

| Question | Type | Points | Strand | Content Performance Indicator | Answer Key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Book 1 |  |  |  |  |  |
| 1 | Multiple Choice | 1 | Number Sense and Operations | 6.N07 Express equivalent ratios as a proportion | C |
| 2 | Multiple Choice | 1 | Number Sense and Operations | 6.N23 Represent repeated multiplication in exponential form | C |
| 3 | Multiple Choice | 1 | Algebra | 5.A04 Solve simple one-step equations using basic whole-number facts | B |
| 4 | Multiple Choice | 1 | Number Sense and Operations | 6.N13 Define absolute value and determine the absolute value of rational numbers (including positive and negative) | D |
| 5 | Multiple Choice | 1 | Geometry | 6.G11 Calculate the area of basic polygons drawn on a coordinate plane (rectangles and shapes composed of rectangles having sides with integer lengths) | C |
| 6 | Multiple Choice | 1 | Number Sense and Operations | 6.N05 Define and identify the zero property of multiplication | A |
| 7 | Multiple Choice | 1 | Geometry | 6.G05 Identify radius, diameter, chords, and central angles of a circle | C |
| 8 | Multiple Choice | 1 | Algebra | 6.A05 Solve simple proportions within context | B |
| 9 | Multiple Choice | 1 | Statistics and Probability | 6.S11 Determine the number of possible outcomes for a compound event by using the fundamental counting principle and use this to determine the probabilities of events when the outcomes have equal probability | C |
| 10 | Multiple Choice | 1 | Geometry | 6.G10 Identify and plot points in all four quadrants | D |
| 11 | Multiple Choice | 1 | Statistics and Probability | 6.S05 Determine the mean, mode, and median for a given set of data | C |
| 12 | Multiple Choice | 1 | Algebra | 6.A03 Translate two-step verbal sentences into algebraic equations | D |
| 13 | Multiple Choice | 1 | Measurement | 6.M05 Identify equivalent metric units of capacity (milliliter to liter and liter to milliliter) | C |
| 14 | Multiple Choice | 1 | Algebra | 6.A06 Evaluate formulas for given input values (circumference, area, volume, distance, temperature, interest, etc.) | A |
| 15 | Multiple Choice | 1 | Number Sense and Operations | 6.N22 Evaluate numerical expressions using order of operations (may include exponents of two and three) | C |

# 2010 Mathematics Test Standard and Performance Indicator Map with Answer Key Grade 6 (continued) 

| Question | Type | Points | Strand | Content Performance Indicator | Answer <br> Key |  |
| :---: | :--- | :---: | :--- | :--- | :--- | :---: |
| Book 1 (continued) |  |  |  |  |  |  |
| 16 | Multiple Choice | 1 | Number Sense and Operations | 6.N16 Add and subtract fractions with <br> unlike denominators | A |  |
| 17 | Multiple Choice | 1 | Statistics and Probability | 6.S07 Read and interpret graphs | C |  |
| 18 | Multiple Choice | 1 | Measurement | 6.M03 Identify equivalent customary <br> units of capacity (cups to pints, pints <br> to quarts, and quarts to gallons) | B |  |
| 19 | Multiple Choice | 1 | Number Sense and Operations | 6.N25 Evaluate expressions having <br> exponents where the power is an <br> exponent of one, two, or three | C |  |
| 20 | Multiple Choice | 1 | Number Sense and Operations | 6.N12 Solve percent problems <br> involving percent, rate, and base | A |  |
| 21 | Multiple Choice | 1 | Statistics and Probability | $5 . S 06$ Record experiment results <br> using fractions/ratios | B |  |
| 22 | Multiple Choice | 1 | Geometry | 6.G07 Determine the area and <br> circumference of a circle, using the <br> appropriate formula | D |  |
| 23 | Multiple Choice | 1 | Geometry | 6.G06 Understand the relationship <br> between the diameter and radius of a <br> circle | C |  |
| 24 | Multiple Choice | 1 | Algebra | 6.A01 Translate two-step verbal <br> expressions into algebraic expressions | D |  |
| 25 | Multiple Choice | 1 | Measurement | 6.M03 Identify equivalent customary <br> units of capacity (cups to pints, pints <br> to quarts, and quarts to gallons) | B |  |

## Book 2

| 26 | Short Response | 2 | Algebra | 5.A05 Solve and explain simple one- <br> step equations using inverse <br> operations involving whole numbers | $\mathrm{n} / \mathrm{a}$ |
| :---: | :--- | :---: | :--- | :--- | :---: |
| 27 | Short Response | 2 | Measurement | 6.M01 Measure capacity and calculate <br> volume of a rectangular prism | $\mathrm{n} / \mathrm{a}$ |
| 28 | Short Response | 2 | Number Sense and Operations | 6.N10 Verify the proportionality <br> using the product of the means equals <br> the product of the extremes | $\mathrm{n} / \mathrm{a}$ |
| 29 | Short Response | 2 | Geometry | $5 . G 12$ Identify and plot points in the <br> first quadrant | $\mathrm{n} / \mathrm{a}$ |
| 30 | Short Response | 2 | Number Sense and Operations | 6.N26 Estimate a percent of quantity <br> (0\% to 100\%) | $\mathrm{n} / \mathrm{a}$ |
| 31 | Short Response | 2 | Algebra | $5 . A 05$ Solve and explain simple one- <br> step equations using inverse <br> operations involving whole numbers | $\mathrm{n} / \mathrm{a}$ |
| 32 | Extended Response | 3 | Algebra | $5 . A 05$ Solve and explain simple one- <br> step equations using inverse <br> operations involving whole numbers | $\mathrm{n} / \mathrm{a}$ |
| 33 | Extended Response | 3 | Number Sense and Operations | $6 . N 09$ Solve proportions using <br> equivalent fractions | $\mathrm{n} / \mathrm{a}$ |
| 34 | Extended Response | 3 | Number Sense and Operations | $6 . N 03$ Define and identify the <br> distributive property of multiplication <br> over addition | $\mathrm{n} / \mathrm{a}$ |
| 35 | Extended Response | 3 | Statistics and Probability | 6.S07 Read and interpret graphs | $\mathrm{n} / \mathrm{a}$ |

