

Oklahoma Algebra 1 PASS Mathematics Content Standards Correlated to *Glencoe Algebra 1*

PASS Mathematics Content Standard	Lesson References
Standard 1: Number Sense and Algebraic Operations - The student will use expressions and equations to model number relationships.	
1.1 Translate word phrases and sentences into expressions and equations and vice versa.	1-1, 3-1, 4-8, 5-4, 5-5
1.2.a Simplify and evaluate linear, absolute value, rational and radical expressions.	1-1, 1-2, 1-3, 2-7, 3-8, 6-5, 11-1, 11-2, 12-2, 12-2F, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8
1.2.b Simplify polynomials by adding, subtracting or multiplying.	8-1, 8-4, 8-5P, 8-5, 8-6, 8-7P, 8-7, 8-8
Standard 2: Relations and Functions - The student will use relations and functions to model number relationships.	
2.1.a Distinguish between linear and nonlinear data.	4-5, 4-6, 5-7, 5-7F
2.1.b Distinguish between relations and functions.	4-6
2.1.c Identify dependent and independent variables, domain and range.	1-8, 4-3, 4-4
2.1.d Evaluate a function using tables, equations, or graphs.	4-5, 4-5F, 4-6
2.2 Recognize the parent graph of the functions $y = k$, $y = x$, $y = x $, and predict the effects of transformations on the parent graph (e.g., $y = x + 2$, change slope, change intercepts, change slope and intercept).	5-3P, 5-3, 5-3F, 5-4, 5-5, 5-6, 6-5
2.3 Calculate the slope of a line using a graph, an equation, two points or a set of data points.	5-1, 5-2, 5-3P, 5-3, 5-3F, 5-4, 5-5, 5-6, 5-7, 5-7F
2.4.a Develop the equation of a line and graph linear relationships given slope and y -intercept.	5-3P, 5-3, 5-4, 5-6
2.4.b Develop the equation of a line and graph linear relationships given slope and one point on the line.	5-3, 5-4, 5-5, 5-6
2.4.c Develop the equation of a line and graph linear relationships given two points on the line.	5-3, 5-4, 5-5
2.4.d Develop the equation of a line and graph linear relationships given x -intercept and y -intercept.	4-5, 5-7
2.4.e Develop the equation of a line and graph linear relationships given a set of data points.	5-7, 5-7F
2.5.a Use the slope to differentiate between lines that are parallel, perpendicular, horizontal, or vertical.	5-1, 5-2, 5-6
2.5.b Interpret the slope and intercepts within the context of everyday life (e.g., telephone charges based on base rate [y -intercept] plus rate per minute [slope]).	5-2, 5-3, 5-4
2.6.a Solve linear equations by graphing or using properties of equality.	3-2P, 3-2, 3-3, 3-4P, 3-4, 3-5, 3-8, 4-5, 4-5F, 5-3P, 5-3, 5-3F

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2.6.b	Solve linear inequalities by graphing or using properties of inequalities.	6-1, 6-2P, 6-2, 6-3, 6-6, 6-6F
2.6.c	Match appropriate equations or inequalities (with 1 or 2 variables) to a graph, table, or situation and vice versa.	3-2P, 3-2, 3-3, 3-4P, 3-4, 3-5, 3-8, 4-5, 4-5F, 5-3P, 5-3, 5-3F
2.7	Solve a system of linear equations by graphing, substitution or elimination.	7-1P, 7-1, 7-1F, 7-2, 7-3, 7-4
2.8.a	Use the formulas from measurable attributes of geometric models (perimeter, circumference, area and volume), science, and statistics to solve problems within an algebraic context.	3-6, 3-7, 3-8, 3-9, 3-9F, 11-4, 11-5
2.8.b	Solve two-step and three-step problems using concepts such as rules of exponents, probability, rate, distance, ratio and proportion, measures of central tendency and percent.	3-6, 3-7, 3-8, 3-9, 3-9F, 10-5, 10-6, 10-7, 14-1, 14-2, 14-3, 14-4, 14-5
2.9.a	Match exponential and quadratic functions to a table, graph or situation and vice versa.	10-1, 10-1F, 10-5, 10-6
2.9.b	Solve quadratic equations by graphing, factoring, or using the quadratic formula.	9-2, 9-3, 9-4, 9-5, 9-6, 10-2, 10-4
Standard 3: Data Analysis and Statistics - The student will use data analysis and statistics to formulate and justify predictions from a set of data.		
3.1.a	Translate from one representation of data to another and understand the data can be represented using a variety of tables, graphs, or symbols and that different modes of representation often convey different messages.	1-9, 1-9F, 2-5, 3-9, 3-9F, 5-7, 5-7F, 13-1, 13-2, 13-3, 13-3F, 13-4, 13-5, 13-5F
3.1.b	Make valid inferences, predictions, and/or arguments based on data from graphs, tables and charts.	1-9, 1-9F, 2-5, 3-9, 3-9F, 5-7, 5-7F, 13-1, 13-2, 13-3, 13-3F, 13-4, 13-5, 13-5F
3.2	Collect data involving two variables and display on a scatter plot; interpret results using a linear model/equation and identify whether the model/equation is a line of best fit for the data (e.g., given a scatter plot and several linear equations, which one is the best fit?).	5-7, 5-7F