



Math Teachers Press, Inc.

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CKP 6/06

IDAHO ACHIEVEMENT STANDARDS CORRELATED TO *MOVING WITH MATH®* *EXTENSIONS GRADE 7*

| | | Student Book | Skill Builders |
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| STANDARD 1: NUMBER AND OPERATION | | | |
| Goal 1.1: Understand and use numbers. | | | |
| By the end of 7th Grade, the student will be able to: | | | |
| 7.M.1.1.1 | Compare magnitudes and relative magnitudes of rational numbers, including integers, fractions, and decimals. (327.01.c) | | 48-2 |
| 7.M.1.1.2 | Solve problems requiring the conversion between simple decimals, fractions, ratios, and percents. (327.01.b) | 24, 37, 38, 47, 48, 51, 52 | 11-2, 11-3, 11-5, 20-1, 25-1, 25-2, 26-1 |
| 7.M.1.1.3 | Locate the position of rational numbers on a number line. (327.01.e) | 20 | 48-1, 48-2 |
| 7.M.1.1.4 | Rewrite multiple factors using exponents. (327.02.c) | 6, | 6-1, 6-2 |
| 7.M.1.1.5 | Apply the number theory concepts of primes, composites, and prime factorization and find the Lowest Common Multiple (LCM) and the Greatest Common Factor (GCF). (327.01.d) | 4, 27 | 3-1, 6-2, 26-2 |
| 7.M.1.1.6 | Recognize pertinent information for problem solving. (328.01.b) | 13-16, 53 | 28-1, 43-1 to 43-6 |
| 7.M.1.1.7 | Describe the use of integers in real-world situations. | 13-16, 53 | 28-1, 43-1 to 43-6 |
| 7.M.1.1.8 | Use appropriate vocabulary. | Glossary and vocabulary words in lessons | |
| Goal 1.2: Perform computations accurately. | | | |
| By the end of 7th Grade, the student will be able to: | | | |
| 7.M.1.2.1 | Recall the common equivalent fractions, decimals, and percents of halves, fourths, and tenths | 26, 27, 37, 38, 48, 52 | 11-1 to 11-3, 11-5, 20-1, 25-1, 25-2, 26-1 |

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| 7.M.1.2.2 | Add, subtract, multiply, and divide whole numbers, fractions and decimals; and add, multiply, and divide integers. (327.02.a, 327.02.d) | 7-11, 28-33, 39-45 | 1-1, 7-1, 8-1, 9-1, 10-1, 10-2, 11-1, 12-1 to 12-3, 13-1 to 13-3, 14-1, 14-2, 15-1, 16-1, 16-2, 17-1, 21-1, 21-2, 22-1, 22-2, 23-1, 24-1, 27-1, 27-2 |
| 7.M.1.2.3 | Evaluate whole numbers in exponential form. | 6 | 6-1 |
| 7.M.1.2.4 | Evaluate numerical expressions using the order of operations with whole number and decimals. (327.02.b) | | |
| 7.M.1.2.5 | Select and use an appropriate method of computation from mental math, paper and pencil, calculator, or a combination of the three. (327.02.e) | 7-11, 28-33, 39-45 | 1-1, 7-1, 8-1, 9-1, 10-1, 10-2, 11-1, 12-1 to 12-3, 13-1 to 13-3, 14-1, 14-2, 15-1, 16-1, 6-2, 17-1, 21-1, 21-2, 22-1, 22-2, 23-1, 24-1, 27-1, 27-2 |
| 7.M.1.2.6 | Use a variety of strategies including common mathematical formulas to compute problems drawn from real life situations. (328.01.a) | 13-16, 53 | 28-1, 43-1 to 43-6 |
| 7.M.1.2.7 | use appropriate vocabulary and notation. (327.01.f) | | |
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| | Goal 1.3: Estimate and judge reasonableness of results. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.1.3.1 | Estimate to predict computation results. (327.03.a) | 3, 12, 34, 36 | 5-1, 19-1, 19-2, 44-1, 44-2 |
| 7.M.1.3.2 | Explain when estimation is appropriate and describe the usefulness of an estimate as opposed to an exact answer. (327.03.b) | | |
| 7.M.1.3.3 | Identify whether a given estimate is an overestimate or underestimate. (327.03.c) | 14 | |
| 7.M.1.3.4 | Use a four-function calculator to solve complex grade-level problems. | | |
| 7.M.1.3.5 | Formulate conjectures and discuss why they must be or seem to be true. (328.02.c) | | |

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| 7.M.1.3.6 | Use appropriate vocabulary and notations. (327.03.d) | Glossary and vocabulary words in lessons | |
| STANDARD 2: CONCEPTS AND PRINCIPLES OF MEASUREMENT. | | | |
| Goal 2.1: Understand and use customary and metric measurements. | | | |
| By the end of 7th Grade, the student will be able to: | | | |
| 7.M.2.1.1 | Select and use appropriate units and tools to make formal measurements in both systems. (329.01.a) | 62-64 | 34-1, 34-2 |
| 7.M.2.1.2 | Apply estimation of measurement to real-world and content problems using standard measuring devices. (329.01.b) | 62-64 | 34-1, 34-2, 36-1 |
| 7.M.2.1.3 | Explain the differences between perimeter, area, and volume (capacity) and their measures within both systems. (329.01.c) | 66, 69, 70, 73, 75, 76 | 38-1, 38-2, 39-1, 40-1 |
| 7.M.2.1.4 | Given the formulas, find the perimeter, circumference, or area of triangles, circles, and quadrilaterals. (331.01.e) | 69-73 | 38-1, 38-2, 39-1, 40-1, 40-2 |
| 7.M.2.1.5 | Convert units of measurement within each system. (329.01.e) | 67, 68 | 35-1, 37-1 |
| 7.M.2.1.6 | Solve problems involving perimeter and area of rectangles and triangles. (329.01.d) | 69-73 | 38-1, 38-2, 39-1, 40-1, 40-2 |
| 7.M.2.1.7 | Use appropriate vocabulary and notations. (329.01.f) | Glossary and vocabulary words in lessons | |
| Goal 2.2: Apply the concepts of rates, ratios, and proportions. | | | |
| By the end of 7th grade, the student will be able to: | | | |
| 7.M.2.2.1 | Explain rates and their relationship to ratios, and use proportions to solve problems represented with a diagram. (329.02.a, 329.03.a) | 49-51 | 27-1, 27-2 |
| 7.M.2.2.2 | Reduce rates to unit rate. | | |
| Goal 2.3: Apply dimensional analysis. | | | |
| By the end of 7h Grade, the student will be able to: | | | |
| 7.M.2.3.1 | Identify properly constructed dimensional analysis conversions (329.04.a) | 67, 68 | 35-1, 37-1 |

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| | STANDARD 3: CONCEPTS AND LANGUAGE OF ALGEBRA AND FUNCTIONS. | | |
| | Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.1.1 | Use variables in simple expressions and equations. (330.01.a) | 21, 22 | 50-1 |
| 7.M.3.1.2 | Translate simple word statements into algebraic expressions and equations. (330.01.b) | 21, 22 | 50-1 |
| 7.M.3.1.3 | Use symbols "<," ">," "=", "≠," "<," and ">" to express relationships. (330.01.c) | 2, 25 | 11-4 |
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| | Goal 3.2: Evaluate algebraic expressions. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.2.1 | Evaluate simple numeric and algebraic expressions using commutative, association, identity, zero, inverse, distributive, and substitution properties. (330.02.a) | 5 | 2-1, 2-2 |
| 7.M.3.2.2 | Use the order of operations in evaluating simple algebraic expressions. (330.02.b) | | |
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| | Goal 3.3: Solve algebraic equations and inequalities. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.3.1 | Solve one-step equations. (330.03.a) | | |
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| | Goal 3.4: Understand the concept of functions. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.4.1 | Extend patterns involving rational numbers and describe the rule that generates the pattern. (333.01.a) | | 42-1 |
| 7.M.3.4.2 | Explain how a change in one quantity results in a change in another quantity. (333.01.b) | 16, 19 | |
| 7.M.3.4.3 | Use appropriate vocabulary and notations. (333.01.c) | Glossary and vocabulary words in lessons | |
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| | Goal 3.5: Represent equations, inequalities and functions in a variety of formats. | | |

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| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.5.1 | Represent a simple set of data in a table, as a graph, and as a mathematical relationship. (333.02.a) | 16, 19 | |
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| | Goal 3.6: Apply functions to a variety of problems. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.3.6.1 | Use patterns and linear functions to represent and solve simple problems. (333.03.a) | 16 | |
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| | STANDARD 4: CONCEPTS AND PRINCIPLES OF GEOMETRY | | |
| | Goal 4.1: Apply concepts of size, shape, and spatial relationships. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.4.1.1 | Classify relationships among types of one- and two-dimensional geometric figures, using their defining properties. (331.01.a) | 54-59, 61 | 29-1, 29-2, 30-1, 31-1, 33-1 |
| 7.M.4.1.2 | Draw and measure various angles and shapes using appropriate tools. (331.01.b) | 56, 61 | 30-2 |
| 7.M.4.1.3 | Apply fundamental concepts, properties, and relationships among points, lines, rays, planes, and angles. (331.01.c) | 56, 57, 61 | 30-1, 20-2, 33-1 |
| 7.M.4.1.4 | Explain and model the effects of reflections, translations, and rotations on various shapes. (331.01.g) | 60 | |
| 7.M.4.1.5 | Identify congruence, similarities, and line symmetry of shapes. (331.01.d) | | 32-1 |
| 7.M.4.1.6 | Describe the concept of surface area and volume (capacity). (331.01.d) | 75, 76 | 41-1 |
| 7.M.4.1.7 | Use appropriate vocabulary and notations. (331.01.h) | Glossary and vocabulary words in lessons | |
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| | Goal 4.2: Apply the geometry of right triangles. | | |
| | No objectives at this grade level. | | |
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| | Goal 4.3: Apply graphing in two dimensions. | | |

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| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.4.3.1 | Identify and plot points on a coordinate plane. | 19 | 49-1 |
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| | STANDARD 5: DATA ANALYSIS, PROBABILITY, AND STATISTICS | | |
| | Goal 5.1: Understand data analysis. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.5.1.1 | Read and interpret tables, charts, and graphs, including frequency tables, scatter plots, broken line graphs, line plots, bar graphs, histograms, circle graphs, and stem-and-leaf plots. | 78-80 | 47-2, 47-3 |
| 7.M.5.1.2 | Explain conclusions drawn from tables, charts, and graphs. (332.01.b) | 78-80 | 47-2, 47-3 |
| 7.M.5.1.3 | Use appropriate vocabulary and notations. (332.01.c) | Glossary and vocabulary words in lessons | |
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| | Goal 5.2: Collect, organize, and display data. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.5.2.1 | Collect, organize and display data with appropriate notation in tables, charts and graphs, including scatter plots, broken line graphs, line plots, bar graphs, and stem-and-leaf plots. (332.02.a) | 17, 78-80 | 47-2, 47-3 |
| | | | |
| | Goal 5.3: Apply simple statistical measurements. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.5.3.1 | Determine the measures of central tendency - mean, median and mode - with sets of data. (332.03.a) | 18, 79 | 45-1, 45-2, 47-2 |
| 7.M.5.3.2 | Discuss distribution of data, including range, frequency, gaps, and clusters. (332.03.b) | 79 | 45-2, 47-2 |
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| | goal 5.4: Understand basic concepts of probability. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.5.4.1 | Predict, perform, and record results of simple probability experiments. (332.04.a) | 77 | 47-1, 47-4 |
| 7.M.5.4.2 | Recognize equally likely outcomes. (332.04.c) | 77 | 47-1, 47-4 |

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| 7.M.5.4.3 | Explain that probability ranges from impossible to certain (0% to 100%). | 77 | 47-1, 47-4 |
| 7.M.5.4.4 | Use the language of probability. (332.04.b) | 77 | 47-1, 47-4 |
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| | Goal 5.5: Make predictions or decisions based on data. | | |
| | By the end of 7th Grade, the student will be able to: | | |
| 7.M.5.5.1 | Make predictions based on simple theoretical probabilities. (332.05.a) | 77 | 47-1, 47-4 |
| 7.M.5.5.2 | Use appropriate vocabulary and notations. (332.05.b) | 77 | 47-1, 47-4 |