems of linear equations			
Interpret and use information from graphs in the coordinate plane			
Match number line graphs with solution sets of linear inequalities			
Use the distance formula			
Use properties of parallel and perpendicular lines to determine an equation of a line or coordinates of a point			
Recognize special characteristics of parabolas and circles (e.g., the vertex of a parabola and the center or radius of a circle)[†]			
Apply properties of 30°-60°-90°, 45°-45°-90°, similar, and congruent triangles			
Use the Pythagorean theorem			
Use relationships involving area, perimeter, and volume of geometric figures to compute another measure			
Evaluate composite functions at integer values[†]			
Apply basic trigonometric ratios to solve right-triangle problems[†]			

[†]ACT only

TABLE 2 (continued): Mathematics College Readiness Standards for Score Range 33–36

Mathematics Standards (ACT only)	For each skill, knowledge, or process:		
	Is it **included** in your mathematics curriculum?	At what grade level (or in which course) are students **first introduced** to it?	At what grade level (or in which course) are students **expected to demonstrate proficiency**?
Solve complex arithmetic problems involving percent of increase or decrease and problems requiring integration of several concepts from pre-algebra and/or pre-geometry (e.g., comparing percentages or averages, using several ratios, and finding ratios in geometry settings)			
Distinguish between mean, median, and mode for a list of numbers			
Analyze and draw conclusions based on information from figures, tables, and graphs			
Exhibit knowledge of conditional and joint probability			
Draw conclusions based on number concepts, algebraic properties, and/or relationships between expressions and numbers			
Exhibit knowledge of logarithms and geometric sequences			
Apply properties of complex numbers			
Write expressions that require planning and/or manipulating to accurately model a situation			
Write equations and inequalities that require planning, manipulating, and/or solving			
Solve simple absolute value inequalities			
Match number line graphs with solution sets of simple quadratic inequalities			
Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$			
Solve problems integrating multiple algebraic and/or geometric concepts			
Analyze and draw conclusions based on information from graphs in the coordinate plane			
Draw conclusions based on a set of conditions			
Solve multistep geometry problems that involve integrating concepts, planning, visualization, and/or making connections with other content areas			
Use relationships among angles, arcs, and distances in a circle			
Use scale factors to determine the magnitude of a size change			
Compute the area of composite geometric figures when planning or visualization is required			
Write an expression for the composite of two simple functions			
Use trigonometric concepts and basic identities to solve problems			
Exhibit knowledge of unit circle trigonometry			
Match graphs of basic trigonometric functions with their equations			