

**EIGHTH GRADE
Mathematics
PRIORITY STANDARDS**

Algebraic Reasoning: Expressions and Equations	
8.AEE.A.1	Apply the properties of integer exponents using powers of 10 to generate equivalent numerical expressions.
8.AEE.A.2	Represent solutions to equations using square root and cube root symbols.
8.AEE.B.6	Write the equation for a line in slope intercept form $y = mx + b$, where m and b are rational numbers, and explain in context why the slope m is the same between any two distinct points.
8.AEE.C.7	Solve linear equations with one variable including equations with rational number coefficients, with the variable on both sides, or whose solutions require using the distributive property and/or combining like terms.
8.AEE.C.8	Find, analyze, and interpret solutions to pairs of simultaneous linear equations using graphs or tables.
Algebraic Reasoning: Functions	
8.AFN.A.2	Compare the properties of two functions represented algebraically, graphically, numerically in tables, or verbally by description.
8.AFN.B.4	Construct a function to model a linear relationship in authentic contexts between two quantities.
8.AFN.B.5	Describe qualitatively the functional relationship between two quantities in authentic contexts by analyzing a graph.
Geometric Reasoning and Measurement	
8.GM.A.1	Verify experimentally the properties of rotations, reflections, and translations.
8.GM.A.2	Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations.
8.GM.A.3	Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates.
8.GM.A.4	Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and/or dilations.
8.GM.A.5	Use informal arguments to establish facts about interior and exterior angles of triangles and angles formed by parallel lines cut with a transversal.
8.GM.B.6	Distinguish between applications of the Pythagorean Theorem and its Converse in authentic contexts.
8.GM.B.7	Apply the Pythagorean Theorem in authentic contexts to determine unknown side lengths in right triangles.
8.GM.B.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
Data Reasoning	
8.DR.D.4	Interpret scatter plots for bivariate quantitative data to investigate patterns of association between two quantities to answer investigative questions.
	* Denotes a revision has been made to the original Common Core State Standard.