



NEISD Math Year at a Glance 2024 - 2025
8th Grade Math

Fall Semester

Unit Title	Unit 1 Using Real Numbers	Unit 2 Equations & Inequalities	Unit 3 Proportional & Non-Proportional Functions	Unit 4 Bivariate Data	Unit 5 Pythagorean Theorem & Angle Relationships
Time	2 weeks	4 weeks	4 weeks	4 weeks	3 weeks
Understandings	<p>Numbers are related to each other</p> <p>There are various ways to represent equivalent values</p> <p>Mathematical symbols impact the value of a number</p>	<p>Solutions are values that make the equation true.</p> <p>There are various ways to represent linear relationships.</p> <p>Mathematical symbols are used to show the relationship between two expressions</p> <p>Inequality symbols are used between two expressions to represent situations where one side is greater than the other.</p>	<p>Linear relationships are represented in different ways</p> <p>An equation describes the relationship between input and output values</p> <p>There are distinguishing features between proportional and nonproportional situations and their representations.</p> <p>A function describes a situation where one quantity determines another.</p>	<p>Graphical representations are used to determine the association between two variables.</p> <p>An association between two variables can be used to make a prediction</p> <p>There are distinguishing features between proportional and nonproportional situations and their representations.</p>	<p>Right triangles have unique characteristics that lead to a special relationship between the sides of the triangle.</p> <p>The Pythagorean Theorem can be used to solve problems about distance.</p> <p>The geometric relationships between angles and figures can be deduced from a set of examples.</p>
TEKS	8.2A, B, C, D	8.8A, B, C 8.9A	8.5A, B, F, G, H, I	8.4B, C 8.5C, D, E 8.11A, B, C	8.6 C 8.7 C, D 8.8 D



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Spring Semester

Unit Title	Unit 6 Transformations	Unit 7 Volume & Surface Area	Unit 8 Personal Financial Literacy	Unit 9 STAAR Review	Unit 10 Algebra I Acceleration
Time	5 weeks	5 weeks	2 weeks	2 weeks	4 weeks
Understandings	<p>A scale factor applied to a figure does not preserve congruence but it does create a similar figure.</p> <p>An algebraic representation can be used to describe and define a transformation.</p> <p>The formula to find the slope of a line can be illustrated and understood by finding the ratio of the rise to run in 2 similar triangles.</p>	<p>The volume formulas indicate the relationship between a geometric solid's Base area and its height. .</p> <p>The area and perimeter of the base (B and P) are key factors in determining the volume and surface area of prisms and cylinders.</p> <p>Knowledge about equations can be applied to solving problems with formulas and solving for specific measurements.</p>	<p>There are real world implications when saving for college, calculating the cost of a loan, and investing money over time.</p> <p>Factors such as interest rate, length of time and principal</p>	<p>Writing and solving equations is useful problem solving strategy for problems about linear relationships, geometry, and interest.</p> <p>Analyzing graphs includes identifying the variables on x- and y- axis, comparing corresponding coordinates of transformed figures, and determining the value of the y-intercept and slope of a linear graph.</p> <p>Efficient problem solving includes analyzing the problem, organizing the given information, and determining a solution with or without a calculator.</p>	<p>The rate of change and the y-intercept are key features for representing linear functions</p> <p>Solutions to a function are represented as x-intercepts on the graph of the function and are known as zeros.</p> <p>In order to solve equations and inequalities with the distributive property, simplifying is necessary for solving.</p>
TEKS	8.3A, B, C 8.4A 8.10A, B, C, D	8.6 A, B 8.7 A, B	8.12A, B, C, D, E, F, G	All Tested Standards	A.2C A.3B, C A.5A, B