

# Bozeman Public Schools Curriculum Pacing Guide



Course: Algebra 1

Grade Level: High School

| Time Frame | Unit & Essential Learnings                                                                                                                                                                              | Standard                                                      | Resources       | Assessments                              |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------|------------------------------------------|
| 7 days     | <u>The Language of Algebra</u><br>Order of Operations, Variable & Exponents, Operations on Real Numbers, Power/Exponents, Square Roots, Classify Real Numbers, Intro to Functions, Simplify Expressions | N 1.0, N 5.0, A 1.0, A 2.0, G 1.0                             | Holt Algebra 1  | 2 Quizzes<br>Test<br>Vocab Pre Test      |
| 20 days    | <u>Equations</u><br>Solving Equations (one step, multi step, variables on both sides), Rates Ratios, Proportions, Percents, Solving Literal Equations, Solving Absolute Value Equations                 | N 2.0, A 1.0, A 2.0, A 5.1, A 5.2, A 5.3, A 7.3, M 1.0, M 2.0 | Holt Algebra 1  | 3 Quizzes, 2 Tests<br>Writing Assessment |
| 13 days    | <u>Inequalities</u><br>Graphing & Writing Inequalities, Solving Inequalities Using Operation, Solving Using Multi Step, Compound Inequalities, Solving Absolute Value Inequalities                      | A 1.0, A 2.0, A 5.2, A 5.4, A 5.5                             | Holt Algebra 1  | 2 Quizzes, Test                          |
| 13 days    | <u>Functions</u>                                                                                                                                                                                        | A 2.0, aA 4.7, G                                              | Holt Algebra 1, | 2 Quizzes, Test                          |

|         |                                                                                                                                                                                                                                 |                                                                                           |                              |                                                                   |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------|
|         | Graphing Relationships, Relations and Functions, Writing & Graphing, Scatter Plots                                                                                                                                              | 2.0                                                                                       | 4.2 Lab – Vertical Line Test |                                                                   |
| 17 days | <u>Linear Functions</u><br>Identifying Functions, Rate of Change, Slope, Direct Variation, Slope Intercept Form, Point Slope Form, Slopes of Parallel & Perpendicular Lines, Absolute Value Functions                           | N 4.0, A 2.0, A 5.7, A 6.1, A 6.2, A 6.3, A 6.4, A 6.5, A 6.6, A 6.7, A 6.8, G 3.0, G 4.0 | Holt Algebra 1               | 2 Quizzes, Test                                                   |
| 12 days | <u>Systems of Linear Equations</u><br>Solve by graphing, substitution, elimination, Classifying systems as consistent or inconsistent, Solve Systems of Inequalities                                                            | A 2.0, A 5.5, A 5.6, A 5.8, G 5.0, G 7.0                                                  | Holt Algebra 1               | 2 Quizzes, Test<br>Vocab Post Assessment<br>Semester 1 Final Exam |
| 17 days | <u>Exponents &amp; Polynomials</u><br>Integer Exponents, Powers of 10, Scientific Notation, Properties of Exponents, Operations on Polynomials, Special Products of Binomials                                                   | N 3.0, A 2.0, A 4.0, A 4.1, A 4.2                                                         | Holt Algebra 1               | 2 Quizzes, Test<br>Vocab Pre Assessment                           |
| 15 days | <u>Factoring Polynomials</u><br>Greatest Common Factor, Prime Factorization, Factoring Polynomials, Special Factoring Rules                                                                                                     | A 4.6                                                                                     | Holt Algebra 1               | 2 Quizzes, Test                                                   |
| 17 days | <u>Quadratics</u><br>Identifying Quadratics, Characteristics of Quadratics, Graphing Quadratics, Transforming Quadratics, Solving by Factoring, Square Roots & Graphing, Completing the Square, Quadratic Formula, Discriminant | A 2.0, A 7.0, A 7.1, A 7.2, A 7.4, A 8.1, G 1.0, G 3.0, G 6.0, G 8.0                      | Holt Algebra 1               | 2 Quizzes, Test                                                   |

|         |                                                                                                                                                                                                                                   |                                   |                |                                                             |  |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------|-------------------------------------------------------------|--|
| 12 days | <u>Data Analysis &amp; Probability</u><br>Organize & Display Data, Frequency & Histograms, Data Distribution, Misleading Graphs & Statistics, Experimental/ Theoretical Probability, Independent & Dependents Events, Complements | A 3.0, D 1.0, D 2.0, D 3.0, D 4.0 | Holt Algebra 1 | 2 Quizzes, Test<br>Writing Assessment                       |  |
| 10 days | <u>Exponential Functions</u><br>Identify Exponential Functions, Growth & Decay, Radical Expressions, Operations (+,-,x,÷) on Radicals                                                                                             | A 2.0, N 2.0, G 3.0               | Holt Algebra 1 | 2 Quizzes, Test                                             |  |
| 10 days | <u>Rational Functions</u><br>Simplify Rational Expressions, Operations (+,-,x,÷) on Rationals, Divide Polynomials                                                                                                                 | A 2.0, A 4.3, A 4.4, A 4.5        | Holt Algebra 1 | 2 Quizzes, Test<br>Vocab Post Test<br>Semester 2 Final Exam |  |