



# Math Connects

Concepts, Skills, and Problem Solving

Course 1

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STANDARDS	PAGE REFERENCES
<p><b>Grade Level Expectation</b></p>	
<p><b>M (N&amp;O)-6-1</b> <b>Rational Numbers</b></p>	
<p>Ratios</p>	
<p>Demonstrate conceptual understanding of: ratios with three forms of notation (<math>a/b</math>, <math>a:b</math>, and <math>a \div b</math> where <math>b \neq 0</math>) rates (<math>a</math> out of <math>b</math> and as a percent - 1 out of 4 = 25%)</p>	<p><b>Student Edition:</b> 314-316, 322-324, 365-366 <i>Check Your Understanding</i> 316 #1-#7, 325 #1-#4, <i>Math Lab</i> 320-321 <i>Practice and Problem Solving</i> 317-319 #8-#31, 325-327 #5-#20 <i>Test Practice</i> 319 #32-#33, 327 #21-#29</p> <p><b>Teacher Edition:</b> A 319; AE 315-316 #1-#3, 323-324 #1-#4; EA 318; FA 316, 325, 327</p>

STANDARDS	PAGE REFERENCES
Rates	
Use models, explanations and other representations	<p><b>Student Edition:</b>  315-316, 329-331, 355  <i>Check Your Understanding</i> 316 #5-#7, 331 #1-#5  <i>Lesson-by-Lesson Review</i> 356 #9-#15  <i>Practice and Problem Solving</i> 318 #22-#29,  319 #30-#31, 332 #6-#13, #20  <i>Test Practice</i> 333 #35-#37</p> <p><b>Teacher Edition:</b>  A 319; AE 330, 331; FA 316</p>
<i>M (N&amp;O)-6-2</i> <i>Magnitude of Numbers</i>	
Whole number bases with whole number exponents	
Order and compare fractions, decimals, percents <b>within and across</b> number formats	<p><b>Student Edition:</b>  220-222, 225-226, 229-230, 238, 378, 406  <i>Check Your Understanding</i> 222 #1-#6, 227 #1-#9,  231 #1-#10, 378 #1-#13  <i>Lesson-by-Lesson Review</i> 239 #16-#19,  241 #37-#43, 407 #7-#13, 408 #18-#26  <i>Practice and Problem Solving</i> 223-224 #7-#32,  231 #11-#30, 378-380 #14-#41  <i>Test Practice</i> 224 #33-#35, 380 #44</p> <p><b>Teacher Edition:</b>  A 224; AE 221, 222, 230, 378; FA 227, 231, 379</p>
Integers	
Order and compare numbers using exponents	<p>The following pages cover exponents and can also be used as a basis to ordering and comparing numbers using exponents.</p> <p><b>Student Edition:</b>  28-31, 32-36, 38-39  <i>Check Your Understanding</i> 39 #5-#6  <i>Practice and Problem Solving</i> 39 #18-#21, #24-#27</p>

STANDARDS	PAGE REFERENCES
Rational numbers (fractions, decimals, percents 1%-100%)	
Order and compare quantities using number lines and equality and inequality symbols	<p><b>Student Edition:</b>  142-143, 572-573  <i>Check Your Understanding</i> 143 #1-#6, 573 #1-#9  <i>Lesson-by-Lesson Review</i> 621 #11-#22  <i>Practice and Problem Solving</i> 144 #7-#18, 574 #10-#15, #26-#27  <i>Test Practice</i> 145 #37, 575 #33</p> <p><b>Teacher Edition:</b>  A 145, 575; AE 143, 573; FA 143, 573</p>
<i>M (N&amp;O)-6-3</i> <i>Mathematical Operations</i>	
Addition and subtraction of positive fractions and integers	
Demonstrate conceptual understanding of math operations by describing or illustrating the relationship of a base and exponent	<p><b>Student Edition:</b>  32-34, 38 Examples #3-#4  <i>Check Your Understanding</i> 32 #1-#9, 39 #5-#6  <i>Practice and Problem Solving</i> 35-36 #10-#46, 39 #18-#21, #24-#26, #30  <i>Test Practice</i> 36 #47-#48</p> <p><b>Teacher Edition:</b>  A 35; AE 33, 34, 38; FA 38-39</p>
Multiplication and division of fractions and decimals Whole numbers with whole number exponents	
Demonstrate conceptual understanding of the effect on the magnitude of a whole number when multiplied or divided by whole number, decimal, or fraction	<p><b>Student Edition:</b>  162, 179, 217, 276-277  <i>Check Your Understanding</i> 277 #1-#4  <i>Mini-Lab</i> 179 #1-#2  <i>Practice and Problem Solving</i> 181 #23, 278 #11-#20  <i>Quick Quiz</i> 23 #14-#25, 77 #8-#14, 137 #1-#14</p> <p><b>Teacher Edition:</b>  A 162, 279; AE 277; FA 23, 77, 137, 278; SA 23, 27, 137</p>

STANDARDS	PAGE REFERENCES
<p><i>M (N&amp;O)-6-4</i> <i>Solving Problems</i></p> <p>Single or multiple operations on fractions (proper, improper and mixed) Single or multiple operations on decimals Addition and subtraction of integers Percent of a whole Greatest common factor (GCF) Least common multiple (LCM) Orders of operations (with and without parentheses)</p>	
<p>Solve problems incorporating content as listed</p>	<p><b>Student Edition:</b> 37-38, 155-157, 197-199, 216-217, 256-257, 365-377, 577-578 <i>Check Your Understanding</i> 39 #1-#7, 158 #1-#9, 199 #1-#8, 218 #1-#5, 258 #1-#7, 367 #1-#11, 579 #1-#7 <i>Math Lab</i> 261 <i>Practice and Problem Solving</i> 39 #8-#28, 158 #13-#40, 200-201 #9-#39, 218 #6-#25, 259-260 #8-#36, 579 #8-#35 <i>Spiral Review</i> 183 #47-#49 <i>Test Practice</i> 201 #40-#50, 219 #26-#27, 260 #37-#38, 369 #41-#42</p> <p><b>Teacher Edition:</b> A 155, 201, 219, 260, 369; AE 38, 158, 199, 258, 367, 578; FA 199, 218, 367</p>
<p><i>M (N&amp;O)-6-5</i> <i>Monetary Value</i></p>	
<p>None at this level</p>	

STANDARDS	PAGE REFERENCES
<p><i>M (N&amp;O)-6-6</i>  <i>Mental Math</i>  <i>Embed mental arithmetic throughout math instruction</i></p> <p>Mental computation strategies:            Use compatible numbers            Apply properties            Use mental imagery            Use patterns</p>	
<p>Mentally calculate money change (expand to \$20, \$50 and \$100)</p>	<p>The following problems use money in practical examples, and can also be used as a basis for mentally calculating money change.</p> <p><b>Student Edition:</b>            121  <i>Practice and Problem Solving</i> 52 #20, 159 #40, 165 #34  <i>Practice Test</i> 191 #20  <i>Problem-Solving Investigation</i> 55 #6, 215 #11-#12, 255 #7, #13</p>
<p>Multiply 2 digit by 1 digit whole numbers</p>	<p><b>Student Edition:</b>            632-633  <i>Check Your Understanding</i> 634 #1-#2  <i>Lesson-by-Lesson Review</i> 664 #9-#10  <i>Practice and Problem Solving</i> 634 #14-#17</p> <p><b>Teacher Edition:</b>            A 635; AE 633; FA 634</p>
<p>Multiply combinations of 2 and 3 digit numbers (multiples of 10, 100)</p>	<p>The following pages covering powers of 10 and division by decimals can also be used as a basis for multiplying combinations of 2 and 3 digit numbers (multiples of 10, 100):</p> <p><b>Student Edition:</b>            32-33, 179</p>
<p>Divide 3 or 4 digit multiples of powers of 10 by their compatible factors            (360÷6,360÷60,360÷12,360÷120)</p>	<p>The following pages covering powers of 10 and compatible numbers can also be used as a basis for dividing multiples of powers of 10 by their compatible factors:</p> <p><b>Student Edition:</b>            32-33, 276, 287</p>

STANDARDS	PAGE REFERENCES
Determine the part of a whole number using benchmark percents (1%, 10%, 25%, 50%, 75%)	<p>The following pages covering percents can also be used as a basis for discussing their use as benchmarks:</p> <p><b>Student Edition:</b> 365, 401 <i>Check Your Understanding</i> 366 #8 <i>Practice and Problem Solving</i> 368 #28-#30, #36</p> <p>The following Student Edition pages covering the use of benchmarks can also be used to supplement the above discussion:</p> <p><i>Problem-Solving Investigation</i> 442, 463 #34-#35</p> <p><b>Teacher Edition:</b> AE 367, 403; EA 374</p>
<p><i>M (N&amp;O)-6-7</i> <i>Estimation</i> <i>Embed estimation throughout math instruction</i></p> <p>Estimation</p>	
Identify when estimation is appropriate	<p><b>Student Edition:</b> 150-152, 276-277, 401-403 <i>Check Your Understanding</i> 152 #1-#9, 277 #1-#10 <i>Practice and Problem Solving</i> 153 #10-#33, 278 #11-#35, 477 #36</p> <p><b>Teacher Edition:</b> A 154, 279; AE 151, 152, 277; FA 278</p>
Select an appropriate method of estimation	<p><b>Student Edition:</b> 150-152, 276-277, 401-403 <i>Check Your Understanding</i> 152 #1-#9, 277 #1-#10, 403 #1-#8 <i>Practice and Problem Solving</i> 153 #10-#33, 278 #36-#38</p> <p><b>Teacher Edition:</b> A 154, 279, 405; AE 151, 152, 277; FA 278, 403</p>
Determine the level of accuracy needed for a situation	<p><b>Student Edition:</b> 283, 433 <i>Practice and Problem Solving</i> 278 #31-#34</p> <p><b>Teacher Edition:</b> FA 283</p>

STANDARDS	PAGE REFERENCES
Analyze effect of estimate on accuracy of results	<b>Student Edition:</b> 270-271, 282-283, 433 <i>Check Your Understanding</i> 444 #5-#6 <i>Practice and Problem Solving</i> 151 #37, 404 #29 <b>Teacher Edition:</b> FA 271, 283, 444
Evaluate the reasonableness of solution	<b>Student Edition:</b> 184-185, 270-271, 282-283, 433 <i>Check Your Understanding</i> 444 #5-#6 <i>Practice and Problem Solving</i> 285 #37-#40 <b>Teacher Edition:</b> FA 271, 283, 444
<i>M (N&amp;O)-6-8</i> <i>Properties</i> <i>Embed properties throughout math instruction</i>	
Number Properties Odd and even numbers, positive and negative numbers, prime factorization, divisibility and remainders Field Properties commutative, associative, identity, multiplicative, Property of 1, distributive, and additive inverse	
Apply number properties to simplify computations and solve problems	<b>Student Edition:</b> 636-638 <i>Check Your Understanding</i> 638 #1-#10 <i>Lesson-by-Lesson Review</i> 664 #13-#16 <i>Practice and Problem Solving</i> 639 #11-#37, 640 #38-#49 <i>Test Practice</i> 641 #50-#51 <b>Teacher Edition:</b> A 640; AE 637, 638; FA 638

STANDARDS	PAGE REFERENCES
<p><i>M (G&amp;M)-6-1</i> <i>Sorting and Classifying</i></p> <p>Uses properties and attributes of : Angles (right, acute, obtuse)</p>	
<p>Identify, describe, classify or distinguish among different types of triangles (acute, right, obtuse, scalene, isosceles, equiangular, and equilateral)</p>	<p><b>Student Edition:</b> 486-488 <i>Check Your Understanding</i> 489 #1-#2, #6-#7 <i>Foldables</i> 509 <i>Lesson-by-Lesson Review</i> 512 #22-#28 <i>Practice and Problem Solving</i> 489 #8-#10, 490 #22-#26</p> <p><b>Teacher Edition:</b> AE 487, 488; FA 489</p>
	<p>Sides (number of sides, congruent, parallelism, or perpendicularity)</p>
<p>Identify, describe, classify or distinguish among different types of quadrilaterals (squares, rectangles, rhombi, trapezoids, parallelograms)</p>	<p><b>Student Edition:</b> 494-496 <i>Check Your Understanding</i> 496 #3 <i>Lesson-by-Lesson Review</i> 513 #32-#34 <i>Practice and Problem Solving</i> 497 #11-#19, 498 #23-#25, #27-#32</p> <p><b>Teacher Edition:</b> AE 495; FA 496</p>
<p><i>M (G&amp;M)-6-2</i> <i>Applies Theorems or Relationships</i></p>	
<p>None at this Grade</p>	

STANDARDS	PAGE REFERENCES
<p><i>M (G&amp;M)-6-3</i> <i>3-Dimensional Shapes</i></p> <p>Properties or attributes of shapes: Shape of bases, number of lateral faces, number of bases, number of edges, number of vertices 3-D shapes: rectangular prisms, triangular prisms, cylinders, spheres, pyramids, cones</p>	
<p>Use properties or attributes to identify, compare or describe 3-D shapes</p>	<p>The following sections address rectangular and triangular 3-D shapes/pyramids and cylinders, and can also be used as a basis to discuss spheres and cones.</p> <p><b>Student Edition:</b> 548-553, 555-559, LA22-LA23 <i>Check Your Understanding</i> 550 #1-#6, 557 #1-#4, LA23-LA24 #1-#10, LA24 #11-#24 <i>Geometry Lab</i> 554 <i>Mini-Lab</i> 548 <i>Practice and Problem Solving</i> 551 #7-#16, #20-#23, 557 #5-#13, 558 #21-#29 <i>Study Tip</i> 549 <i>Test Practice</i> 559 #30-#31</p> <p><b>Teacher Edition:</b> A 559; AE 549, 556; FA 550, 557; FMC 549; SQ 555; T 548, 555</p>
<p><i>M (G&amp;M)-6-4</i> <i>Congruency</i></p> <p>Transformations (reflections, translations, rotations)</p>	
<p>Predict and describe transformational steps (reflection, translation, and rotation including degree of rotation) needed to show congruence</p>	<p><b>Student Edition:</b> 604-609, 610-614, 615-619 <i>Check Your Understanding</i> 606 #1-#4, 612 #1-#4, 617 #1-#6 <i>Lesson-by-Lesson Review</i> 623-624 #54-#65 <i>Practice and Problem Solving</i> 607-608 #5-#28, 612-613 #5-#19, 614 #24-#26, 618-619 #7-#28 <i>Practice Test</i> 625 #28-#33 <i>Study Guide and Review</i> 623-624 <i>Test Practice</i> 609 #36-#37, 614 #27-#28, 619 #29-#30, 627 #12</p> <p><b>Teacher Edition:</b> A 609, 611, 613, 619; AE 605-606, 611, 616; FA 605, 611, 617; FMC 605, 611, 616; SC 604, 610, 615; TNT 607, 618</p>

STANDARDS	PAGE REFERENCES
<b>Congruency</b>	
<p>Compose and decompose two- and three-dimensional objects using models or explanations</p>	<p><b>Student Edition:</b>            548-550, 555-556  <i>Geometry Lab</i> 554  <i>Mini-Lab</i> 548  <i>Problem-Solving Investigation</i> 546-547  <i>Study Tip</i> 549  <i>Test Practice</i> 559 #30-#31</p> <p><b>Teacher Edition:</b>            A 559; AE 549, 556; FA 550, 554; FMC 549;            PAA 559; SQ 555; T 548, 555</p>
<b>Line and rotational symmetry</b>	
<p>Use line and rotational symmetry to demonstrate congruent parts within a shape</p>	<p><b>Student Edition:</b>            11 #1, 609 #43-#46, 613 #20-#22, 615-619  <i>Check Your Understanding</i> 617 #1-#6  <i>Lesson-by-Lesson Review</i> 624 #62-#65  <i>Practice and Problem Solving</i> 618-619 #7-#28  <i>Practice Test</i> 625  <i>Real-World Example</i> 617  <i>Study Guide and Review</i> 624  <i>Test Practice</i> 619 #29-#30</p> <p><b>Teacher Edition:</b>            A 619; AE 616; FA 617; FMC 616; SQ 615;            TNT 618</p>
<i>M (G&amp;M)-6-5</i> <i>Similarity</i>	
<b>Similarity of polygons and circles</b>	
<p>Describe the proportional effect on the linear dimensions of polygons or circles (when scaling up or down) while preserving the angle measures of polygons using models or explanations</p>	<p><b>Student Edition:</b>            502-507  <i>Practice Test</i> 515 #15-#16  <i>Study Guide and Review</i> 514  <i>Study Tip</i> 504</p> <p><b>Teacher Edition:</b>            A 507; AE 503-504; PAA 507; SQ 502; TNT 503</p>
<p>Apply scales to maps</p>	<p><b>Student Edition:</b>            747  <i>Get Ready for the Lesson</i> 233</p>

STANDARDS	PAGE REFERENCES
<p><i>M (G&amp;M)-6-6</i> <i>Perimeter/Area/Volume</i></p> <p>Perimeter of polygons Area of quadrilaterals or triangles Volume of rectangular prisms Circumference of a circle (relationships of radius, diameter and circumference)</p>	
<p>Determine perimeter/circumference, area, volume and circumference using formulas, models, or solving related problems</p>	<p><b>Student Edition:</b> 63-67, 522-526, 528-533, 534-538, 540-544, 548-553, 555-559, LA15-LA19, LA20-LA21 <i>Geometry Lab</i> 554 <i>Measurement Lab</i> 527, 539, 560 <i>Mid-Chapter Quiz</i> 545 <i>Practice Test</i> 565 <i>Study Guide and Review</i> 561-564</p> <p><b>Teacher Edition:</b> 63b, 522b, 528b, 534b A 553; AE 523, 535-536, 549-553; FMC 523; SQ 522, 529, 548; TNT 524</p>
<p>Express measures in appropriate units.</p>	<p><b>Student Edition:</b> 63-67, 522-526, 528-533, 534-538, 540-544, 548-553, 555-559, LA15-LA19, LA20-LA21 <i>Geometry Lab</i> 554 <i>Measurement Lab</i> 527, 539, 560 <i>Mid-Chapter Quiz</i> 545 <i>Practice Test</i> 565 <i>Study Guide and Review</i> 561-564</p> <p><b>Teacher Edition:</b> 63b, 522b, 528b, 534b A 553; AE 523, 535-536, 549-553; FMC 523; SQ 522, 529, 548; TNT 524</p>

STANDARDS	PAGE REFERENCES
<p><i>M (G&amp;M)-6-7</i>  <i>Measurement</i>  <i>Embed measurement throughout math instruction</i></p> <p>Length (inch, foot, centimeter, meter, yard, mile, kilometer, 12in=1ft, 100cm=1m, 3ft=1yd, 10mm=1cm, 1000mm=1m, to 1/16 inch, to 0.1 cm, to .001m,)  Time (hour, day, year, 24hrs=1 day, 7 days=1 week, 365 days=1 year, 60 sec=1 min, 60min=1 hr, to 1 minute intervals)  Temperature (Celsius and Farenheit to 1 degree)  Capacity (quart, gallon, pint, liter 32oz=1qt, 4qts=1 gal., 2pts=1qt, 1000ml=1L, to 1oz)  Mass (gram, kilogram)  Weight (pound, ounces, 16oz=1lb., to 1oz)  Angles and Rotation (degree, ° 360 = 1circle, ° 90 = right angle, to 2 degrees)</p>	
<p>Measure using appropriate units for length, time, temperature, capacity, mass and weight</p>	<p><b>Student Edition:</b>  418-423, 424-429, 432-436, 437-441, 445-449, 450-454, 534-538, 540-544, 548-553  <i>Measurement Lab</i> 430-431, 539  <i>Mid-Chapter Quiz</i> 444, 545  <i>Practice Test</i> 465  <i>Study Guide and Review</i> 462-464</p> <p><b>Teacher Edition:</b>  AE 419, 438; DI 428, 435, 454; PAA 538; SQ 418, 450; TNT 433, 552</p>
<p>Solve problems and make conversions for length, time and mass</p> <p>Metric System – Decimals – Semester I Standard  (Customary) System – Fractions – Semester II</p>	<p><b>Student Edition:</b>  418-423, 424-429, 432-436, 437-441, 445-449, 450-454  <i>Measurement Lab</i> 430-431  <i>Mid-Chapter Quiz</i> 444  <i>Practice Test</i> 465  <i>Study Guide and Review</i> 462-464</p> <p><b>Teacher Edition:</b>  AE 419, 438; DI 428, 435, 454; SQ 418, 450; TNT 433</p>
<p><i>M (G&amp;M)-6-8</i>  <i>Time</i></p>	
<p>None at this level</p>	
<p><i>M (G&amp;M)-6-9</i>  <i>Spatial Relationships</i></p>	
<p>None at this level</p>	

STANDARDS	PAGE REFERENCES
<p><i>M (G&amp;M)-6-10</i> <i>Spatial Reasoning and Visualization</i></p>	
<p>None at this level</p>	
<p><i>M (F&amp;A)-6-1</i> <i>Patterns</i></p>	
<p>Identifies and extends to specific cases a variety of patterns (linear and nonlinear) represented in models, tables sequences, graphs, or problem situations</p>	
<p>Write a rule in words or symbols to determine any specific element in a linear or nonlinear relationship</p>	<p><b>Student Edition:</b> 49-53, 60 #41, 67 #36-#37, 343-348 <i>Graphing Calculator Lab</i> 47-48 <i>Practice Test</i> 73 <i>Problem-Solving Investigation</i> 55 #10-#12, 341-342, 662 #7, #9 <i>Study Guide and Review</i> 71, 357-358 <b>Teacher Edition:</b> AE 50, 344-345; DI 51; SQ 49, 343; TNT 51</p>
<p>Write an expression or equation using words or symbols to express the generalization of a linear relationship (twice the term number plus one, <math>2n+1</math>)</p>	<p><b>Student Edition:</b> 9, 42-46, 49-53, 57-60, 632-635, 636-641, 644-648, 651-654, 657-660 <i>Algebra Lab</i> 61-62 <i>Study Guide and Review</i> 70 #29, 71 #35-#36, 664-666 <i>Practice Test</i> 73 #15-#16, #20, 667 <i>Mid-Chapter Quiz</i> 649 <b>Teacher Wraparound Edition:</b> AE 43, 638, 646, 652, 658; SQ 42, 49, 57, 657</p>
<p><i>M (F&amp;A)-6-2</i> <i>Rates of Change</i></p>	
<p>Linear relationships (<math>y=kx</math> and <math>y=mx+b</math>) as a constant rate of change</p>	
<p>Construct and interpret graphs of real occurrences</p>	<p><b>Student Edition:</b> 49-53, 233-237 <i>Graphing Calculator Lab</i> 47-48 <i>Practice Test</i> 243 <i>Study Guide and Review</i> 71, 242 <b>Teacher Edition:</b> A 237; AE 50, 234-235; PAA 235; SQ 233</p>

STANDARDS	PAGE REFERENCES
Describe slope of linear relationships (faster, slower, greater, smaller) in problem situations	See <i>Math Connects: Concepts, Skills, and Problem Solving Course 2</i> © 2009. Students calculate slope on the following pages. <b>Student Edition:</b> 293-297
Describe how a change in one variable relates to a change in the value of the second variable in problem situations with constant rates of change	<b>Student Edition:</b> 49-53, 57-60, 67 #36-#37, 343-348, 349-353 <i>Graphing Calculator Lab</i> 47-48 <i>Practice Test</i> 73, 359 <i>Study Guide and Review</i> 71, 357-358 <b>Teacher Edition:</b> AE 50, 344-345; DI 51; SQ 49, 343; TNT 51
<p><i>M (F&amp;A)-6-3</i> <i>Algebraic Expressions</i></p>	
	Algebraic expressions including more than 1 variable
Write linear algebraic expressions using order of operations	<b>Student Edition:</b> 37-40, 42-46, 53 #31-#34, 77 #15-#20 <i>Mid-Chapter Quiz</i> 41 #13-#17 <i>Practice Test</i> 73 <i>Study Guide and Review</i> 70 <b>Teacher Edition:</b> 37b A 40; AE 38; SQ 37; TNT 39
Evaluate linear algebraic expressions (including more than one variable)	<b>Student Edition:</b> 42-46, 53 #31-#33, 60 #42-#44, 63-67, 343-348, 636-641, 648 #36, 654 #39 <i>Algebra Lab</i> 61 <i>Mid-Chapter Quiz</i> 649 #11-#19 <i>Practice Test</i> 73 #9-#11, #19-#20, 359 #17 <i>Study Guide and Review</i> 70-72, 664 #18-#28 <b>Teacher Edition:</b> 42b, 636b A 46, 640; AE 43, 637; FMC 43, 344, 637; SQ 42, 636
Evaluate an expression within an equation (find $y$ when $x = 4$ , given $y = 3x - 2$ )	<b>Student Edition:</b> 49-53, 67 #36-#37 <i>Graphing Calculator Lab</i> 47-48 <b>Teacher Edition:</b> AE 50; DI 51; SQ 49

STANDARDS	PAGE REFERENCES
<p><i>M (F&amp;A)-6-4</i> <i>Equality</i></p>	
<p>Equality</p>	
<p>Show equivalence between two expressions using models or different representations</p>	<p><b>Student Edition:</b> 632-635, 636-641 <i>Algebra Lab</i> 630-631 <i>Chapter Test</i> 667 <i>Mid-Chapter Quiz</i> 649 <i>Study Guide and Review</i> 663-664</p> <p><b>Teacher Edition:</b> A 635, 640; AE 633, 637; FMC 633; SQ 632, 636; TNT 637</p>
<p>Solve multi-step linear equations of the form <math>ax \pm b = c</math> where a, b, and c are whole numbers and <math>a \neq 0</math></p>	<p><b>Student Edition:</b> 57-60, 63-67, 349-353, 644-648, 651-654, 657-660, LA7-LA9 <i>Algebra Lab</i> 642-643, 650 <i>Graphing Calculator Lab</i> 354 <i>Mid-Chapter Quiz</i> 649 #22-#25 <i>Study Guide and Review</i> 71-72, 358, 665-666</p> <p><b>Teacher Edition:</b> A 60; AE 58, 645-646, 652, LA8; FMC LA8; SC 57, 651</p>
<p><i>M (DSP)-6-1</i> <i>Interpret a Given Representation</i> <i>Consistent with skills in M (DSP)-6-2</i></p>	
<p>Data interpretation</p>	
<p>Answer questions related to data</p>	<p><b>Student Edition:</b> 81-85, 88-91, 92-95, 96-100, 114-118, 370-375 <i>Extend</i> 86-87 <i>Mid-Chapter Quiz</i> 101 <i>Practice Test</i> 131 <i>Problem-Solving Investigation</i> 78-79 <i>Study Guide and Review</i> 126-129</p> <p><b>Teacher Edition:</b> 81b, 88b, 92b, 370b A 95, 375; AE 82-83, 89, 93, 97, 371; DI 373; FMC 82, 89, 97, 371; SQ 81, 92, 96, 370</p>

STANDARDS	PAGE REFERENCES
<p>Data representations:            Circle graphs,            Line graphs,            Stem-and-leaf plots</p>	
<p>Analyze data to:            formulate or justify conclusions make predictions            solve problems</p>	<p><b>Student Edition:</b>            81-85, 88-91, 92-95, 100 #26-#27, 114-118,            370-375, 380 #44  <i>Get Ready for the Lesson</i> 377  <i>Spreadsheet Lab</i> 86-87  <i>Study Guide and Review</i> 128  <b>Teacher Edition:</b>            88b, 92b            A 95; AE 89, 93, 371-372; DI 373; FMC 89; SQ 88;            TNT 88, 90, 92</p>
<p><i>M (DSP)-6-2</i>  <i>Analyze Data</i></p>	
<p>Patterns, trends and distributions in data</p>	
<p>Analyze patterns, trends or distributions in data            using measures of central tendency (median,            mean, mode) and dispersion (range) to analyze            situations and solve problems</p>	<p><b>Student Edition:</b>            102-106, 108-113, 118 #20-#22, 125 #39-#40  <i>Practice Test</i> 131 #10-#11  <i>Spreadsheet Lab</i> 107  <i>Study Guide and Review</i> 129 #23-#28  <b>Teacher Edition:</b>            102b, 108b            A 106; AE 103, 109-110; FMC 103; SQ 102, 108</p>
<p><i>M (DSP)-6-3</i>  <i>Organize and Display Data</i>  <i>Consistent with skills in M (DSP)-6-2</i></p>	
<p>Data representations:            Tables            Line graphs            Stem-and-leaf plots</p>	
<p>Answer questions related to the data</p>	<p><b>Student Edition:</b>            81-85, 88-91, 92-95, 100 #26-#27, 114-118  <i>Spreadsheet Lab</i> 87-87  <i>Study Guide and Review</i> 128  <b>Teacher Edition:</b>            88b, 92b            A 95, AE 89, 93; FMC 89; SQ 88; TNT 88, 90, 92</p>

STANDARDS	PAGE REFERENCES
Analyze data to formulate or justify conclusions, make predictions and solve problems	<b>Student Edition:</b> 81-85, 88-91, 92-95, 100 #26-#27, 114-118 <i>Spreadsheet Lab</i> 86-87 <i>Study Guide and Review</i> 128 <b>Teacher Edition:</b> 88b, 92b A 95; AE 89, 93; FMC 89; SQ 88; TNT 88, 90, 92
<i>M (DSP)-6-4</i> <i>Counting Techniques</i>	Strategies: organized lists, tables, tree diagrams, models, Fundamental Counting Principle
Utilize counting techniques to solve combination and simple permutation problems in context	<b>Student Edition:</b> 389-393, 394-398, 405 #36 <i>Mid-Chapter Quiz</i> 388 #20-#24 <i>Practice Test</i> 411 #13-#21 <i>Probability Lab</i> 387 <i>Study Guide and Review</i> 408-409 <b>Teacher Edition:</b> A 386, 398; AE 382-383, 390, 395; FMC 382; PAA 384; SQ 381, 389, 394
<i>M (DSP)-6-5</i> <i>Probability</i>	Experimental and theoretical probability
Predict the theoretical probability of an event	<b>Student Edition:</b> 381-386, 389-393, 394-398 <i>Mid-Chapter Quiz</i> 388 #20-#24 <i>Practice Test</i> 411 #13-21 <i>Probability Lab</i> 387 <i>Study Guide and Review</i> 408-409 <b>Teacher Edition:</b> A 386, 398; AE 382-383; FMC 382; SQ 381
Test predictions through experiments and simulations	<b>Student Edition:</b> 389-393, 394-398, 405 #36 <i>Mid-Chapter Quiz</i> 388 #20-#24 <i>Practice Test</i> 411 #13-#21 <i>Probability Lab</i> 387 <i>Study Guide and Review</i> 408-409 <b>Teacher Edition:</b> A 386, 398; AE 382-383, 390, 395; FMC 382; PAA 384; SQ 381, 389, 394

STANDARDS	PAGE REFERENCES
Design fair games	<p><b>Student Edition:</b>  389-393, 394-398, 405 #36  <i>Mid-Chapter Quiz</i> 388 #20-#24  <i>Practice Test</i> 411 #13-#21  <i>Probability Lab</i> 387  <i>Study Guide and Review</i> 408-409</p> <p><b>Teacher Edition:</b>  A 386, 398; AE 382-383, 390, 395; FMC 382;  PAA 384; SQ 381, 389, 394</p>
Determine the theoretical or experimental probability of an event in a problem solving situation	<p><b>Student Edition:</b>  381-386, 389-393, 394-398  <i>Mid-Chapter Quiz</i> 388 #20-24  <i>Practice Test</i> 411 #13-21  <i>Probability Lab</i> 387  <i>Study Guide and Review</i> 408-409</p> <p><b>Teacher Edition:</b>  A 386, 398; AE 382-383; FMC 382; SQ 381</p>
<p><i>M (DSP)-6-6</i>  <i>Experimental Design</i>  Consistent with skills in <i>M (DSP)-6-2</i></p>	
<p>Independent experimental design (In response to a teacher or student generated question or hypothesis)</p>	
Determine most effective method of data collection (survey, observation, experimentation)	<p><b>Student Edition:</b>  84 #11, 91 #20, 95 #17, 99 #19, 112 #17, 114-118  <i>Spreadsheet Lab</i> 86-87  <i>Statistics Lab</i> 119-120</p> <p><b>Teacher Edition:</b>  A 120; AE 115-116; PAA 116, 395; SQ 114; T 119</p>
Collect, organize and display data	<p><b>Student Edition:</b>  81-85, 88-91, 92-95, 96-100, 374 #15  <i>Mid-Chapter Quiz</i> 101  <i>Practice Test</i> 131  <i>Problem-Solving Investigation</i> 78-79  <i>Spreadsheet Lab</i> 86-87  <i>Statistics Lab</i> 119-120  <i>Study Guide and Review</i> 126-129</p> <p><b>Teacher Edition:</b>  81b, 88b, 92b  A 95, 120; AE 82-83, 89, 93, 97; FMC 82, 89, 97;  SQ 81, 92, 96; T 119</p>

STANDARDS	PAGE REFERENCES
Analyze data to draw conclusions and make predictions about question or hypothesis being tested	<p><b>Student Edition:</b> 88-91, 92-95, 100 #26-#27, 114-118, 370-375, 380 #44, 394-398 <i>Study Guide and Review</i> 128</p> <p><b>Teacher Edition:</b> AE 371-372; DI 373; FMC 395; PAA 395; SQ 88, 394; TNT 88, 90</p>
Ask new question based on results	<p><b>Student Edition:</b> 88-91, 92-95, 100 #26-#27, 114-118, 370-375, 380 #44, 394-398 <i>Spreadsheet Lab</i> 86-87 <i>Statistics Lab</i> 119-120 <i>Study Guide and Review</i> 128</p> <p><b>Teacher Edition:</b> AE 371-372; DI 373; FMC 395; PAA 395; SQ 88, 394; TNT 88, 90</p>
Make connections to real world situations	<p><b>Student Edition:</b> 84 #11, 91 #20, 95 #17, 99 #19, 112 #17 <i>Spreadsheet Lab</i> 86-87 <i>Statistics Lab</i> 119-120</p> <p><b>Teacher Edition:</b> A 120; T 119</p>