

Chapter 1 Basics of Algebra

| Lesson | Topic | WI Standards |
|------------------------------------|--|-----------------------------|
| 1-1 Classifying Numbers | A) Identifying Types of Numbers | NA O NIC 1 |
| | B) Number Sets | M.8.NS.1 |
| 1.2.0 | A) Expressions with Exponents | NA A CCE 2 |
| 1-2 Order of Operations | B) Expressions with Grouping Symbols | M.A.SSE.2 |
| | A) Variables | |
| 1-3 Parts of Algebraic Expressions | B) Terms | M.A.SSE.1.a |
| LAPI ESSIONS | C) Coefficients | _ |
| 1-4 Expressions and | A) Identifying Expressions and Equations | NA A CCE 4 la |
| Equations | B) Writing Expressions and Equations | M.A.SSE.1.b |
| 1-5 Simplifying | A) Like Terms | M.A.SSE.1.a, M.A.SSE.1.b |
| Expressions | B) Multiplying Terms with Different Variables | |
| 1-6 Distributive | A) Distributive Property to Simplify Expressions | M.A.SSE.1.b, |
| Property | B) Order of Operations with Variable Expressions | M.A.SSE.2 |
| | A) Identifying Relations | |
| 1-7 Relations | B) Domain | M.F.IF.5 |
| | C) Range | |
| 1-8 Functions | A) Identifying Functions | NA 5 15 4 NA 5 15 5 |
| | B) Identifying Inputs and Outputs of Functions | M.F.IF.1, M.F.IF.5 |
| 1-9 Function Notation | A) Writing Function Notation | |
| | B) Input and Output in Function Notation | M.F.IF.1, M.F.IF.2 |
| | C) Evaluating Equations Written in Function Notation | _ |



Chapter 2 Solving Equations

| Lesson | Торіс | WI Standards |
|---|--|----------------------------|
| 2-1 One-Step and Two- Step Equations | A) Solutions of One-Variable Equations | M.A.SSE.1.b, |
| | B) Solving One-Step Equations | M.A.CED.1, M.A.REI.1, |
| Step Equations | C) Solving Two-Step Equations | M.A.REI.3 |
| 2.2 Multi Stop Equations | A) Solving Multi-Step Equations | M.A.SSE.1.b, M.A.CED.1, |
| 2-2 Multi-Step Equations | B) Equations with Zero, One, or Many Solutions | M.A.REI.1, M.A.REI.3 |
| 2-3 Equations with | A) Solving Equations with Rational Coefficients | M.A.CED.1, |
| Rational Numbers | B) Solving Equations with Grouping Symbols | M.A.REI.1, M.A.REI.3 |
| | A) Writing Proportions | |
| 2-4 Proportions | B) Solving Proportions | M.A.CED.1, M.A.REI.3 |
| | C) Proportions with Zero, One, or Many Solutions | |
| | A) Solving One-Step Literal Equations | |
| 2-5 Literal Equations | B) Solving Two-Step Literal Equations | M.A.SSE.1.b, M.A.CED.4 |
| | C) Solving Multi-Step Literal Equations | Will GED. 1 |
| 2-6 Absolute Value Equations | A) Solving Absolute Value Equations with Single Variable Inside Absolute Value | |
| | B) Solving Absolute Value Equations with Linear Expression Inside Absolute Value | M.A.CED.1, M.A.CED.3 |
| | C) Writing Absolute Value Equations | |



Chapter 3 Linear Functions

| Lesson | Торіс | WI Standards |
|--------------------------------------|---|--|
| 3-1 Direct Variation | A) Graphs and Tables of Direct Variation | M.A.CED.2, M.A.REI.10, M.F.IF.7.a, |
| | B) Writing and Graphing Equations of Direct Variation | M.F.LE.1.a, M.F.LE.2, M.F.LE.5 |
| | A) Solutions of Two-Variable Equations | M.N.Q.1, M.A.CED.2, |
| 3-2 Standard Form | B) Linear Equations in Standard Form | M.A.REI.10, M.F.IF.4, |
| | C) x- and y-Intercepts | M.F.LE.1.a, M.F.LE.5 |
| 2.2 Pate of Change | A) Rate of Change Equations | M.N.Q.1, M.F.IF.6, M.F.LE.1.a, |
| 3-3 Rate of Change | B) Finding Rate of Change | M.F.LE.1.b, M.SP.ID.7 |
| | A) Classifying Slopes of Lines | M.F.IF.4, |
| 3-4 Slope | B) Slopes of Lines from Graphs | M.F.LE.1.b, |
| | C) Slopes of Lines from Points | M.SP.ID.7 |
| | A) Linear Equations in Point-Slope Form | M.A.CED.2, M.F.IF.7.a, |
| 3-5 Point-Slope Form | B) Writing Equations in Point-Slope Form | M.F.IF.9, M.F.BF.3, |
| | C) Graphing Equations in Point-Slope Form | M.F.LE.2, M.F.LE.5 |
| 3-6 Slope-Intercept Form | A) Linear Equations in Slope-Intercept Form | M.N.Q.1, M.A.SSE.1.b, |
| | B) Identifying the Slope and y-Intercept from Equations in Slope-Intercept Form | M.A.CED.2, M.F.IF.7.a, |
| | C) Writing and Graphing Equations in Slope-Intercept Form | M.F.IF.9, M.F.BF.3, |
| | D) Point-Slope and Slope-Intercept Forms | M.F.LE.2, M.F.LE.5 |
| 2-7 Harizantal and | A) Slopes of Horizontal and Vertical Lines | M.A.CED.2, |
| 3-7 Horizontal and Vertical Lines | B) Graphing Equations of Horizontal and Vertical Lines | M.F.IF.7.a, |
| | C) Writing Equations of Horizontal and Vertical Lines | M.F.LE.2 |



Chapter 3 Linear Functions (cont.)

| Lesson | Торіс | WI Standards |
|---------------------------------------|--|---------------------------|
| | A) Slopes of Parallel Lines | |
| 3-8 Parallel and | B) Equations of Parallel Lines Through Given Points | — M A CED 2 |
| Perpendicular Lines | C) Slopes of Perpendicular Lines | M.A.CED.2, M.F.LE.2 |
| | D) Equations of Perpendicular Lines Through Given Points | |
| | A) Scatter Plots | M.N.Q.1, |
| 3-9 Scatter Plots and Lines of Fit | B) Lines of Fit | M.SP.ID.6.a, M.SP.ID.6.c, |
| | C) Making Predictions with Lines of Fit | M.SP.ID.7 |
| | A) Residuals and Residual Plots | M.SP.ID.6.b, |
| 3-10 Residuals and Correlation | B) Correlation Coefficients | M.SP.ID.8, |
| | C) Correlation and Causation | M.SP.ID.9 |
| 3-11 Inverse Relations | A) Finding the Inverse of Sets of Points | |
| | B) Graphing Inverses | ─ M.N.Q.1, — M.F.BF.4 |
| | C) Inverses in Function Notation | |



Chapter 4 Solving Inequalities

| Lesson | Topic | WI Standards |
|--|---|---|
| 4-1 One-Step and Two- Step Inequalities | A) Solutions of One-Variable Inequalities | M.A.CED.1, M.A.CED.3, |
| | B) Solving One-Step Inequalities | |
| | C) Solving Two-Step Inequalities | M.A.REI.3 |
| | A) Solving Multi-Step Inequalities | M.A.CED.1, |
| 4-2 Multi-Step Inequalities | B) Inequalities with Zero, Many, or Infinite Solutions | M.A.CED.3, |
| | C) Graphing Solutions of Multi-Step Inequalities | M.A.REI.3 |
| 4-3 Inequalities with | A) Solving Inequalities with Rational Coefficients | M.A.CED.1, M.A.CED.3, |
| Rational Numbers | B) Solving Inequalities with Grouping Symbols | M.A.REI.3 |
| 4-4 Graphing and | A) Graphing Compound Inequalities | M.A.CED.1, |
| Writing Compound | B) Writing Compound Inequalities from Graphs | M.A.CED.3, |
| Inequalities | C) Graphing Special Cases of Compound Inequalities | M.A.REI.3 |
| | A) Solutions of Compound Inequalities | M.A.CED.1, M.A.CED.3, M.A.REI.3 |
| 4-5 Solving Compound Inequalities | B) Solving Compound Inequalities | |
| mequanties | C) Graphing Solutions of Compound Inequalities | |
| | A) Solutions of Absolute Value Inequalities | M.A.CED.1, M.A.CED.3 |
| 4.C.Abaalista Valisa | B) Writing Absolute Value Inequalities as Compound Inequalities | |
| 4-6 Absolute Value Inequalities | C) Solving Absolute Value Inequalities by Writing Them as Compound Inequalities | |
| | D) Graphing Absolute Value Inequalities by Writing Them as Compound Inequalities | |
| 4-7 Solving Absolute Value Inequalities | A) Solving Absolute Value Inequalities with Single Variable Inside Absolute Value | M.A.SSE.1.b, M.A.CED.1, M.A.CED.3 |
| | B) Solving Absolute Value Inequalities with Linear Expression Inside Absolute Value | |
| 4-8 Linear Inequalities | A) Solutions of Two-Variable Inequalities | |
| | B) Graphing Linear Inequalities | M.A.CED.3, M.A.REI.12 |
| | C) Writing Linear Inequalities | - 1¥1./7.1\L1.12 |



Chapter 5 Systems of Linear Equations and Inequalities

| Lesson | Topic | WI Standards |
|--|--|--|
| 5-1 Solutions of Systems of Equations | A) Solutions of Systems of Linear Equations | MAA CED 2 |
| | B) Graphs of Systems of Equations and the Number of Solutions | M.A.CED.3, M.A.REI.6 |
| 5-2 Graphing to Solve | A) Graphing Systems of Linear Equations | M.N.Q.1, M.A.CED.3, |
| Systems of Equations | B) Graphing to Solve Systems of Linear Equations | M.A.REI.6, M.A.REI.11 |
| 5-3 Using Substitution to Solve Systems of Equations | A) Substitution to Solve Systems of Linear Equations with One Variable Isolated | M.A.SSE.1.b, M.A.CED.3, M.A.REI.6, M.A.REI.11 |
| | B) Substitution to Solve Systems of Linear Equations After Isolating a Variable | |
| 5-4 Using Elimination to Solve Systems of Equations | A) Addition or Subtraction Property of Equality to Eliminate a Variable | M.A.CED.3, M.A.REI.5, M.A.REI.6 |
| | B) Multiplication and Addition or Subtraction Property of Equality to Eliminate a Variable | |
| 5-5 Systems of Linear Inequalities | A) Solutions of Systems of Linear Inequalities | M.N.Q.1, |
| | B) Graphing Systems of Linear Inequalities | M.A.CED.3, |
| | C) Writing Systems of Linear Inequalities | M.A.REI.12 |



Chapter 6 Exponents and Exponential Functions

| Lesson | Торіс | WI Standards |
|--|--|--------------|
| 6-1 Integer Exponents | A) Numerical Expressions with Nonpositive Integer Exponents | M.8.EE.1 |
| | B) Variable Expressions with Nonpositive Integer Exponents | |
| 6-2 Product of Powers | A) Expanding Expressions to Show the Product of Powers Property | |
| Property | B) Simplify Expressions with the Product of Powers Property | M.A.SSE.2 |
| 6-3 Quotient of Powers | A) Expanding Expressions to Show the Quotient of Powers Property | NA A CCE 2 |
| Property | B) Simplifying Expressions with the Quotient of Powers Property | M.A.SSE.2 |
| 6-4 Combining Product and Quotient of Powers | A) Simplifying Products with the Product and Quotient of Power Properties | M.A.SSE.2 |
| Properties | B) Simplifying Quotients with the Product and Quotient of Power Properties | |
| 6-5 Power of Power | A) Expanding Expressions to Show the Power of Power Property | M.A.SSE.2 |
| Property | B) Simplifying Expressions with the Power of Power Property | |
| 6-6 Power of Product | A) Expanding Expressions to Show the Power of Product Property | M.A.SSE.2 |
| Property | B) Simplifying Expressions with the Power of Product Property | |
| 6-7 Power of Quotient Property | A) Expanding Expressions to Show the Power of Quotient Property | M.A.SSE.2 |
| | B) Simplifying Expressions with the Power of Quotient Property | |
| 6-8 Combining All Exponent Properties | A) Simplifying Expressions Using Two to Three Exponent Properties | |
| | B) Simplifying Expressions Using Three to Four Exponent Properties | M.A.SSE.2 |
| | C) Simplifying Expressions Using All Exponent Properties | |



Chapter 6 Exponents and Exponential Functions (cont.)

| Lesson | Topic | WI Standards |
|-----------------------------------|--|--------------|
| 6-9 Solving Exponential Equations | A) Solutions of Exponential Equations | |
| | B) Exponential Equations with Equivalent Bases | M.A.CED.1 |
| | C) Exponential Equations with Different Bases | |

Chapter 7 Arithmetic and Geometric Sequences

| Lesson | Topic | WI Standards |
|--|---|---|
| 7-1 Introduction to Sequences | A) Sequences | _ |
| | B) Terms of Sequences | M.F.BF.2 |
| Sequences | C) Types of Sequences | |
| | A) Finding Common Differences from Terms of Arithmetic Sequences | |
| 7-2 Arithmetic Sequences | B) Extending Arithmetic Sequences | M.F.BF.2 |
| Sequences | C) Writing Terms of Arithmetic Sequences from Terms and Common Differences | |
| | A) Parts of Recursive Formulas of Arithmetic Sequences | M.A.SSE.1.b, |
| 7-3 Recursive Formulas of Arithmetic Sequences | B) Writing Terms of Arithmetic Sequences from Recursive Formulas | M.F.IF.3, M.F.BF.1.a, M.F.BF.2, M.F.LE.2 |
| | C) Writing Recursive Formulas for Arithmetic Sequences | |
| | A) Parts of Explicit Formulas of Arithmetic Sequences | M.A.SSE.1.b, |
| 7-4 Explicit Formulas of Arithmetic Sequences | B) Writing and Evaluating Explicit Formulas of Arithmetic Sequences | M.F.IF.3, M.F.BF.1.a, |
| | C) Converting Between Explicit and Recursive Formulas of Arithmetic Sequences | M.F.BF.2, M.F.LE.2 |
| 7-5 Geometric Sequences | A) Finding Common Ratios from Terms of Geometric Sequences | |
| | B) Extending Geometric Sequences | M.F.BF.2 |
| | C) Writing Terms of Geometric Sequences from Terms and Common Ratios | - |



Chapter 7 Arithmetic and Geometric Sequences (cont.)

| Lesson | Topic | WI Standards |
|---|--|--|
| 7-6 Recursive Formulas of Geometric Sequences | A) Parts of Recursive Formulas of Geometric Sequences | M.A.SSE.1.b, M.F.IF.3, M.F.BF.1.a, M.F.BF.2, |
| | B) Writing Terms of Geometric Sequences from Recursive Formulas | |
| | C) Writing Recursive Formulas for Geometric Sequences | M.F.LE.2 |
| | A) Parts of Explicit Formulas of Geometric Sequences | M.A.SSE.1.b, |
| 7-7 Explicit Formulas of Geometric Sequences | B) Writing and Evaluating Explicit Formulas of Geometric Sequences | M.F.IF.3, M.F.BF.1.a, |
| deometric sequences | C) Converting Between Explicit and Recursive Formulas of Geometric Sequences | M.F.BF.2, M.F.LE.2 |
| 7-8 Exponential Functions | A) Solutions of Exponential Functions | M.A.SSE.1.b, M.A.CED.2, M.A.REI.10, |
| | B) Equations of Exponential Functions | M.F.IF.4, M.F.IF.5, M.F.IF.7.a, M.F.BF.2, |
| | C) Graphs of Exponential Functions | M.F.LE.1.a, M.F.LE.2, M.F.LE.5 |
| 7-9 Exponential Growth and Decay | A) Classifying Graphs and Equations as Exponential Growth or Decay | M.N.Q.2, M.A.SSE.1.b, M.A.CED.2, |
| | B) Equations of Exponential Growth or Decay | M.F.IF.4, M.F.IF.7.a, M.F.IF.8.b, M.F.LE.1.a, |
| | C) Writing and Evaluating Exponential Growth and Decay Equations | M.F.LE.1.c, M.F.LE.2, M.F.LE.5 |



Chapter 8 Roots and Square Root Functions

| Lesson | Topic | WI Standards |
|--|--|------------------------|
| 8-1 Square Roots of Whole Numbers | A) Square Roots of Perfect Squares | M NI DNI 2 |
| | B) Product Property of Square Roots | |
| | C) Square Roots of Whole Numbers Written in Prime Factored Form | M.N.RN.2, M.N.RN.3 |
| | D) Square Roots of Whole Numbers | |
| | A) Square Roots of Single Variables Raised to Even Powers | |
| 8-2 Square Roots of Variable Expressions | B) Square Roots of Single Variables Raised to Odd Powers | M.N.RN.2, M.A.SSE.2 |
| | C) Square Roots of Monomial Expressions with Two or More Factors | |
| 8-3 Adding and | A) Adding and Subtracting Simplified Square Roots | M NI DNI 2 |
| Subtracting Square Roots | B) Adding and Subtracting Square Roots After Simplifying | M.N.RN.2, M.N.RN.3 |
| 8-4 Products of Square | A) Simplifying a Product of Square Roots with Prime Factorized Radicands | M.N.RN.2, M.N.RN.3 |
| Roots | B) Simplifying a Product of Square Roots with Whole Number Radicands | |
| 8-5 Quotients of Square Roots | A) Simplifying a Fraction with at Least One Square Root without Needing to Rationalize the Denominator | |
| | B) Simplifying Square Roots of Fractions without Needing to Rationalize the Denominator | MAN DN 2 |
| | C) Simplifying a Fraction of Square Roots without Needing to Rationalize the Denominator | M.N.RN.2 |
| | D) Simplifying Square Roots of Fractions and Fractions of Square Roots with Multipliers | |
| 8-6 Rationalizing Square Roots | A) Finding the Value Needed to Rationalize a Denominator | |
| | B) Simplifying a Fraction of Square Roots | M.N.RN.2 |
| | C) Simplifying Square Roots of Fractions | |



Chapter 8 Roots and Square Roots Functions (cont.)

| Lesson | Topic | WI Standards |
|--|---|------------------------|
| 8-7 Rational Exponents and nth Roots | A) Writing Roots as Rational Exponents | M.N.RN.1, |
| | B) Writing Rational Exponents as nth Roots | M.N.RN.2, M.A.SSE.2 |
| 8-8 Simplifying Rational Exponents and nth Roots | A) Evaluating Expressions with Rational Exponents | M.N.RN.1, |
| | B) Evaluating Expressions with nth Roots | M.N.RN.2 |

Chapter 9 Polynomials

| Lesson | Topic | WI Standards |
|--|---|-------------------------|
| 9-1 Introduction to Polynomials | A) Terms of Polynomials | |
| | B) Degree of Polynomials | — NA A CCE 1 o |
| | C) Standard Form of Polynomials | M.A.SSE.1.a |
| | D) Leading Coefficients | |
| 9-2 Modeling Polynomial Addition and Subtraction | A) Using Algebra Tiles to Model Polynomials | |
| | B) Using Algebra Tiles to Add Polynomials | M.A.APR.1 |
| | C) Using Algebra Tiles to Subtract Polynomials | |
| | A) Adding Polynomials | |
| 9-3 Adding and Subtracting Polynomials | B) Subtracting Polynomials | M.A.SSE.1.b, M.A.APR.1 |
| Subtracting Forynomials | C) Adding and Subtracting Polynomials | - 1413 (3 (1 1 (. 1 |
| 9-4 Modeling Polynomial | A) Using Algebra Tiles to Multiply a Monomial and Binomial | M.A.SSE.2, |
| Multiplication | B) Using Algebra Tiles to Multiply Two Binomials | M.A.APR.1 |
| | A) Completing Tables for Polynomial Multiplication | |
| 9-5 Using Tables to Multiply Polynomials | B) Using a Table to Multiply a Monomial and Polynomial | M.A.SSE.2, M.A.APR.1 |
| | C) Using a Table to Multiply Polynomials with Two or More Terms | - WI.A.AFN.1 |
| 9-6 Multiplying Polynomials | A) Multiplying Two Polynomials | M.A.SSE.1.b, |
| | B) Multiplying Three or More Polynomials | M.A.SSE.2, M.A.APR.1 |
| 9-7 Special Products | A) Squares of Sums | _ M.A.SSE.1.b, |
| | B) Squares of Differences | M.A.SSE.2, |
| | C) Products of Binomial Conjugates | M.A.APR.1 |



Chapter 10 Factoring

| Lesson | Topic | WI Standards |
|---|---|---------------------------|
| 10-1 Greatest Common Factors | A) Identifying Factors | M.A.SSE.1.a, M.A.SSE.2 |
| | B) Finding Greatest Common Factors | |
| 10-2 Using Greatest Common Factors to Factor | A) Using Algebra Tiles to Factor Common Factors from Polynomial Expressions | M.A.SSE.2 |
| | B) Factoring Common Factors from Polynomial Expressions | |
| | C) Factoring -1 From Polynomial Expressions | |
| 10-3 Factoring by | A) Using Algebra Tiles to Factor Polynomials with Four Terms | M.A.SSE.2 |
| Grouping | B) Factoring Polynomials with Four Terms by Grouping | |
| 10-4 Factoring | A) Using Algebra Tiles to Factor Quadratic Trinomials | M.A.SSE.2 |
| Quadratics with Leading Coefficients of One | B) Factoring Quadratics with Leading Coefficients of One | |
| 10-5 Factoring Trinomials with Leading Coefficients Not One | A) Factoring Quadratics with Leading Coefficients Not Equal to One | |
| | B) Factoring a Polynomial into a Monomial and Two Binomial Factors | M.A.SSE.2 |
| | C) Determining if Quadratics are Factorable | |
| 10-6 Special Cases in Factoring Polynomials | A) Factoring Differences of Squares | M.A.SSE.2 |
| | B) Factoring Perfect Square Trinomials | |



Chapter 11 Quadratic Equations and Functions

| Lesson | Topic | WI Standards |
|--|---|--|
| 11-1 Parabolas | A) Graphs of Quadratic Functions | M.A.REI.10, M.F.IF.4, M.F.IF.7.a, M.F.IF.9, M.F.LE.3 |
| | B) Key Features of Parabolas | |
| | C) Relationship Between the Vertex and the x- Intercepts of Parabolas | |
| 11-2 Standard Form of Quadratic Functions | A) Equations of Quadratic Functions in Standard Form | M.A.SSE.1.a, M.A.SSE.2, |
| | B) Key Features of Quadratic Functions from Equations | |
| | C) Graphing Quadratic Functions from Equations in Standard Form | M.A.REI.7, M.F.IF.4, M.F.IF.7.a, M.F.IF.9 |
| | A) Solutions of Quadratic Equations | M.A.CED.1, |
| 11-3 Solving Quadratic Equations by Graphing | B) Connection Between Quadratic Functions and Their Related Equations | M.A.REI.4, M.A.REI.10, M.A.REI.11, |
| | C) Solving Quadratic Equations by Graphing | M.F.IF.7.a |
| | A) Solving Factored Quadratic Equations | M.N.Q.2, M.A.SSE.2, M.A.SSE.3.a, M.A.CED.1, M.A.REI.4, M.A.REI.7, M.F.IF.8.a |
| 11-4 Solving Quadratic Equations by Factoring | B) Solving Quadratic Equations in Standard Form by Factoring | |
| | C) Solving Quadratic Equations in Nonstandard Form by Factoring | |
| 11-5 Using Square Roots | A) Solving Quadratic Equations with Squared Variable | M.A.CED.1, M.A.REI.4 |
| to Solve Quadratic Equations | B) Solving Quadratic Equations with Squared Linear Expressions | |
| 11-6 Solving Quadratic Equations by Completing the Square | A) Perfect Square Trinomials | M.A.SSE.3.b, M.A.CED.1, M.A.REI.4, M.F.IF.8.a |
| | B) Solving Quadratic Equations by Completing the Square | |
| 11-7 Using the Quadratic Formula to Solve Quadratic Equations | A) Writing the Quadratic Formula | M.A.CED.1, M.A.REI.4, M.A.REI.7 |
| | B) Solving Quadratic Equations in Standard Form with the Quadratic Formula | |
| | C) Solving Quadratic Equations in Nonstandard Form with the Quadratic Formula | |



Chapter 11 Quadratic Equations and Functions (cont.)

| Lesson | Topic | WI Standards |
|---|---|--------------|
| 11-8 Discriminants of Quadratic Equations | A) Finding Discriminants | M.A.REI.4 |
| | B) Relationship Between Discriminants and Number of Real Solutions | |
| | C) Relationship Between Discriminants and Graphs of Quadratic Functions | - |

Chapter 12 Functions and Transformations

| Lesson | Topic | WI Standards |
|-----------------------------|--|---|
| 12-1 Piecewise Functions | A) Graphing Functions on a Given Domain | M.A.CED.2, M.A.REI.10, M.F.IF.5, |
| | B) Graphing Piecewise Functions | |
| | C) Writing Equations of Piecewise Functions | M.F.IF.7.b |
| 12-2 Step Functions | A) Evaluating Floor and Ceiling Functions | M.A.CED.2, M.A.REI.10, |
| | B) Graphs of Step Functions | M.F.IF.5, M.F.IF.7.b |
| 12-3 Parent Functions | A) Graphing Parent Functions | M.A.CED.2, M.A.REI.10, |
| | B) Writing Equations of Parent Functions | M.F.IF.4, M.F.IF.7.b |
| 12-4 Translations | A) Identifying Vertical or Horizontal Translations of Parent Functions from Graphs and Equations | M.A.SSE.1.b, M.A.SSE.2, M.A.CED.2, M.F.IF.4, M.F.IF.7.a, M.F.IF.7.b, M.F.IF.9, M.F.BF.3 |
| | B) Identifying Translations of Parent Functions from Graphs and Equations | |
| | C) Graphing Translated Parent Functions from Equations | |
| | D) Writing Equations of Translated Parent Functions from Graphs | |
| 12-5 Reflections | A) Graphing Reflected Parent Functions | M.A.SSE.2, M.A.CED.2, M.F.IF.4, |
| | B) Writing Equations of Reflected Parent Functions | M.F.IF.7.a, M.F.IF.7.b, M.F.IF.9, M.F.BF.3 |



Chapter 12 Functions and Transformations (cont.)

| Lesson | Topic | WI Standards |
|--------------------------------------|--|---|
| 12-6 Dilations | A) Identifying Vertical Dilation Factors from Graphs and Equations | M.A.SSE.2, M.A.CED.2, M.F.IF.4, M.F.IF.7.a, M.F.IF.7.b, M.F.IF.9, M.F.BF.3 |
| | B) Identifying Horizontal Dilation Factors from Graphs and Equations | |
| | C) Graphing Dilated Quadratic and Absolute Value Functions | |
| | D) Comparing Dilation Factors | |
| 12-7 Transformations and Vertex Form | A) Graphing and Writing Equations of Transformed Quadratic and Absolute Value Functions | M.A.SSE.2, M.A.SSE.3.b, M.A.CED.2, M.F.IF.4, M.F.IF.7.a, M.F.IF.7.b, |
| | B) Relationship Between the Vertices of Quadratic and Absolute Value Functions and Their Equations | |
| | C) Vertex Form of Quadratic Equations | M.F.IF.8.a, M.F.IF.9, M.F.BF.3 |



Chapter 13 Statistics and Probability

| Lesson | Topic | WI Standards |
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| 13-1 Measures of Center | A) Mean | M.SP.ID.1, |
| | B) Median | M.SP.ID.2, M.SP.ID.3 |
| 13-2 Measures of Spread | A) Range | M.SP.ID.1, |
| | B) Standard Deviation | M.SP.ID.2, |
| | C) IQR | M.SP.ID.3 |
| 13-3 Outliers | A) Effects of Outliers | M.A.CED.1, M.A.CED.3, M.SP.ID.1, |
| | B) Identifying Outliers | |
| | C) Identifying a Box Plot from a Data Set | M.SP.ID.2, M.SP.ID.3 |
| | A) Shapes of Data Displays | M.SP.ID.1, M.SP.ID.2, M.SP.ID.3 |
| | B) Shape and Measures of Center | |
| 13-4 Distributions of Data | C) Effects of Changes in Data Set on Values of Measures of Center and Spread | |
| | D) Using Shapes of Data Displays to Compare Measures of Center | |
| | A) Parts of Two-Way Tables | M.A.CED.1, M.SP.ID.5 |
| 13-5 Two-Way Tables | B) Reading Two-Way Tables | |
| | C) Finding Missing Joint and Marginal Frequencies | |
| 13-6 Relative and Conditional Frequency | A) Identifying Types of Frequency Tables | M.A.CED.1, M.SP.ID.5 |
| | B) Using Two-Way Tables to Calculate Probabilities | |
| | C) Finding Missing Conditional and Relative Frequencies | |