



WEST SHORE SCHOOL DISTRICT
Pacing Guide: Pre Algebra Grade 8

Week	Module
1 2 3 4 5 6 7	Number Systems and Properties of Exponents
8 9 10 11 12 13 14 15 16 17	Linear Relations & Functions
18 19 20 21 22 23 24 25	Linear Equations & Systems of Equations
26 27 28 29	Data Analysis
30 31 32 33 34 35 36	Congruence and Similarity



WEST SHORE SCHOOL DISTRICT
Pacing Guide: Pre Algebra Grade 8

Module 1- Number Systems & Properties of Exponents (7 weeks)

Real number system (rational & irrational), converting terminating & repeating decimals, estimate irrationals w/out calculator, compare & order irrationals on a number line, radicals, square roots & cubed roots w/ & w/out calculator, properties of integer exponents w/o calculator, express numbers, compare & perform operations in scientific notation

Module 2- Linear Relations & Functions (10 weeks) (3 tests)

Part 1: Slope, rate of change, linear equation, Graph & compare proportional relationships (in graphs & equation form), compare slopes on a coordinate plane & with similar triangles, convert equations to slope intercept form (proportional through the origin), Part 2: Determine whether a relation is a function, domain & range, compare two functions (from a table, an equation) and determine the greater slope, determine whether a function is linear or non-linear

Part 3: Create a function to model a linear equation (from description or two coordinates), find slope & y-intercept, analyze a graph to describe a function (increasing, decreasing, linear, non-linear)

Module 3- Linear Equations & Systems of Equations (8 weeks)

Write & identify one variable equations (one, infinite, no solutions), solve linear equations w/ distributive property & combining like terms, interpret solutions to systems of equations (one point, no solution, infinite solutions), solve systems of equations (substitution & elimination) algebraically & estimate by graphing, solve real word problems

Module 4- Data Analysis (4 weeks)

Scatter plots (construct & analyze), construct a line of best fit, use linear equations of bivariate data to solve problems, (clustering, outliers, positive correlations, negative correlations, linear association, non-linear association), construct & interpret two way tables & frequency charts

Module 5- Congruence & Similarity (7 weeks)

Transformations, congruence, rotation, reflection, translation, sequences of transformations for congruent polygons & similar polygons/triangles, dilations & transformations using coordinates, Pythagorean Theorem, volume of cones/cylinders/spheres