

GLENCOE CORRELATION
MATHEMATICS: APPLICATIONS AND CONCEPTS COURSE 2
OKLAHOMA
Priority Academic Student Skills
Mathematics Content Standards
Grade 7

CONTENT STANDARDS	PAGE REFERENCES
Standard 1: Algebraic Reasoning - The student will use number properties to simplify and solve simple linear equations.	
1. Identify and apply the commutative, associative, distributive, inverse and identity properties (e.g., $n + 0 = n$, $2(x + 3) = 2x + 6$).	SE: 30-33, 48 #40-#43 <i>Extra Practice Lesson 1-6</i> 565 <i>Key Concept</i> 121, 157, 160, 258, 259 <i>Mixed Problem Solving</i> 596 #10 <i>Standardized Test Practice</i> 50 #6
2. Use a variety of methods to model and solve one-step linear equations (e.g., use properties of equality, graph ordered pairs with paper and pencil, use graphing calculators).	SE: 24-27, 156-159, 160-163, 177-181, 187 #19-#36, 258-261 <i>Extra Practice Lesson 4-2</i> 572 <i>Lesson 4-3</i> 572, <i>Lesson 4-6</i> 573 #3-#14 <i>Hands-On Lab</i> 154-155
3. Identify situations that model linear graphs (e.g., distance traveled at a constant rate).	SE: 179 example 3, 180-181 #29-#36, 188 #60-#61 <i>Hands-On Lab</i> 176 <i>Mixed Problem Solving</i> 596 #8, #9, 599 #2-#4, #8-#12 <i>Standardized Test Practice</i> 191 #20 <i>When am I ever going to use this?</i> 182 TWE: ICE 179
Standard 2: Number Sense – The student will use numbers and number relationships to acquire basic facts and determine the reasonableness of results.	
1. Integers	
a. Compare and order positive and negative integers and describe their use in real-life situations (e.g., temperature, sea level, stock market fluctuations, football yardage).	SE: 106-108, 109-111, 142 #11-#14, 143 #20-#29, 145 #3-#9, #24 <i>Extra Practice Lesson 3-1</i> 569 #1-#6 <i>Lesson 3-2</i> 570 <i>Mixed Problem Solving</i> 598 #1-#3 <i>Standardized Test Practice</i> 146 #7, 147 #16
b. Use the basic operations on integers to solve problems.	SE: 120-124, 128-131, 134-137, 138-141, 144 <i>Extra Practice Lesson 3-4</i> 570 <i>Lesson 3-5</i> 571, <i>Lesson 3-6</i> 571, <i>Lesson 3-7</i> 571 <i>Mixed Problem Solving</i> 598 #9-#16
2. Ratio, Proportion and Percents	
a. Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	SE: 304-308, 327 #32-#35, 440-443 <i>Extra Practice Lesson 7-4</i> 581 <i>Lesson 10-6</i> 588 <i>Mixed Problem Solving</i> 602 #7, #8, 605 #9 <i>Spreadsheet Investigation</i> 309 TWE: DI 304 T 305

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b. Set up equivalent ratios, estimate and solve problems using ratio, proportions, and percents including percents greater than 100 and less than 1 (e.g., determine missing sides of similar figures, heart rate per minute, cost per pound, pay to hours worked overtime).	SE: 216-219, 288-291, 292-295, 297-300, 304-308, 312-315, 316-318, 319-321, 323-325, 440-443
c. Solve percent application problems (e.g., discounts, tax, finding the missing value of percent/part/whole).	SE: 325 #21-#23, 342-343 #24, #27-#31, 350-353, 354-357, 358-360 <i>Extra Practice Lesson 8-5 584</i> <i>Lesson 8-6 584</i> <i>Mixed Problem Solving 603 #3-#16</i> <i>Problem Solving Strategy 339 #7, #8, #10</i> <i>Spreadsheet Investigation 361</i>
3. Exponents	
a. Analyze and develop generalizations of exponential patterns, including zero as an exponent, using manipulatives and calculators (e.g., model getting paid a penny the first day, 2 cents the second day, 4 cents the third day ...).	SE: 12 #40, #41, 13 #62 <i>Prerequisite Skills 561</i> TWE: B 10 DI 11
b. Build and recognize models of multiples to investigate squares and square roots (e.g., build rectangular arrays for numbers 1 to 100 and note which can be represented as squares).	SE: 470-473 <i>Hands-On Mini Lab 475</i> TWE: A 473 B 10 W 472
c. Estimate the square root of a number (e.g., between two consecutive integers).	SE: 475 example 1, 476-477 #2-#7, #13-#20, 504 #13-#18 <i>Extra Practice Lesson 11-2 590 #1-#15</i> <i>Standardized Test Practice 508 #9</i> TWE: A 476 DI 476 T 476
Standard 3: Geometry - The student will apply the properties and relationships of plane geometry in a variety of contexts.	
1. Classifying Geometric Figures	
a. Classify triangles according to their sides and angles.	SE: 429-431, 437 #35-#37, 463 #15, #16 <i>Extra Practice Lesson 10-4 588</i> TWE: T 429 #3, #4
b. Classify quadrilaterals according to their sides and angles (e.g., determine whether all squares are rectangles).	SE: 434-436, 443 #20-#22, 463 #18-#20 <i>Extra Practice Lesson 10-5 588</i> <i>Mixed Problem Solving 605 #8</i> <i>Standardized Test Practice 467 #18c</i> TWE: B 434 DI 434 T 435
2. Identify and compare bisectors, interior, exterior, and vertical angles (e.g., using graph paper, software, protractors to measure angles between parallel lines with a transversal).	SE: 422-425 <i>Hands-On Lab 416-417, 426-427</i>

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3. Rectangular Coordinate System	
a. Locate points on a plane in all four quadrants.	SE: 112-115, 143 #30-#37, 177-181, 185 #27-#30, 188 #54-#59, #62 <i>Extra Practice Lesson 3-3 570</i> <i>Lesson 4-6 573 #3-#14</i> <i>Hands-On Lab 176</i> <i>Mixed Problem Solving 598 #4-#8</i> <i>Standardized Test Practice 146 #9</i>
b. Identify geometric transformation of figures (rotations, translations, and reflections).	SE: 451-454, 456-459, 464 #26-#31 <i>Extra Practice Lesson 10-8 589</i> <i>Lesson 10-9 589</i> <i>Hands-On Lab 460-461</i> <i>Standardized Test Practice 467 #18e, #18f</i> TWE: DI 456 T 452, 457
Standard 4: Measurement - The student will use measurement to solve problems in a variety of contexts.	
1. Area and Perimeter	
a. Develop area and perimeter concepts (e.g., use grids to estimate the area of irregular shapes).	SE: 270-273, 483-485, 489-492, 493-495, 498-500 <i>Extra Practice Lesson 6-8 579</i> <i>Lesson 11-4 591, Lesson 11-5 591, Lesson 11-6 591, Lesson 11-7 592</i>
b. Apply formulas to solve problems involving perimeter (circumference) and area of polygons and circles.	SE: 273 #25-#29, 473 #37, #38, 485 #20, 492 #20, #21, 495 #25, 500 #12 <i>Mixed Problem Solving 601 #12-#17, 606</i> <i>Problem Solving Strategy 497 #4, #10</i> <i>Standardized Test Practice 283 #16</i>
2. Customary and Metric Measurements	
a. Select and use appropriate tools for measurements in practical applications and make reasonable estimates of measurements in a particular situation using the appropriate unit.	SE: 269 #34, 542-545, 548 #24-#28 <i>Extra Practice Lesson 12-6 595</i> <i>Hands-On Lab 412</i> <i>Standardized Test Practice 549 #16</i>
b. Use estimates to relate customary and metric measurements to each other.	SE: A conversions table is listed on the back inside cover of the textbook.
Standard 5: Data Analysis and Probability - The student will use probability to formulate and justify predictions from a set of data.	
1. Use data from a sample to predict possible outcomes and compute simple probabilities as fractions, decimals or percents (e.g., use data from lists, tree diagrams, frequency distribution tables, area models).	SE: 370-373, 376-377 #16, #17, #19, #25-#27, 393-396, 398-401 <i>Extra Practice Lesson 9-1 584</i> <i>Lesson 9-6 586, Lesson 9-7 586 #4-#7</i> <i>Hands-On Lab 397</i> <i>Mixed Problem Solving 604 #1-#3, #11, #12</i> TWE: DI 371

CONTENT STANDARDS	PAGE REFERENCES
2. Determine the probability of an event involving “or”, “and”, or “not” (e.g., on a spinner with 1 blue, 2 red and 2 yellow sections, what is the probability of getting a red or a yellow?).	SE: 370-373, 376-377 #16, #17, #19, #25-#27, 393-396, 398-401, 402 #11-#16, 405 #3-#5 <i>Extra Practice Lesson 9-1</i> 584 <i>Lesson 9-6</i> 586 <i>Standardized Test Practice</i> 407 #12 TWE: T 371

Codes Used for TWE Pages

A	Assess
B	Bellringer
DI	Daily Intervention
ICE	In-Class Example
T	Teach
W	Which One Doesn't Belong