

2009 Mathematics Test Standard and Performance Indicator Map with Answer Key Grade 6

Question	Type	Points	Strand	Content Performance Indicator	Answer Key
Book 1					
1	Multiple Choice	1	Measurement	6.M03 Identify equivalent customary units of capacity (cups to pints, pints to quarts, and quarts to gallons)	C
2	Multiple Choice	1	Statistics and Probability	6.S06 Determine the range for a given set of data	A
3	Multiple Choice	1	Geometry	5.G13 Plot points to form basic geometric shapes (identify and classify)	C
4	Multiple Choice	1	Number Sense and Operations	6.N24 Represent exponential form as repeated multiplication	D
5	Multiple Choice	1	Algebra	6.A06 Evaluate formulas for given input values (circumference, area, volume, distance, temperature, interest, etc.)	C
6	Multiple Choice	1	Algebra	5.A02 Translate simple verbal expressions into algebraic expressions	C
7	Multiple Choice	1	Number Sense and Operations	6.N16 Add and subtract fractions with unlike denominators	A
8	Multiple Choice	1	Statistics and Probability	6.S05 Determine the mean, mode and median for a given set of data	B
9	Multiple Choice	1	Number Sense and Operations	6.N22 Evaluate numerical expressions using order of operations (may include exponents of two and three)	B
10	Multiple Choice	1	Geometry	6.G01 Calculate the length of corresponding sides of similar triangles, using proportional reasoning	C
11	Multiple Choice	1	Algebra	5.A04 Solve simple one-step equations using basic whole-number facts	D
12	Multiple Choice	1	Algebra	5.A03 Substitute assigned values into variable expressions and evaluate using order of operations	B
13	Multiple Choice	1	Number Sense and Operations	6.N15 Order rational numbers (including positive and negative)	B
14	Multiple Choice	1	Algebra	5.A02 Translate simple verbal expressions into algebraic expressions	C
15	Multiple Choice	1	Number Sense and Operations	6.N18 Add, subtract, multiply, and divide mixed numbers with unlike denominators	D

2009 Mathematics Test Standard and Performance Indicator Map with Answer Key
Grade 6 (continued)

Question	Type	Points	Strand	Content Performance Indicator	Answer Key
Book 1 (continued)					
16	Multiple Choice	1	Geometry	5.G14 Calculate perimeter of basic geometric shapes drawn on a coordinate plane (rectangles and shapes composed of rectangles having sides with integer lengths and parallel to the axes)	B
17	Multiple Choice	1	Geometry	6.G06 Understand the relationship between the diameter and radius of a circle	D
18	Multiple Choice	1	Measurement	6.M05 Identify equivalent metric units of capacity (milliliter to liter and liter to milliliter)	D
19	Multiple Choice	1	Number Sense and Operations	6.N13 Define absolute value and determine the absolute value of rational numbers (including positive and negative)	A
20	Multiple Choice	1	Statistics and Probability	6.S07 Read and interpret graphs	D
21	Multiple Choice	1	Number Sense and Operations	6.N11 Read, write, and identify percents of a whole (0% to 100%)	C
22	Multiple Choice	1	Statistics and Probability	5.S07 Create a sample space and determine the probability of a single event, given a simple experiment (e.g., rolling a number cube)	D
23	Multiple Choice	1	Geometry	6.G04 Determine the volume of rectangular prisms by counting cubes and develop the formula	D
24	Multiple Choice	1	Number Sense and Operations	6.N14 Locate rational numbers on a number line (including positive and negative)	B
25	Multiple Choice	1	Measurement	6.M03 Identify equivalent customary units of capacity (cups to pints, pints to quarts, and quarts to gallons)	A
Book 2					
26	Short Response	2	Number Sense and Operations	6.N23 Represent repeated multiplication in exponential form	n/a
27	Short Response	2	Geometry	6.G05 Identify radius, diameter, chords and central angles of a circle	n/a
28	Short Response	2	Number Sense and Operations	6.N21 Find multiple representations of rational numbers (fractions, decimals, and percents 0 to 100)	n/a
29	Short Response	2	Algebra	6.A02 Use substitution to evaluate algebraic expressions (may include exponents of one, two and three)	n/a

2009 Mathematics Test Standard and Performance Indicator Map with Answer Key
Grade 6 (continued)

Question	Type	Points	Strand	Content Performance Indicator	Answer Key
Book 2 (continued)					
30	Short Response	2	Statistics and Probability	5.S07 Create a sample space and determine the probability of a single event, given a simple experiment (e.g., rolling a number cube)	n/a
31	Short Response	2	Measurement	6.M01 Measure capacity and calculate volume of a rectangular prism	n/a
32	Extended Response	3	Number Sense and Operations	6.N02 Define and identify the commutative and associative properties of addition and multiplication	n/a
33	Extended Response	3	Number Sense and Operations	6.N12 Solve percent problems involving percent, rate, and base	n/a
34	Extended Response	3	Statistics and Probability	6.S08 Justify predictions made from data	n/a
35	Extended Response	3	Algebra	5.A05 Solve and explain simple one-step equations using inverse operations involving whole numbers	n/a