

GLENCOE CORRELATION
MATHSCAPE LEVEL 7
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., $n + 0 = n$, $2(x + 3) = 2x + 6$).	<i>The Language of Algebra</i> SE: 10-11, 36 TG: 24, 56
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).	<i>The Language of Algebra</i> SE: 6-7, 12-13, 26-27, 28-29, 30-31 TG: 14, 16, 28, 35, 56, 58
3. Identify situations that model linear graphs (e.g., distance traveled at a constant rate).	<i>The Language of Algebra</i> SE: 16-17, 18-19, 20-21, 22-23, 32-33, 38, 39, 40, 41 TG: 38, 42, 50
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).	<i>Making Mathematical Arguments</i> SE: 6-7 TG: 14 <i>Buyer Beware</i> SE: 6-7, 10-11, 12-13 TG: 16, 24
b. Use the basic operations on integers to solve problems.	<i>Making Mathematical Arguments</i> SE: 6-7, 8-9, 10-11, 35, 36 TG: 12, 13, 22, 24
2. Ratio, Proportion and Percents	
a. Demonstrate the concept of ratio and proportion with models (e.g., similar geometric shapes, scale models).	<i>Buyer Beware</i> SE: 15-16, 18-19, 20-21, 22-23, 38, 39, 40, 41 TG: 34, 40, 44, 48, 50
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).	<i>Buyer Beware</i> SE: 6-7, 10-11, 16-17, 18-19, 20-21, 22-23, 30, 41, 42 TG: 14, 35, 36, 42, 46, 58
c. Solve percent application problems (e.g., discounts, tax, finding the missing value of percent/part/whole).	<i>Buyer Beware</i> SE: 26-27, 30-31, 32-33, 44, 45 TG: 56, 66, 68

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3. Exponents	
a. Analyze and develop generalizations of exponential patterns, including zero as an exponent, using manipulatives and calculators.	<i>Making Mathematical Arguments</i> SE: 16-17, 18-19, 22-23, 38, 40, 41 TG: 34, 35, 56, 57
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).	<i>Making Mathematical Arguments</i> SE: 26-27, 28-29, 30-31, 32-33, 42, 45 TG: 34, 48, 58, 64
c. Estimate the square root of a number.	<i>Making Mathematical Arguments</i> SE: 20-21 TG: 40
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.	<i>Getting In Shape</i> SE: 6-7, 8-9, 10-11, 12-13, 34-36 TG: 20
b. Classify quadrilaterals according to their sides and angles (e.g., determine whether all squares are rectangles).	<i>Getting In Shape</i> SE: 16-17, 18-19, 20-21, 22-23, 38, 39 TG: 32, 34, 35, 36, 38
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).	<i>Getting In Shape</i> SE: 6-7, 8-9 TG: 12-13, 18
3. Rectangular Coordinate System	
a. Locate points on a plane in all four quadrants.	<i>The Language of Algebra</i> SE: 16-17 TG: 38
b. Identify geometric transformation of figures (rotations, translations, and reflections).	<i>Getting In Shape</i> SE: 10-11, 12-13, 20-21, 22-23, 32-33, 40, 45 TG: 26, 32, 33, 34, 44, 70
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).	<i>From the Ground Up</i> SE: 6-7, 10-11, 12-13, 34, 36 TG: 16, 22
b. Apply formulas to solve problems involving perimeter (circumference) and area of polygons and circles.	<i>Getting in Shape</i> SE: 26-27, 30-31, 42 #9, 44#11 TG: 60, 68
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.	<i>Getting in Shape</i> SE: 6-7, 12-13, 18-19, 28-29, 30-31, 34, 43 TG: 12, 14, 26

CONTENT STANDARDS	PAGE REFERENCES
b. Use estimates to relate customary and metric measurements to each other.	<i>From the Ground Up</i> SE: 32-33, 45 These examples could be used as projects relating customary and metric measurements.
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).	<i>Chance Encounters</i> SE: 6-7, 8-9, 10-11, 26-27, 30-31, 32-33, 34-35, 36, 44, 45, 47 TG: 14, 66, 68
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?).	<i>Chance Encounters</i> SE: 8-9, 10-11, 14-15, 16-17, 18-19, 32-33, 38, 40, 41 TG: 18, 72