

**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 8**

<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 Operations</b>			
8.N.1	Develop and apply the laws of exponents for multiplication and division	September-April	Pages 45–48
8.N.2	Evaluate expressions with integral exponents	September-April	Pages 45–48
8.N.3	Read, write, and identify percents less than 1% and greater than 100%	September-April	Pages 29–32
8.N.4	Apply percents to: Tax, percent increase/decrease, simple interest, sale price, commission, interest rates, and gratuities	September-April	Pages 49–52, 53–56
<b>Number Sense and Operations Estimation</b>			
8.N.5	Estimate a percent of a quantity, given an application	September-April	Pages 57–60
8.N.6	Justify the reasonableness of answers using estimation	September-April	Pages 57–60
<b>Algebra Variables and Expressions</b>			
8.A.1	Translate verbal sentences into algebraic inequalities	September-April	Pages 65–68
8.A.2	Write verbal expressions that match given mathematical expressions	September-April	Pages 65–68
8.A.3	Describe a situation involving relationships that matches a given graph	September-April	Pages 145–148
8.A.4	Create a graph given a description or an expression for a situation involving a linear or nonlinear relationship	September-April	Pages 197–200
<b>Algebra Variables and Expressions</b>			
8.A.5	Use physical models to perform operations with polynomials	September-April	Pages 81–84, 85–88
8.A.6	Multiply and divide monomials	September-April	Pages 73–76
8.A.7	Add and subtract polynomials (integer coefficients)	September-April	Pages 69–72
<b>Algebra Variables and Expressions</b>			
8.A.8	Multiply a binomial by a monomial or binomial (integer coefficients)	September-April	Pages 81–84
8.A.9	Divide a polynomial by a monomial (integer coefficients). Note: The degree of the denominator is less than or equal to the degree of the numerator for all variables	September-April	Pages 85–88



Performance Indicator Code	Performance Indicator	Sept.-April/ May-June Instructional Periods	New York State Mathematics Workbook
<b>Algebra Variables and Expressions</b>			
8.A.10	Factor algebraic expressions using the GCF	September-April	Pages 89–92
8.A.11	Factor a trinomial in the form $ax^2+bx+c$ ; $a=1$ and $c$ having no more than 3 sets of factors	September-April	Pages 93–96
<b>Algebra Equations and Inequalities</b>			
8.A.12	Apply algebra to determine the measure of angles formed by or contained in parallel lines cut by a transversal and by intersecting lines	September-April	Pages 129–132
8.A.13*	Solve multi-step inequalities and graph the solution set on a number line	September-April	Pages 133–136
8.A.14*	Solve linear inequalities by combining like terms, using the distributive property, or moving variables to one side of the inequality (include multiplication or division of inequalities by a negative number)	September-April	Pages 137–140
<b>Algebra Equations and Inequalities</b>			
8.A.15	Understand that numerical information can be represented in multiple ways: arithmetically, algebraically, and graphically	September-April	Pages 145–148
8.A.16	Find a set of ordered pairs to satisfy a given linear numerical pattern (expressed algebraically); then plot the ordered pairs and draw the line	September-April	Pages 145–148
<b>Algebra Patterns, Relations and Functions</b>			
8.A.17	Define and use correct terminology when referring to function (domain and range)	May-June	Pages 149–152
8.A.18	Determine if a relation is a function	May-June	Pages 149–152
8.A.19	Interpret multiple representations using equation, table of values, and graph	May-June	Pages 153–156
<b>Algebra Coordinate Geometry</b>			
<b>Geometry Constructions</b>			
8.G.0	Construct the following using a straight edge and compass: Segment congruent to a segment; angle congruent to an angle; perpendicular bisector; and angle bisector	May-June	Pages 113–116, 117–120
<b>Geometry Geometric Relationships</b>			
8.G.1	Identify pairs of vertical angles as congruent	September-April	Pages 101–104
8.G.2	Identify pairs of supplementary and complementary angles	September-April	Pages 101–104
8.G.3	Calculate the missing angle in a supplementary or complementary pair	September-April	Pages 101–104



Performance Indicator Code	Performance Indicator	Sept.-April/ May-June Instructional Periods	New York State Mathematics Workbook
<b>Geometry Geometric Relationships</b>			
8.G.4	Determine angle pair relationship when given two parallel lines cut by a transversal	September-April	Pages 105–108
8.G.5	Calculate the missing angle measurements when given two parallel lines cut by a transversal	September-April	Pages 105–108
8.G.6	Calculate the missing angle measurements when given two intersecting lines and an angle	September-April	Pages 101–104
<b>Geometry Transformational Geometry</b>			
8.G.7	Describe and identify transformations in the plane, using proper function notation (rotations, reflections, translations, and dilations.)	September-April	Pages 161–164, 165–168, 169–172, 173–176
8.G.8	Draw the image of a figure under rotations of 90 and 180 degrees	September-April	Pages 169–172
8.G.9	Draw the image of a figure under a reflection over a given line	September-April	Pages 161–164
8.G.10	Draw the image of a figure under a translation	September-April	Pages 165–168
8.G.11	Draw the image of a figure under a dilation	September-April	Pages 173–176
8.G.12	Identify the properties preserved and not preserved under a reflection, rotation, translation, and dilation	September-April	Pages 161–164, 165–168, 169–172, 173–176
<b>Geometry Coordinate Geometry</b>			
8.G.13*	Determine the slope of a line from a graph and explain the meaning of slope as a constant rate of change	September-April	Pages 181–184
8.G.14*	Determine the y-intercept of a line from a graph and be able to explain the y-intercept	September-April	Pages 181–184
8.G.15*	Graph a line using a table of values	September-April	Pages 181–184
<b>Geometry Geometric Relationships</b>			
8.G.16*	Determine the equation of a line given the slope and the y-intercept	September-April	Pages 185–188
8.G.17*	Graph a line from an equation in slope-intercept form ( $y=mx+b$ ).	September-April	Pages 185–188
8.G.18*	Solve systems of equations graphically (only linear, integral solutions, $y=mx+b$ format, no vertical/horizontal lines)	September-April	Pages 189–192
8.G.19*	Graph the solution set of an inequality on a number line	September-April	Pages 133–136, 137–140
8.G.20*	Distinguish between linear and nonlinear equations $ax^2+bx+c$ ; $a=1$ (only graphically)	September-April	Pages 193–196



Performance Indicator Code	Performance Indicator	Sept.-April/ May-June Instructional Periods	New York State Mathematics Workbook
<b>Geometry</b>			
<b>Coordinate Geometry</b>			
8.G.21*	Recognize the characteristics of quadratics in tables, graphs, equations, and situations	September-April	Pages 193–196
<b>Measurement</b>			
<b>Units of Measurement</b>			
8.M.1	Solve equations/proportions to convert to equivalent measurements within metric and customary measurement systems. Note: Also allow Fahrenheit to Celsius and vice versa	September-April	Pages 129–132

<b>Key to Performance Indicator Code:</b>	8.N.6 8 = 8th Grade N = Number Sense & Operations 6= Performance Indicator Number
---	--

