

GLENCOE CORRELATION
PRE-ALGEBRA
OKLAHOMA
Priority Academic Student Skills
Mathematics Content Standards
Pre-Algebra

| CONTENT STANDARDS | PAGE REFERENCES |
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| Standard 1: Algebraic Reasoning - The student will graph and solve linear equations and inequalities in problem-solving situations. | |
| 1. Equations | |
| a. Model, write, and solve 2-step linear equations using a variety of methods. | SE: 120-124, 126-130, 330-333, 334-338 |
| b. Graph and interpret the solution to linear equations on a number line with one variable and on a coordinate plane with two variables. | SE: 85-89, 110-114, 115-119, 375-379, 381-385, 398-401, 402-403, 414-418 |
| c. Predict the effect on the graph of a linear equation when the slope changes (e.g., make predictions from graphs, identify the slope in the equation $y = mx + b$ and relate to a graph). | SE: 393-397, 398-401, 402-403, 492-497 |
| 2. Inequalities | |
| a. Model, write, and solve 1-step and 2-step linear inequalities with one variable. | SE: 340-344, 345-349, 350-354, 355-359 |
| b. Graph the solution to linear inequalities with one variable on a number line. | SE: 85-89, 340-344, 345-349, 350-354, 355-359 |
| Standard 2: Number Sense - The student will use numbers and number relationships to solve problems. | |
| 1. Rational Numbers and Proportional Reasoning | |
| a. Compare and order rational numbers (positive and negative integers, fractions, decimals) in real-life situations. | SE: 56-61, 186-190, 200-204, 226-230, 281-285, 441-445 |
| b. Use the basic operations on rational numbers to solve problems in real-life situations. | SE: 6-10, 64-68, 70-74, 75-79, 80-84, 210-214, 215-219, 220-224, 232-236 |
| c. Apply ratios and proportions to solve problems. | SE: 264-268, 270-274, 275, 276-280, 288-292, 310-314, 471-475, 476, 477-481, 482, 584-588, 646-649 |
| 2. Exponents | |
| a. Use the rules of exponents to solve problems (e.g., $7^2 \cdot 7^3 = 7^5$, $a^m/a^n = a^{m-n}$). | SE: 175-179, 181-185, 186-190 |
| b. Represent and interpret large numbers and numbers less than one in exponential and scientific notation. | SE: 153-157, 181-185, 186-190 |
| c. Use estimation strategies (e.g., rounding) to describe the magnitude of large numbers and numbers less than one. | SE: 186-190 |

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| Standard 3: Geometry - The student will use geometric properties to solve problems in a variety of contexts. | |
| 1. Construct models, sketch (from different perspectives), and classify solid figures such as rectangular solids, prisms, cones, cylinders, pyramids, and combined forms. | SE: 554-555, 556-561, 573-577, 578-582 |
| 2. Develop the Pythagorean Theorem and apply the formula to find the length of missing sides of a right triangle and the length of other line segments. | SE: 458-459, 460-464, 465, 466-470 |
| Standard 4: Measurement - The student will use measurement to solve problems in a variety of contexts. | |
| 1. Estimate and find the surface area and volume in real world settings (e.g., unwrap a box to explore surface area; use rice, 1-inch cubes, centimeter cubes, cups ... to estimate the volume of boxes, irregular shaped objects, containers). | SE: 562, 563-567, 568-572, 573-577, 578-582 |
| 2. Apply knowledge of ratio and proportion to solve relationships between similar geometric figures. | SE: 270-274, 276-280, 471-475, 583, 584-588 |
| 3. Formulas | |
| a-I. Select and apply appropriate formulas for an equation (e.g., $d = rt$, $I = prt$). | SE: 70-74, 80-84, 375-379 |
| a-II. Select and apply appropriate formulas for measurement problems (e.g., $p = 2l + 2w$, $V = lwh$). | SE: 131-136, 137, 334-338, 492-497, 513-517, 520-525, 527-531, 533-538, 539-543, 563-567, 568-572, 573-577, 578-582 |
| b. Find the area of a "region of a region" for simple composite figures. | SE: 539-543 |
| Standard 5: Data Analysis and Statistics - The student will use data analysis and statistics to interpret data in a variety of contexts. | |
| 1. Select and apply appropriate formats (e.g., line plots, bar graphs, stem-and-leaf plots, scatter plots, histograms, circle graphs) to display collected data. | SE: 40-44, 409-413, 606-611, 617-621, 622, 623-628, 629 |
| 2. Measures of Central Tendency | |
| a. Find the measures of central tendency (mean, median and mode) of a set of data and understand why a specific measure provides the most useful information in a given context. | SE: 80-84, 238-242, 243, 612-616, 617-621, 622 |
| b. Compute the mean, median, and mode for data sets and understand how additional data in a set may affect the measures of central tendency. | SE: 82, 238-242, 243, 248, 252, 258, 605, 615, 618, 735 |
| 3. Determine how samples are chosen (random, limited, biased) to draw and support conclusions about generalizing a sample to a population. | SE: 309 |