2012 Mathematics Tests Standard and Performance Indicator Map Grade 8

Question	Type	Points	Strand	Performance Indicator
Book 1				
1	Multiple Choice	1	Geometry	8.G.1 Identify pairs of vertical angles as congruent
2	Multiple Choice	1	Geometry	8.G.10 Draw the image of a figure under a translation
3	Multiple Choice	1	Algebra	8.A.7 Add and subtract polynomials (integer coefficients)
4	Multiple Choice	1	Geometry	8.G.4 Determine angle pair relationships when given two parallel lines cut by a transversal
5	Multiple Choice	1	Algebra	8.A.11 Factor a trinomial in the form $ax^2 + bx + c$; a=1 and c having no more than three sets of factors
6	Multiple Choice	1	Measurement	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.*
7	Multiple Choice	1	Geometry	8.G.6 Calculate the missing angle measurements when given two intersecting lines and an angle
8	Multiple Choice	1	Algebra	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.*
9	Multiple Choice	1	Algebra	8.A.1 Translate verbal sentences into algebraic inequalities
10	Multiple Choice	1	Number Sense and Operations	8.N.1 Develop and apply the laws of exponents for multiplication and division
20	Multiple Choice	1	Geometry	8.G.5 Calculate the missing angle measurements when given two parallel lines cut by a transversal

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Question	Type	Points	Strand	Performance Indicator
21	Multiple Choice	1	Algebra	8.A.3 Describe a situation involving relationships that matches a given graph
22	Multiple Choice	1	Geometry	8.G.2 Identify pairs of supplementary and complementary angles
23	Multiple Choice	1	Algebra	8.A.2 Write verbal expressions that match given mathematical expressions
24	Multiple Choice	1	Geometry	8.G.8 Draw the image of a figure under rotations of 90 and 180 degrees
25	Multiple Choice	1	Algebra	8.A.8 Multiply a binomial by a monomial or a binomial (integer coefficients)
26	Multiple Choice	1	Algebra	8.A.7 Add and subtract polynomials (integer coefficients)
27	Multiple Choice	1	Geometry	8.G.5 Calculate the missing angle measurements when given two parallel lines cut by a transversal
28	Multiple Choice	1	Algebra	8.A.6 Multiply and divide monomials
29	Multiple Choice	1	Geometry	8.G.2 Identify pairs of supplementary and complementary angles
30	Multiple Choice	1	Measurement	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.*
31	Multiple Choice	1	Geometry	8.G.3 Calculate the missing angle in a supplementary or complementary pair
Book 2				
32	Multiple Choice	1	Geometry	8.G.12 Identify the properties preserved and not preserved under a reflection, rotation, translation, and dilation
33	Multiple Choice	1	Algebra	8.A.6 Multiply and divide monomials
34	Multiple Choice	1	Geometry	8.G.1 Identify pairs of vertical angles as congruent
35	Multiple Choice	1	Algebra	8.A.2 Write verbal expressions that match given mathematical expressions
36	Multiple Choice	1	Number Sense and Operations	8.N.2 Evaluate expressions with integral exponents

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Question	Type	Points	Strand	Performance Indicator
37	Multiple Choice	1	Geometry	8.G.2 Identify pairs of supplementary and complementary angles
38	Multiple Choice	1	Measurement	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.*
39	Multiple Choice	1	Algebra	8.A.4 Create a graph given a description or an expression for a situation involving a linear or nonlinear relationship
40	Multiple Choice	1	Geometry	8.G.3 Calculate the missing angle in a supplementary or complementary pair
41	Multiple Choice	1	Algebra	8.A.7 Add and subtract polynomials (integer coefficients)
42	Multiple Choice	1	Algebra	8.A.10 Factor algebraic expressions using the GCF
43	Multiple Choice	1	Algebra	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)
51	Multiple Choice	1	Geometry	8.G.3 Calculate the missing angle in a supplementary or complementary pair
52	Multiple Choice	1	Algebra	8.A.8 Multiply a binomial by a monomial or a binomial (integer coefficients)
53	Multiple Choice	1	Geometry	8.G.7 Describe and identify transformations in the plane, using proper function notation (rotations, reflections, translations, and dilations)
54	Multiple Choice	1	Algebra	8.A.10 Factor algebraic expressions using the GCF
55	Multiple Choice	1	Geometry	8.G.5 Calculate the missing angle measurements when given two parallel lines cut by a transversal
56	Multiple Choice	1	Algebra	8.A.1 Translate verbal sentences into algebraic inequalities
57	Multiple Choice	1	Geometry	8.G.1 Identify pairs of vertical angles as congruent

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Question	Type	Points	Strand	Performance Indicator
58	Multiple Choice	1	Algebra	8.A.1 Translate verbal sentences into algebraic inequalities
59	Multiple Choice	1	Geometry	8.G.4 Determine angle pair relationships when given two parallel lines cut by a transversal
60	Multiple Choice	1	Algebra	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.*
61	Multiple Choice	1	Geometry	8.G.9 Draw the image of a figure under a reflection over a given line
62	Multiple Choice	1	Geometry	8.G.6 Calculate the missing angle measurements when given two intersecting lines and an angle
Book 3				
63	Short Response	2	Algebra	8.A.8 Multiply a binomial by a monomial or a binomial (integer coefficients)
64	Short Response	2	Number Sense and Operations	8.N.2 Evaluate expressions with integral exponents
65	Short Response	2	Algebra	8.A.10 Factor algebraic expressions using the GCF
66	Short Response	2	Measurement	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*
67	Short Response	2	Algebra	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
68	Extended Response	3	Measurement	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*

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Question	Type	Points	Strand	Performance Indicator
69	Extended Response	3	Number Sense and Operations	8.N.4 Apply percents to: Tax Percent increase/decrease Simple interest Sale price Commission Interest rates Gratuities
70	Extended Response	3	Geometry	8.G.7 Describe and identify transformations in the plane, using proper function notation (rotations, reflections, translations, and dilations)
71	Extended Response	3	Algebra	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