

Expectations and Outcomes

Grade Level/Course: Seventh Grade

Content Area: Advanced Math

Unit Title	Guarantees
Inequalities	<ul style="list-style-type: none"> • Writing and Graphing Inequalities • Solving inequalities using addition and subtraction • Solving inequalities using multiplication or division • Solving two step inequalities
Constructions and Scale Drawings	<ul style="list-style-type: none"> • Adjacent and Vertical Angles • Complementary and Supplementary Angles • Triangles • Quadrilaterals • Scale Drawings
Circles and Area	<ul style="list-style-type: none"> • Circles and Circumference • Perimeters of Composite Figures • Areas of circles • Areas of Compo
Surface Area and Volume	<ul style="list-style-type: none"> • Surface Areas of prisms • Surface Areas of Pyramids • Surface Areas of Cylinders • Volumes of Prisms • Volumes of Pyramids • Cross Sections of 3D figures
Probability and Statistics	<ul style="list-style-type: none"> • Outcomes and Events • Probability • Experimental and Theoretical Probability • Compound Events • Independent and Dependent Events • Samples and Populations

Unit Title	Guarantees
	<ul style="list-style-type: none"> • Comparing Populations
Equations	<ul style="list-style-type: none"> • Solving Simple Equations • Solving Multi step equations • Solving equations with variables on both sides • Rewriting equations and formulas
Transformations	<ul style="list-style-type: none"> • Congruent Figures • Translations • Reflections • Rotations • Similar figures • Perimeters and Areas of similar figures • Dilations
Angles and Triangles	<ul style="list-style-type: none"> • Parallel lines and transversals • Angles of Triangles • Angles of Polygons • Using Similar Triangles
Graphing and Writing Linear Equations	<ul style="list-style-type: none"> • Graphing Linear equations • Slope of a line • Graphing proportional relationships • Graphing linear equations in slope-intercept form • Graphing linear equations in standard form • Writing equations in slope-intercept form • Writing equations in point-slope form
Systems of Linear Equations	<ul style="list-style-type: none"> • Solving systems of linear equations by graphing • Solving systems of linear equations by subtraction • Solving systems of linear equations by elimination • Solving special systems of linear equations
Functions	<ul style="list-style-type: none"> • Relations and Functions • Representations of Functions

Unit Title	Guarantees
	<ul style="list-style-type: none"> • Linear Functions • Comparing Linear and Nonlinear Functions • Analyzing and Sketching Graphs
Real Numbers and the Pythagorean Theorem	<ul style="list-style-type: none"> • Finding Square Roots • Finding Cube Roots • The Pythagorean theorem • Approximating Square roots • Using the Pythagorean Theorem
Volume and Similar Solids	<ul style="list-style-type: none"> • Volumes of Cylinders • Volumes of Cones • Volumes of Spheres • Surface Areas and Volumes of Similar Solids
Data Analysis and Displays	<ul style="list-style-type: none"> • Scatter plots • Lines of Fit • Two-way tables • Choosing a data display
Exponents and Scientific Notation	<ul style="list-style-type: none"> • Exponents • Product of Powers Property • Quotient of Powers Property • Zero and Negative Exponents • Reading Scientific Notation • Writing Scientific Notation • Operations in Scientific Notation