



Math Connects

Concepts, Skills, and Problem Solving
Course 3

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STANDARDS	PAGE REFERENCES
Cluster 1. Numbers and Operation	
Content Standard A: Number and Number Sense: Students will understand and demonstrate a sense of what numbers mean and how they are used. Students will be able to:	
M1A1.6 Read, compare, order, use and represent fractions, (halves, thirds, fourths, fifths, sixths, eighths and tenths with all numerators); and compare, order, use and represent decimals to thousandths and convert between decimals and percentages.	<p>Student Edition: 142-145, 149 #36-#38, 154 #40, 161 #8-#11, 166 #52-#54, 187 #15-#21, 220-224, 228 #42-#45, 232 #44, 241 #37-#43</p> <p>Teacher Wraparound Edition: A 145, 224; AE 143, 221, 222; DI 144; F 221; T 142; TNT 143, 221</p>
M1A3.6 Recognize and apply concepts of prime and composite numbers and use divisibility rules for 2, 3, 4, 5, 6, 9 and 10; and recognize and find factors and multiples of natural numbers.	<p>Student Edition: 28, 29 ex 1, 30 #1-#4, 31 #44, 195 #1-#5, 197-201, 216-219, 224 #36, 228 #46, 736-737</p> <p>Teacher Wraparound Edition: A 201, 219; AE 29, 198, 199, 217; F 198, 217; PA 218; T 197</p>

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<p>Content Standard B: Computation: Students will understand and demonstrate computation skills (no calculator use for straight computation and numbers used in this section should match those listed for Standard A). Students will be able to:</p>	
<p>M1B1.6 Compute and model all four operations with whole numbers, common fractions and decimals to thousandths, and do straight computation with these numbers and operations. Division limited to 2-digit whole number divisors and 3-digit dividends.</p>	<p>Student Edition: 156-160, 161 #19-#21, 256-260, 263-268, 270-274 <i>Math Lab</i> 261-262</p> <p>Teacher Wraparound Edition: A 160, 260, 268; AE 157, 158, 257, 258, 264, 265, 270, 272; DI 258; F 264</p>
<p>M1B2.6 Create, solve, and justify the solution for multi-step, real-life problems with whole numbers, common fractions and decimals to thousandths, with division limited to 2-digit whole number divisors and 3-digit dividends.</p>	<p>Student Edition: 38 ex 5, 39 #22-#23, 157 ex 4, 158 #11, 159 #25, 160 #45, 161 #25, 165 #10, 170 ex 4, 171 #40, 174 ex 3, 175 #23, 259 #30 <i>Get Ready</i> 37, 169</p> <p>Teacher Wraparound Edition: A 176; AE 38, 157, 170, 174</p>
<p>Content Standard I. Discrete Mathematics: There is considerable overlap with other areas and other aspects are more appropriately assessed locally. No Grade Level Expectations in 5-8.</p>	
<p>Cluster 2. Shape and Size</p>	
<p>Content Standard E: Geometry: Students will understand and apply concepts from geometry.</p>	
<p>M2E1.6 Use properties/ attributes (limited to number of sides, number of angles, and length of sides, lines of symmetry, parallel sides, perpendicular sides, and angles relative to 90°) to classify polygons; and to compare and classify rectangular prisms, including cubes; and triangular prisms and draw 2-dimensional shapes.</p>	<p>Student Edition: 486-491, 492 #13-#14, 494-499, 512 #22-#24, 513 #32-#33, 515 #8-#9</p> <p>Teacher Wraparound Edition: A 499; AE 487, 488, 495; F 495; TNT 495</p>
<p>M2E3.6 Use ordered pairs as coordinates of points in the first quadrant of a coordinate plane.</p>	<p>Student Edition: 233-237, 242 #60-#67, 243 #22, 599-603, 609 #38-#41, 614 #31-#34, 623 #48-#53, 625 #22-#25, 626 #2, 627 #9</p> <p>Teacher Wraparound Edition: A 237; AE 234, 235, 600; DE 602; PA 235, 603; T 599; TNT 233, 234</p>

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<p>Content Standard F: Measurement: Students will understand and demonstrate measurement skills. Students will be able to:</p>	
<p>M2F1.6 Perform conversions between inches, feet and yards; seconds, minutes and hours; pounds and ounces; and cups, pints, quarts and gallons.</p>	<p>Student Edition: 419 ex 3, 420 ex 4, 421 #5-#8, 422 #30-#31, 423 #46, 425 ex 1 – ex 1, 426 #1-#6, 427 #11-#22, 428 #41-#42, 436 #43-#45, 444 #6-#11, 462 #8-#22, 465 #1-#2</p> <p>Teacher Wraparound Edition: A 423; AE 419, 420, 425; F 419; T 418</p>
<p>M2F2.6 Solve problems involving direct measures of length, distance, elapsed time, temperature, capacity, mass and weight.</p>	<p>Student Edition: 419 ex 1 – ex 2, 421 #1-#4, 422 #37-#41, 428 #44, 433 ex 5, 435 #36, 462 #12-#14</p> <p><i>Measurement Lab</i> 430-431</p> <p><i>Mini Lab</i> 424, 437, 455</p> <p>Teacher Wraparound Edition: A 436; AE 419; DI 422, 426, 435, 456; T 432, 437; TNT 420</p>
<p>M2F3.6 Compute the area and perimeter of triangles and rectangles with whole numbers (formula use), and find the volume of rectangular solids using pictures of blocks or gridded diagram with correct units.</p>	<p>Student Edition: 522-526, 534-538, 540-544, 545 #1-#2, 548-553</p> <p><i>Measurement Lab</i> 539</p> <p>Teacher Wraparound Edition: A 538, 553; AE 523, 535, 536, 540, 549, 550; DI 525, 536, 537; F 523, 549; TNT 525</p>
<p>Cluster 3. Mathematical Decision Making</p>	
<p>Content Standard C: Data Analysis and Statistics: Students will understand and apply concepts of data analysis. Students will be able to:</p>	
<p>M3C1.6 Organize data to find modes, medians, means and ranges for sets of data and displays: Data displays include frequency distributions, tables, line plots, or bar graphs (e.g., given a bar graph, determine the mode, median, range and mean).</p>	<p>Student Edition: 102-106, 108-113, 118 #20-#22, 125 #39-#40, 129 #23-#28, 131 #10-#11, 132 #1</p> <p><i>Spreadsheet Lab</i> 107</p> <p>Teacher Wraparound Edition: A 106, 113; AE 103, 109, 110; TNT 109</p>

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<p>Content Standard D: Probability: Students will understand and apply concepts of probability. Students will be able to: In the following GLEs it is expected that students use area and set models.</p>	
<p>M3D1.6 Find the probabilities of simple events and represent them as fractions (simplest form not needed).</p>	<p>Student Edition: 381-386, 393 #28-#30, 398 #25-#28, 408 #27-#36, 409 #42, 411 #13-#16, 412 #2-#3 <i>Probability Lab</i> 387 Teacher Wraparound Edition: A 386; AE 382, 383; DI 382; F 382; PA 384; T 387</p>
<p>M3D4.6 Find the number of arrangements of 3 factors with no more than 4 choices per factor (e.g., tree diagram, organized list, pictures).</p>	<p>Student Edition: 389-393, 398 #24, 405 #35, 409 #37-#41, 411 #17, 413 #10-#11 Teacher Wraparound Edition: A 393; AE 390; F 390; T 389</p>
<p>Content Standard J. Mathematical Reasoning: Content Standard J. Mathematical Reasoning: Due to the difficulty of measuring the Reasoning Indicators independently of other content and the reasoning that is implied in other performance indicators, no indicators from Standard J are included.</p>	
<p>Cluster 4. Patterns</p>	
<p>Content Standard G: Patterns, Relations, and Functions: Students will understand that mathematics is the science of patterns, relationships, and functions. Students will be able to:</p>	
<p>M4G1.6 Translate real-life situations into addition, subtraction, multiplication, and division sentences with whole numbers (mix of operations included).</p>	<p>Student Edition: 25 ex 1, 26 ex 2, 27 #3, 69 ex 1, 70 #21, 73 #6, 74 #2 Teacher Wraparound Edition: A 27; AE 25, 26</p>
<p>M4G3.6 Solve problems involving linear patterns in the form of tables, graphs, words, rules and equations using whole numbers, decimals to hundredths and simple fractions.</p>	<p>Student Edition: 49-53, 57-60, 63-67, 71 #30-#34, 73 #17-#18, 644-648, 649 #21-#24, 651-654, 657-660, 665 #29-#48, 666 #49-#57 <i>Algebra Lab</i> 642-643, 650 Teacher Wraparound Edition: A 60, 654, 660; AE 50, 645, 646, 652, 658; F 50; PA 652; T 651, 657</p>
<p>Content Standard H: Algebra Concepts: Students will understand and apply algebraic concepts. Students will be able to:</p>	
<p>M4H1.6 Evaluate formulas with no more than 3 variables using the computation specified in M1B1.6.</p>	<p>Student Edition: 42-46, 53 #31-#33, 70 #22-#28, 73 #9-#11 Teacher Wraparound Edition: A 46; AE 43; F 43; PA 43; T 42</p>

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<p>M4H6.6 Solve one-step equations using whole numbers with all four operations.</p>	<p>Student Edition: 57-60, 73 #17-#18, 644-648, 649 #21-#24, 651-654, 657-660, 665 #29-#48, 666 #49-#57 <i>Algebra Lab</i> 642-643, 650 Teacher Wraparound Edition: A 60, 654, 660; AE 645, 646, 652, 658; PA 652; T 651, 657</p>
<p>Content Standard K. Communication: Students will reflect upon and clarify their understanding of mathematical ideas and relationships. Students will be able to:</p>	
<p>M4K2.6 Read and use statistics, tables, and graphs to communicate ideas and information. Data displays include frequency distributions, tables, line plots, histograms or bar graphs and pie charts/circle graphs (read only).</p>	<p>Student Edition: 81-85, 88-91, 92-95, 96-100, 101 #3-#4, 103 ex 1, 106 #27, 109 ex 3, 111 #4, 113 #29-#31, 114-118 <i>Spreadsheet Lab</i> 86-87 Teacher Wraparound Edition: A 85, 95, 100; AE 82, 83, 89, 93, 97, 109, 115, 116; PA 83</p>