



2012 Mathematics Tests Standard and Performance Indicator Map Grade 4

Question	Type	Points	Strand	Performance Indicator
Book 1				
1	Multiple Choice	1	Number Sense and Operations	4.N.14 Use a variety of strategies to add and subtract numbers up to 10,000
2	Multiple Choice	1	Number Sense and Operations	4.N.26 Round numbers less than 1,000 to the nearest tens and hundreds
3	Multiple Choice	1	Number Sense and Operations	4.N.3 Compare and order numbers to 10,000
4	Multiple Choice	1	Number Sense and Operations	4.N.16 Understand various meanings of multiplication and division
5	Multiple Choice	1	Statistics and Probability	4.S.6 Formulate conclusions and make predictions from graphs
6	Multiple Choice	1	Measurement	4.M.3 Know and understand equivalent standard units of length: 12 inches = 1 foot 3 feet = 1 yard
7	Multiple Choice	1	Number Sense and Operations	4.N.2 Read and write whole numbers to 10,000
8	Multiple Choice	1	Number Sense and Operations	4.N.18 Use a variety of strategies to multiply two-digit numbers by one-digit numbers (with and without regrouping)
9	Multiple Choice	1	Number Sense and Operations	4.N.23 Add and subtract proper fractions with common denominators
10	Multiple Choice	1	Number Sense and Operations	4.N.6 Understand, use, and explain the associative property of multiplication
11	Multiple Choice	1	Number Sense and Operations	4.N.19 Use a variety of strategies to multiply two-digit numbers by two-digit numbers (with and without regrouping)
12	Multiple Choice	1	Algebra	4.A.4 Describe, extend, and make generalizations about numeric (+, -, ×, ÷) and geometric patterns

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Question	Type	Points	Strand	Performance Indicator
21	Multiple Choice	1	Measurement	4.M.9 Calculate elapsed time in hours and half hours, not crossing A.M./P.M.
22	Multiple Choice	1	Number Sense and Operations	4.N.21 Use a variety of strategies to divide two-digit dividends by one-digit divisors (with and without remainders)
23	Multiple Choice	1	Measurement	4.M.8 Make change, using combined coins and dollar amounts
24	Multiple Choice	1	Measurement	4.M.4 Select tools and units appropriate to the mass of the object being measured (grams and kilograms)
25	Multiple Choice	1	Statistics and Probability	4.S.5 Develop and make predictions that are based on data
26	Multiple Choice	1	Algebra	4.A.3 Find the value or values that will make an open sentence true, if it contains $<$ or $>$
27	Multiple Choice	1	Statistics and Probability	4.S.3 Represent data using tables, bar graphs, and pictographs
28	Multiple Choice	1	Measurement	4.M.1 Select tools and units (customary and metric) appropriate for the length being measured
29	Multiple Choice	1	Geometry	4.G.1 Identify and name polygons, recognizing that their names are related to the number of sides and angles (triangle, quadrilateral, pentagon, hexagon, and octagon)
30	Multiple Choice	1	Number Sense and Operations	4.N.13 Develop an understanding of the properties of odd/even numbers as a result of multiplication
31	Multiple Choice	1	Algebra	4.A.5 Analyze a pattern or a whole-number function and state the rule, given a table or an input/output box
Book 2				
32	Multiple Choice	1	Statistics and Probability	4.S.4 Read and interpret line graphs
33	Multiple Choice	1	Number Sense and Operations	4.N.20 Develop fluency in multiplying and dividing multiples of 10 and 100 up to 1,000
34	Multiple Choice	1	Number Sense and Operations	4.N.14 Use a variety of strategies to add and subtract numbers up to 10,000

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Question	Type	Points	Strand	Performance Indicator
35	Multiple Choice	1	Number Sense and Operations	4.N.24 Express decimals as an equivalent form of fractions to tenths and hundredths
36	Multiple Choice	1	Statistics and Probability	4.S.6 Formulate conclusions and make predictions from graphs
37	Multiple Choice	1	Measurement	4.M.6 Select tools and units appropriate to the capacity being measured (milliliters and liters)
38	Multiple Choice	1	Measurement	4.M.3 Know and understand equivalent standard units of length: 12 inches = 1 foot 3 feet = 1 yard
39	Multiple Choice	1	Statistics and Probability	4.S.3 Represent data using tables, bar graphs, and pictographs
40	Multiple Choice	1	Algebra	4.A.2 Use the symbols $<$, $>$, $=$, and \neq (with and without the use of a number line) to compare whole numbers and unit fractions and decimals (up to hundredths)
41	Multiple Choice	1	Measurement	4.M.8 Make change, using combined coins and dollar amounts
42	Multiple Choice	1	Geometry	4.G.5 Define and identify vertices, faces, and edges of three-dimensional shapes
43	Multiple Choice	1	Number Sense and Operations	4.N.3 Compare and order numbers to 10,000
51	Multiple Choice	1	Number Sense and Operations	4.N.27 Check reasonableness of an answer by using estimation
52	Multiple Choice	1	Geometry	4.G.1 Identify and name polygons, recognizing that their names are related to the number of sides and angles (triangle, quadrilateral, pentagon, hexagon, and octagon)
53	Multiple Choice	1	Measurement	4.M.4 Select tools and units appropriate to the mass of the object being measured (grams and kilograms)
54	Multiple Choice	1	Number Sense and Operations	4.N.4 Understand the place value structure of the base ten number system: 10 ones = 1 ten 10 tens = 1 hundred 10 hundreds = 1 thousand 10 thousands = 1 ten thousand

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Question	Type	Points	Strand	Performance Indicator
55	Multiple Choice	1	Algebra	4.A.4 Describe, extend, and make generalizations about numeric (+, -, ×, ÷) and geometric patterns
56	Multiple Choice	1	Number Sense and Operations	4.N.18 Use a variety of strategies to multiply two-digit numbers by one-digit numbers (with and without regrouping)
57	Multiple Choice	1	Statistics and Probability	4.S.6 Formulate conclusions and make predictions from graphs
58	Multiple Choice	1	Number Sense and Operations	4.N.22 Interpret the meaning of remainders
59	Multiple Choice	1	Geometry	4.G.2 Identify points and line segments when drawing a plane figure
60	Multiple Choice	1	Number Sense and Operations	4.N.17 Use multiplication and division as inverse operations to solve problems
61	Multiple Choice	1	Measurement	4.M.10 Calculate elapsed time in days and weeks, using a calendar
62	Multiple Choice	1	Number Sense and Operations	4.N.8 Recognize and generate equivalent fractions (halves, fourths, thirds, fifths, sixths, and tenths) using manipulatives, visual models, and illustrations
Book 3				
63	Short Response	2	Measurement	4.M.8 Make change, using combined coins and dollar amounts
64	Short Response	2	Number Sense and Operations	4.N.16 Understand various meanings of multiplication and division
65	Short Response	2	Algebra	4.A.2 Use the symbols <, >, =, and ≠ (with and without the use of a number line) to compare whole numbers and unit fractions and decimals (up to hundredths)
66	Short Response	2	Number Sense and Operations	4.N.15 Select appropriate computational and operational methods to solve problems
67	Short Response	2	Algebra	4.A.1 Evaluate and express relationships using open sentences with one operation
68	Extended Response	3	Geometry	4.G.3 Find perimeter of polygons by adding sides
69	Extended Response	3	Number Sense and Operations	4.N.20 Develop fluency in multiplying and dividing multiples of 10 and 100 up to 1,000

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Question	Type	Points	Strand	Performance Indicator
70	Extended Response	3	Number Sense and Operations	4.N.22 Interpret the meaning of remainders
71	Extended Response	3	Statistics and Probability	4.S.6 Formulate conclusions and make predictions from graphs