

**Correlation of Continental Press's *New York State Mathematics* workbook  
to the *Grades 3–8 Mathematics Testing Program Guidance, September–April/May–June*  
released by the NY State Education Department**

**Grade 7**

<b>Performance Indicator Code</b>	<b>Performance Indicator</b>	<b>Sept.-April/ May-June Instructional Periods</b>	<b>New York State Mathematics Workbook</b>
<b>Number Sense and Operations Number Systems</b>			
7.N.1	Distinguish between the various subsets of real numbers (counting/natural numbers, whole numbers, integers, rational numbers, and irrational numbers.)	September-April	Pages 13–16
7.N.2	Recognize the difference between rational and irrational numbers (e.g., explore different approximations of $\pi$ .)	September-April	Pages 13–16
7.N.3	Place rational and irrational numbers (approximations) on a number line and justify the placement of the numbers	September-April	Pages 13–16
7.N.4	Develop the laws of exponents for multiplication and division	September-April	Pages 45–48
7.N.5	Write numbers in scientific notation	September-April	Pages 17–20
7.N.6	Translate numbers from scientific notation into standard form	September-April	Pages 17–20
7.N.7	Compare numbers written in scientific notation	September-April	Pages 17–20
<b>Number Sense and Operations Number Theory</b>			
7.N.8	Find the common factors and greatest common factor of two or more numbers	September-April	Pages 25–28
7.N.9	Determine multiples and least common multiple of two or more numbers	September-April	Pages 25–28
7.N.10	Determine the prime factorization of a given number and write in exponential form	September-April	Pages 29–32
<b>Number Sense and Operations Operations</b>			
7.N.11	Simplify expressions using order of operations. Note: Expressions may include absolute value and/or integral exponents greater than 0	September-April	Pages 49–52
7.N.12	Add, subtract, multiply, and divide integers	September-April	Pages 41–44
7.N.13	Add and subtract two integers (with and without the use of a number line)	September-April	Pages 41–44
7.N.14	Develop a conceptual understanding of negative and zero exponents with a base of ten and relate to fractions and decimals (e.g., $10^{-2} = .01 = 1/100$ )	September-April	Pages 17–20
7.N.15	Recognize and state the value of the square root of a perfect square (up to 225)	September-April	Pages 53–56



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<b>Number Sense and Operations Operations</b>			
7.N.16	Determine the square root of non-perfect squares using a calculator	September-April	Pages 53–56
7.N.17	Classify irrational numbers as non-repeating/non-terminating decimals	September-April	Pages 13–16
<b>Number Sense and Operations Estimation</b>			
7.N.18	Identify the two consecutive whole numbers between which the square root of a non-perfect square whole number less than 225 lies (with and without the use of a number line)	September-April	Pages 53–56
7.N.19	Justify the reasonableness of answers using estimation	September-April	Pages 61–64
<b>Algebra Variables and Expressions</b>			
7.A.1	Translate two-step verbal expressions into algebraic expressions	September-April	Pages 69–72
7.A.2*	Add and subtract monomials with exponents of one	September-April	Pages 73–76
7.A.3*	Identify a polynomial as an algebraic expression containing one or more terms	September-April	Pages 73–76
<b>Algebra Equations and Inequalities</b>			
7.A.4*	Solve multi-step equations by combining like terms, using the distributive property, or moving variables to one side of the equation	September-April	Pages 77–80
7.A.5	Solve one-step inequalities (positive coefficients only) (See 7.G.10)	September-April	Pages 81–84
7.A.6	Evaluate formulas for given input values (surface area, rate, and density problems)	September-April	Pages 89–92
<b>Algebra Patterns, Relations and Functions</b>			
7.A.7*	Draw the graphic representation of a pattern from an equation or from a table of data	September-April	Pages 97–100
7.A.8*	Create algebraic patterns using charts/tables, graphs, equations, and expressions	September-April	Pages 93–96
7.A.9	Build a pattern to develop a rule for determining the sum of the interior angles of polygons	May-June	Pages 105–108
7.A.10	Write an equation to represent a function from a table of values	May-June	Pages 93–96



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<b>Geometry Shapes</b>			
7.G.1	Calculate the radius or diameter, given the circumference or area of a circle	September-April	Pages 109–112
7.G.2	Calculate the volume of prisms and cylinders, using a given formula and a calculator	September-April	Pages 117–120
7.G.3	Identify the two-dimensional shapes that make up the faces and bases of three-dimensional shapes (prisms, cylinders, cones, and pyramids)	September-April	Pages 113–116
7.G.4	Determine the surface area of prisms and cylinders, using a calculator and a variety of methods	September-April	Pages 117–120
<b>Geometry Geometric Relationships</b>			
7.G.5*	Identify the right angle, hypotenuse, and legs of a right triangle	September-April	Pages 121–124
7.G.6*	Explore the relationship between the lengths of the three sides of a right triangle to develop the Pythagorean Theorem	September-April	Pages 121–124
7.G.7	Find a missing angle when given angles of a quadrilateral	September-April	Pages 105–108
7.G.8*	Use the Pythagorean Theorem to determine the unknown length of a side of a right triangle	September-April	Pages 121–124
7.G.9*	Determine whether a given triangle is a right triangle by applying the Pythagorean Theorem and using a calculator	September-April	Pages 121–124
<b>Geometry Coordinate Geometry</b>			
7.G.10	Graph the solution set of an inequality (positive coefficients only) on a number line (See 7.A.5)	September-April	Pages 81–84
<b>Measurement Units of Measurement</b>			
7.M.1	Calculate distance using a map scale	May-June	Pages 129–132
7.M.2	Convert capacities and volumes within a given system	September-April	Pages 133–136
7.M.3	Identify customary and metric units of mass	September-April	Pages 137–140
7.M.4	Convert mass within a given system	September-April	Pages 137–140
7.M.5	Calculate unit price using proportions	May-June	Pages 145–148
7.M.6	Compare unit prices	May-June	Pages 145–148
7.M.7	Convert money between different currencies with the use of an exchange rate table and a calculator	May-June	Pages 145–148
7.M.8	Draw central angles in a given circle using a protractor (circle graphs)	September-April	Pages 169–172



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<b>Measurement Tools and Methods</b>			
7.M.9	Determine the tool and technique to measure with an appropriate level of precision: mass	September-April	Pages 137–140
<b>Measurement Estimation</b>			
7.M.10	Identify the relationship between relative error and magnitude when dealing with large numbers (e.g., money, population)	September-April	Pages 153–156
7.M.11	Estimate surface area	September-April	Pages 149–152
7.M.12	Determine personal references for customary/metric units of mass	September-April	Pages 149–152
7.M.13	Justify the reasonableness of the mass of an object	September-April	Pages 149–152
<b>Statistics and Probability Collection of Data</b>			
7.S.1	Identify and collect data using a variety of methods	September-April	Pages 165–168
<b>Statistics and Probability Organization and Display of Data</b>			
7.S.2	Display data in a circle graph	September-April	Pages 169–172
7.S.3	Convert raw data into double bar graphs and double line graphs	September-April	Pages 173–176
<b>Statistics and Probability Analysis of Data</b>			
7.S.4	Calculate the range for a given set of data	September-April	Pages 161–164
7.S.5	Select the appropriate measure of central tendency	September-April	Pages 177–180
7.S.6	Read and interpret data represented graphically (pictograph, bar graph, histogram, line graph, double line/bar graphs, or circle graph.)	September-April	Pages 169–172, 173–176
<b>Statistics and Probability Predictions from Data</b>			
7.S.7	Identify and explain misleading statistics and graphs	September-April	Pages 177–180



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<b>Statistics and Probability</b>			
<b>Probability</b>			
7.S.8	Interpret data to provide the basis for predictions and to establish experimental probabilities	September-April	Pages 193–196
7.S.9	Determine the validity of sampling methods to predict outcomes	September-April	Pages 193–196
7.S.10	Predict the outcome of an experiment	September-April	Pages 193–196
7.S.11	Design and conduct an experiment to test predictions	September-April	Pages 193–196
7.S.12	Compare actual results to predicted results	September-April	Pages 193–196

<b>Key to Performance Indicator Code:</b>	7.N.12 7 = 7th Grade N = Number Sense & Operations 12 = Performance Indicator Number
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