

MATATAG → Math → Grade 8

Topic	New File Name	File Type	Level of Skill Progression
Q1			
measures of central tendency of grouped data	DEV_Video - How to Find a Mean Median Mode and Range Measures of Center Dot Plots	video	Developing
	DEV_Video - Measures of Central Tendency	video	Developing
	DEV_Discussion Presentation - Statistical Data and Data Gathering	ppt	Developing
	DEV_Discussion Presentation - Mean, Median, and Mode of Grouped Data	ppt	Developing
	DEV_Discussion Presentation - Range, Average Deviation, Variance, and Standard Deviation of Grouped Data	ppt	Developing
	DEV_Discussion Presentation - Analyzing, Interpreting, and Making Valid Generalizations from Statistical Data	ppt	Developing
	DEV_Printable Worksheet - Statistical Data and Data Gathering	pdf	Developing
	DEV_Printable Worksheet - Mean, Median, and Mode of Grouped Data	pdf	Developing
	DEV_Printable Worksheet - Range, Average Deviation, Variance, and Standard Deviation of Grouped Data	pdf	Developing
	DEV_Printable Worksheet - Analyzing, Interpreting, and Making Valid Generalizations from Statistical Data	pdf	Developing
	PRO_Video - Mean, Median, Mode, and Range	video	Proficient
algebraic expressions and operations with monomials, binomials, and multinomials	DEV_Video - Write an Algebraic Expression for a Real-World Scenario Addition Subtraction	video	Developing
	DEV_Video - Determine Whether an Algebraic Expression Matches a Scenario	video	Developing
	DEV_Discussion Presentation - Product of the Sum and Difference of Two Terms	ppt	Developing
	DEV_Discussion Presentation - Product of a Binomial and a Trinomial	ppt	Developing
	DEV_Discussion Presentation - Laws of Exponents	ppt	Developing
	DEV_Printable Worksheet - Product of the Sum and Difference of Two Terms	pdf	Developing
	DEV_Printable Worksheet - Product of a Binomial and a Trinomial	pdf	Developing
	DEV_Printable Worksheet - Laws of Exponents	pdf	Developing

special products for binomials, and factorization of polynomials	DEV_Video - Simplify Algebraic Expressions	video	Developing
	DEV_Video - How to Expand Double Brackets	video	Developing
	DEV_Video - Special Products of Binomials... Recognizing Sum and Difference Patterns!	video	Developing
	DEV_Video - What is Difference of Two Squares (DOTS)	video	Developing
	DEV_Video - Multiply Polynomials	video	Developing
	DEV_Video - Recognizing a Special Product of a Binomial Expression	video	Developing
	DEV_Video - How to Simplify Expressions by Collecting Like Terms	video	Developing
	DEV_Video - How to Simplify Algebraic Expressions	video	Developing
	DEV_Video - Combining Factoring Techniques	video	Developing
	DEV_Video - Factoring Special Products... Can You Recognize the Patterns	video	Developing
	DEV_Discussion Presentation - Dividing Polynomials Using Long Division	ppt	Developing
	DEV_Discussion Presentation - Dividing Polynomials Using Synthetic Division	ppt	Developing
	DEV_Discussion Presentation - Solving Problems Involving Polynomials and Polynomial Equations	ppt	Developing
	DEV_Discussion Presentation - Graphs of Polynomial Functions	ppt	Developing
	DEV_Discussion Presentation - Problems Involving Polynomial Functions	ppt	Developing
	DEV_Discussion Presentation - Square of a Binomial	ppt	Developing
	DEV_Discussion Presentation - Cube of a Binomial	ppt	Developing
	DEV_Discussion Presentation - Addition and Subtraction of Polynomials	ppt	Developing
	DEV_Discussion Presentation - Multiplication and Division of Polynomials	ppt	Developing
	DEV_Discussion Presentation - Product of Two Binomials	ppt	Developing
	DEV_Discussion Presentation - Factoring Polynomials with Common Monomial Factors	ppt	Developing
	DEV_Discussion Presentation - Factoring the Difference of Two Squares	ppt	Developing
	DEV_Discussion Presentation - Factoring the Sum and Difference of Two Cubes	ppt	Developing
	DEV_Discussion Presentation - Factoring Perfect Square Trinomials	ppt	Developing
	DEV_Discussion Presentation - Factoring Quadratic Trinomials in the Form $ax^2 + bx + c$, where $a = 1$	ppt	Developing
	DEV_Discussion Presentation - Factoring Quadratic Trinomials in the Form $ax^2 + bx + c$, where $a \neq 1$	ppt	Developing
	DEV_Printable Worksheet - Dividing Polynomials Using Long Division	pdf	Developing
	DEV_Printable Worksheet - Dividing Polynomials Using Synthetic Division	pdf	Developing
	DEV_Printable Worksheet - Solving Problems Involving Polynomials and Polynomial Equations	pdf	Developing
	DEV_Printable Worksheet - Graphs of Polynomial Functions	pdf	Developing
	DEV_Printable Worksheet - Problems Involving Polynomial Functions	pdf	Developing
	DEV_Printable Worksheet - Square of a Binomial	pdf	Developing
	DEV_Printable Worksheet - Cube of a Binomial	pdf	Developing
	DEV_Printable Worksheet - Addition and Subtraction of Polynomials	pdf	Developing
	DEV_Printable Worksheet - Multiplication and Division of Polynomials	pdf	Developing
	DEV_Printable Worksheet - Product of Two Binomials	pdf	Developing

special products for binomials, and factorization of polynomials	DEV_Printable Worksheet - Factoring Polynomials with Common Monomial Factors	pdf	Developing
	DEV_Printable Worksheet - Factoring the Difference of Two Squares	pdf	Developing
	DEV_Printable Worksheet - Factoring the Sum and Difference of Two Cubes	pdf	Developing
	DEV_Printable Worksheet - Factoring Perfect Square Trinomials	pdf	Developing
	DEV_Printable Worksheet - Factoring Quadratic Trinomials in the Form $ax^2 + bx + c$, where $a = 1$	pdf	Developing
	DEV_Printable Worksheet - Factoring Quadratic Trinomials in the Form $ax^2 + bx + c$, where $a \neq 1$	pdf	Developing
	DEV_eContent - Adding & Subtracting Polynomials_BU	html	Developing
	DEV_eContent - Adding & Subtracting Polynomials_STR	html	Developing
	DEV_eContent - Adding & Subtracting Polynomials_MAS	html	Developing
	DEV_eContent - Multiplying Polynomials_BU	html	Developing
	DEV_eContent - Multiplying Polynomials_STR	html	Developing
	DEV_eContent - Multiplying Polynomials_MAS	html	Developing
	DEV_eContent - Dividing Polynomials_BU	html	Developing
	DEV_eContent - Dividing Polynomials_STR	html	Developing
	DEV_eContent - Dividing Polynomials_MAS	html	Developing
	DEV_eContent - Factorization Difference of Two Squares_BU	html	Developing
	DEV_eContent - Factorization Difference of Two Squares_STR	html	Developing
	DEV_eContent - Factorization Difference of Two Squares_MAS	html	Developing
	DEV_eContent - Factorization: Perfect Squares_BU	html	Developing
	DEV_eContent - Factorization: Perfect Squares_STR	html	Developing
	DEV_eContent - Factorization: Perfect Squares_MAS	html	Developing
	PRO_Video - Laws of Exponents Explained	video	Proficient
	PRO_Video - Algebra: Expanding Square Brackets	video	Proficient
	PRO_Video - Multiplying Binomials by the FOIL Method	video	Proficient
	PRO_Video - Simplifying Expressions	video	Proficient

rational algebraic expressions and equations	DEV_Video - Dividing Rational Expressions	video	Developing
	DEV_Video - Solve Rational Equations Using the Least Common Denominator	video	Developing
	DEV_Video - Adding Rational Expressions	video	Developing
	DEV_Video - Multiply Rational Expressions	video	Developing
	DEV_Video - Solve Rational Equations Using Additive and Multiplicative Inverses	video	Developing
	DEV_Video - Solve Real-World Problems Using Rational Equations	video	Developing
	DEV_Video - Subtracting Rational Expressions	video	Developing
	DEV_Discussion Presentation - Problems Involving Rational Algebraic Expressions	ppt	Developing
	DEV_Discussion Presentation - Rational Algebraic Expressions	ppt	Developing
	DEV_Discussion Presentation - Simplifying Rational Expressions	ppt	Developing
	DEV_Discussion Presentation - Addition and Subtraction of Rational Algebraic Expressions	ppt	Developing
	DEV_Discussion Presentation - Multiplication and Division of Rational Algebraic Expressions	ppt	Developing
	DEV_Printable Worksheet - Problems Involving Rational Algebraic Expressions	pdf	Developing
	DEV_Printable Worksheet - Rational Algebraic Expressions	pdf	Developing
	DEV_Printable Worksheet - Simplifying Rational Expressions	pdf	Developing
	DEV_Printable Worksheet - Addition and Subtraction of Rational Algebraic Expressions	pdf	Developing
	DEV_Printable Worksheet - Multiplication and Division of Rational Algebraic Expressions	pdf	Developing
	DEV_eContent - Multiply Rational Algebraic Expressions_BU	html	Developing
	DEV_eContent - Multiply Rational Algebraic Expressions_STR	html	Developing
	DEV_eContent - Multiply Rational Algebraic Expressions_MAS	html	Developing
	DEV_eContent - Divides Rational Algebraic Expressions_BU	html	Developing
	DEV_eContent - Divides Rational Algebraic Expressions_STR	html	Developing
	DEV_eContent - Divides Rational Algebraic Expressions_MAS	html	Developing
	PRO_Video - Manipulating Rational Expressions: Simplification and Operations	video	Proficient
rules for obtaining terms in sequences	DEV_Video - Arithmetic Sequences	video	Developing
	DEV_Video - Represent an Explicit Rule as an Exponential Function	video	Developing
	DEV_eContent - Rational Exponents_BU	html	Developing
	DEV_eContent - Rational Exponents_STR	html	Developing
	DEV_eContent - Rational Exponents_MAS	html	Developing
	DEV_eContent - Arithmetic Sequence and Mean_BU	html	Developing
	DEV_eContent - Arithmetic Sequence and Mean_STR	html	Developing
	DEV_eContent - Arithmetic Sequence and Mean_MAS	html	Developing
	DEV_eContent - Geometric Sequence and Mean_BU	html	Developing
	DEV_eContent - Geometric Sequence and Mean_STR	html	Developing
	DEV_eContent - Geometric Sequence and Mean_MAS	html	Developing

Q2			
plotting points, and finding distance and the midpoint of line segments on the Cartesian coordinate plane	DEV_Video - Distance Between Points on a Coordinate Plane	video	Developing
	DEV_Video - Graph Points on a Coordinate Plane	video	Developing
	DEV_Video - Graphing on a Coordinate Plane	video	Developing
	DEV_Video - Graphing Points Using a Coordinate Plane	video	Developing
	DEV_Video - Plotting Paths in a Coordinate Plane	video	Developing
	DEV_Discussion Presentation - The Rectangular Coordinate System	ppt	Developing
	DEV_Printable Worksheet - The Rectangular Coordinate System	pdf	Developing
	DEV_eContent - Distance Formula_BU	html	Developing
	DEV_eContent - Distance Formula_STR	html	Developing
	DEV_eContent - Distance Formula_MAS	html	Developing
volume of pyramids (other than square and rectangular pyramids), cones, and spheres	DEV_Video - How to Find the Volumes of Cones and Pyramids	video	Developing
	DEV_Video - Determine the Volume of a Sphere	video	Developing
	DEV_Video - Calculate Volume of Spheres and Hemispheres	video	Developing
	DEV_Video - Solve Real World Problems by Finding Volume of Cones	video	Developing
	DEV_Video - Solve Real-World Problems Involving Spheres	video	Developing
	DEV_Discussion Presentation - Cylinder, Cone, and Sphere	ppt	Developing
	DEV_Discussion Presentation - Volumes of Cylinder and Cone	ppt	Developing
	DEV_Discussion Presentation - Volume of Sphere	ppt	Developing
	DEV_Discussion Presentation - Surface Area of Spheres 1	ppt	Developing
	DEV_Discussion Presentation - Surface Area of Spheres 2	ppt	Developing
	DEV_Discussion Presentation - Surface Area of Triangular and Other Pyramids	ppt	Developing
	DEV_Discussion Presentation - Surface Area of Cones	ppt	Developing
	DEV_Printable Worksheet - Cylinder, Cone, and Sphere	pdf	Developing
	DEV_Printable Worksheet - Volumes of Cylinder and Cone	pdf	Developing
	DEV_Printable Worksheet - Volume of Sphere	pdf	Developing
	DEV_Printable Worksheet - Surface Area of Spheres 1	pdf	Developing
	DEV_Printable Worksheet - Surface Area of Spheres 2	pdf	Developing
	DEV_Printable Worksheet - Surface Area of Triangular and Other Pyramids	pdf	Developing
	DEV_Printable Worksheet - Surface Area of Cones	pdf	Developing

the Pythagorean Theorem	DEV_Video - Pythagoras Theorem and How to Use It	video	Developing
	DEV_Discussion Presentation - Proving Similarity of Triangles and Pythagorean Theorem	ppt	Developing
	DEV_Printable Worksheet - Proving Similarity of Triangles and Pythagorean Theorem	pdf	Developing
	PRO_Video - Proving the Pythagorean Theorem	video	Proficient
	PRO_Video - The Pythagorean Theorem	video	Proficient
triangle inequality theorems	DEV_Video - How to Use the Converse of the Pythagorean Theorem	video	Developing
	DEV_Video - Determine If Given Measurements Will Allow You to Create the Appropriate Shape	video	Developing
	DEV_Video - Is It a Triangle How to Use the Triangle Inequality Theorem	video	Developing
	DEV_eContent - Triangle Inequality Theorem_BU	html	Developing
	DEV_eContent - Triangle Inequality Theorem_STR	html	Developing
	DEV_eContent - Triangle Inequality Theorem_MAS	html	Developing
	DEV_eContent - Exterior Angle Inequality Theorem_BU	html	Developing
	DEV_eContent - Exterior Angle Inequality Theorem_STR	html	Developing
	DEV_eContent - Exterior Angle Inequality Theorem_MAS	html	Developing

Q3			
linear equations in one variable	DEV_Discussion Presentation - Linear Equations and Inequalities	ppt	Developing
	DEV_Discussion Presentation - Solving Linear Equation	ppt	Developing
	DEV_Discussion Presentation - Word Problems Involving Linear Equations	ppt	Developing
	DEV_Printable Worksheet - Linear Equations and Inequalities	pdf	Developing
	DEV_Printable Worksheet - Solving Linear Equation	pdf	Developing
	DEV_Printable Worksheet - Word Problems Involving Linear Equations	pdf	Developing
	DEV_eContent - Linear Equations_BU	html	Developing
	DEV_eContent - Linear Equations_STR	html	Developing
	DEV_eContent - Linear Equations_MAS	html	Developing
linear inequalities in one variable and their graphs	DEV_Video - One Step Equations - Multiplication and Division	video	Developing
	DEV_Discussion Presentation - Systems of Linear Equations and Their Graphs	ppt	Developing
	DEV_Printable Worksheet - Systems of Linear Equations and Their Graphs	pdf	Developing
linear equations in two variables and their graphs	DEV_Discussion Presentation - Slope of a Line	ppt	Developing
	DEV_Discussion Presentation - Graphing Linear Equations	ppt	Developing
	DEV_Discussion Presentation - Solving Systems of Linear Equations by Graphing	ppt	Developing
	DEV_Printable Worksheet - Slope of a Line	pdf	Developing
	DEV_Printable Worksheet - Graphing Linear Equations	pdf	Developing
	DEV_Printable Worksheet - Solving Systems of Linear Equations by Graphing	pdf	Developing
	PRO_Video - Solving Inequalities	video	Proficient
	PRO_Video - Solving Algebraic Inequalities	video	Proficient
systems of linear equations in two variables	DEV_Video - Graph a Linear Inequality with a $<$ or \leq Symbol	video	Developing
	DEV_Video - Graph a Linear Inequality with a $>$ or \geq Symbol	video	Developing
	DEV_Discussion Presentation - Equation of a Line - Slope-intercept Form	ppt	Developing
	DEV_Discussion Presentation - Systems of Linear Equations and Their Graphs	ppt	Developing
	DEV_Discussion Presentation - Types of Systems of Linear Equation	ppt	Developing
	DEV_Discussion Presentation - Solving Systems of Linear Equations by Graphing	ppt	Developing
	DEV_Discussion Presentation - Solving Systems of Linear Equations by Substitution	ppt	Developing
	DEV_Discussion Presentation - Solving Systems of Linear Equations by Elimination	ppt	Developing
	DEV_Printable Worksheet - Equation of a Line - Slope-intercept Form	pdf	Developing
	DEV_Printable Worksheet - Systems of Linear Equations and Their Graphs	pdf	Developing
	DEV_Printable Worksheet - Types of Systems of Linear Equation	pdf	Developing
	DEV_Printable Worksheet - Solving Systems of Linear Equations by Graphing	pdf	Developing
	DEV_Printable Worksheet - Solving Systems of Linear Equations by Substitution	pdf	Developing
	DEV_Printable Worksheet - Solving Systems of Linear Equations by Elimination	pdf	Developing
	PRO_Video - Graphing Inequalities	video	Proficient

linear inequalities in two variables	DEV_Video - How to Solve Simultaneous Equations Using the Elimination Technique	video	Developing
	DEV_Video - Real-World System of Linear Equations to Determine Cost	video	Developing
	DEV_Video - How to Solve Linear Inequalities	video	Developing
	DEV_Video - Finding the Equation of a Straight Line From 2 Sets of Coordinates	video	Developing
	DEV_Video - Linear Equations in Two Variables (Part 1)	video	Developing
	DEV_Video - Linear Equations in Two Variables (Part 2)	video	Developing
	DEV_Video - The Graph of a Linear Equation in Two Variables	video	Developing
	DEV_Video - How to Find the Equation of a Straight Line ($y = mx + c$)	video	Developing
	DEV_Video - How to Solve a System of Linear Equations by Graphing	video	Developing
	DEV_Video - Solve the System of Linear Equations Using Substitution	video	Developing
	DEV_Video - Writing the Equation of the Line Given a Slope and Point	video	Developing
	DEV_Video - How to Write the Equation of a Line Given the Slope and a Point	video	Developing
	DEV_Video - How to Solve Simultaneous Equations Using Graphs	video	Developing
	DEV_Discussion Presentation - Linear Equations and Inequalities	ppt	Developing
	DEV_Discussion Presentation - Solving Linear Inequalities	ppt	Developing
	DEV_Discussion Presentation - Problems Involving Linear Equations and Inequalities	ppt	Developing
	DEV_Discussion Presentation - Linear Equations in Two Variables	ppt	Developing
	DEV_Discussion Presentation - Word Problems Involving Linear Equations	ppt	Developing
	DEV_Discussion Presentation - Linear Inequalities in Two Variables	ppt	Developing
	DEV_Discussion Presentation - Problems Involving Linear Inequalities	ppt	Developing
	DEV_Discussion Presentation - Solving Systems of Linear Inequalities	ppt	Developing
	DEV_Printable Worksheet - Linear Equations and Inequalities	pdf	Developing
	DEV_Printable Worksheet - Solving Linear Inequalities	pdf	Developing
	DEV_Printable Worksheet - Problems Involving Linear Equations and Inequalities	pdf	Developing
	DEV_Printable Worksheet - Linear Equations in Two Variables	pdf	Developing
	DEV_Printable Worksheet - Word Problems Involving Linear Equations	pdf	Developing
	DEV_Printable Worksheet - Linear Inequalities in Two Variables	pdf	Developing
	DEV_Printable Worksheet - Problems Involving Linear Inequalities	pdf	Developing
	DEV_Printable Worksheet - Solving Systems of Linear Inequalities	pdf	Developing
	PRO_Video - Finding the Equation of a Line Through 2 Points Part 1	video	Proficient
	PRO_Video - Finding the Equation of a Line Through 2 Points Part 2	video	Proficient
	PRO_Video - Graphing in Algebra Ordered Pairs and the Coordinate Plane	video	Proficient
	PRO_Video - Introduction to Linear Algebra Systems of Linear Equations	video	Proficient
	PRO_Video - Solving Systems of Two Equations and Two Unknowns Graphing, Substitution, and Elimination	video	Proficient
	PRO_Video - Graphing Lines in Algebra: Understanding Slopes and Y-Intercepts	video	Proficient
	PRO_Video - Graphing Lines in Slope-Intercept Form ($y = mx + b$)	video	Proficient

Q4			
measures of variability for ungrouped data	DEV_Discussion Presentation - Mean, Median, and Mode of Ungrouped Data	ppt	Developing
	DEV_Discussion Presentation - Range, Average Deviation, Variance, and Standard Deviation of Ungrouped Data	ppt	Developing
	DEV_Printable Worksheet - Mean, Median, and Mode of Ungrouped Data	pdf	Developing
	DEV_Printable Worksheet - Range, Average Deviation, Variance, and Standard Deviation of Ungrouped Data	pdf	Developing
interpretation and analysis of graphs from primary and secondary data	DEV_Video - Describe Data Using Measures of Center and Spread	video	Developing
	PRO_Video - Statistics - Probability Experiments	video	Proficient
experimental and theoretical probability	DEV_Video - Compare Experimental and Theoretical Probability to Interpret Data	video	Developing
	DEV_Discussion Presentation - Describing Experimental Probability	ppt	Developing
	DEV_Discussion Presentation - The Tree Diagram Method	ppt	Developing
	DEV_Discussion Presentation - Analyzing Data from an Experiment	ppt	Developing
	DEV_Discussion Presentation - Solving Problems Involving Experimental Probability	ppt	Developing
	DEV_Discussion Presentation - The Listing Method	ppt	Developing
	DEV_Discussion Presentation - Solving Problems Related to Probability	ppt	Developing
	DEV_Discussion Presentation - Theoretical Probability	ppt	Developing
	DEV_Discussion Presentation - Experimental Probability	ppt	Developing
	DEV_Discussion Presentation - Experimental and Theoretical Probability	ppt	Developing
	DEV_Discussion Presentation - Probability of Simple Events	ppt	Developing
	DEV_Printable Worksheet - Describing Experimental Probability	pdf	Developing
	DEV_Printable Worksheet - The Tree Diagram Method	pdf	Developing
	DEV_Printable Worksheet - Analyzing Data from an Experiment	pdf	Developing
	DEV_Printable Worksheet - Solving Problems Involving Experimental Probability	pdf	Developing
	DEV_Printable Worksheet - The Listing Method	pdf	Developing
	DEV_Printable Worksheet - Solving Problems Related to Probability	pdf	Developing
	DEV_Printable Worksheet - Experimental Probability	pdf	Developing
	DEV_Printable Worksheet - Experimental and Theoretical Probability	pdf	Developing
	DEV_Printable Worksheet - Probability of Simple Events	pdf	Developing

the Fundamental Counting Principle	DEV_Video - Describe a Sample Space by Organizing Outcomes	video	Developing
	DEV_Video - Theoretical and Experimental Probability	video	Developing
	DEV_Discussion Presentation - Fundamental Counting Principle	ppt	Developing
	DEV_Printable Worksheet - Fundamental Counting Principle	pdf	Developing
	DEV_eContent - Probability of Simple Events_BU	html	Developing
	DEV_eContent - Probability of Simple Events_STR	html	Developing
	DEV_eContent - Probability of Simple Events_MAS	html	Developing
	PRO_Video - Statistics: Probability Part 2	video	Proficient
	PRO_Video - Statistics: Sample Spaces	video	Proficient
	PRO_Video - Statistics: Probability Part 1	video	Proficient