

FULTON HIGH SCHOOL  
2015-2016 PACING GUIDE  
9TH GRADE ALGEBRA

FIRST SEMESTER

1ST QUARTER

Unit 1: EXPRESSIONS, EQUATIONS, AND FUNCTIONS

Lesson: Evaluate expressions

Lesson: Apply order of operations

Lesson: Write expressions

Lesson: Write equations and inequalities

Lesson: Use precision and measurement

Lesson: Represent functions as rules and tables

Lesson: Represent functions as graphs

Assessments: Graded homework, Graded notebook, Quizzes follow each lesson, Unit Tests (Vocabulary & problem solving)

Unit 2: SOLVING LINEAR EQUATIONS

Lesson: Find square roots and compare real numbers

Lesson: Solve one-step equations

Lesson: Solve two-step equations

Lesson: Solve multi-step equations

Lesson: Solve equations with variables on both sides

Lesson: Write ratios and proportions

Lesson: Solve proportions using cross products

Lesson: Rewrite equations and formulas "Literal equations"

Assessment: Graded homework, Graded notebook, *Quizzes follow each lesson, Unit Tests (Vocabulary & Problem solving)*

2nd Quarter

Unit 3: GRAPHING LINEAR EQUATIONS AND FUNCTIONS

Lesson: Plot points in a coordinate plane

Lesson: Graph linear equations

Lesson: Graph using intercepts

Lesson: Find slope and rate of change

Lesson: Graph using slope-intercept form

Lesson: Model direct variation

Lesson: Graph linear functions

Assessment: Graded homework, Graded notebook, *Quizzes follow each lesson, Unit Tests (Vocabulary & Problem solving)*

#### Unit 4: WRITING LINEAR EQUATIONS

Lesson: Write linear equations in slope-intercept form

Lesson: Use linear equations in slope-intercept form

Lesson: Write linear equations in point-slope form

Lesson: Write linear equations in standard form

Lesson: Write equations of parallel and perpendicular lines

Lesson: Fit a line to data

Lesson: Predict with linear models

Assessment: Graded homework, Graded notebook, *Quizzes follow each lesson, Unit Tests (Vocabulary & Problem solving)*

### SECOND SEMESTER

#### 3rd Quarter

#### Unit 5: SOLVING AND GRAPHING LINEAR INEQUALITIES

Lesson: Solve inequalities using addition and subtraction

Lesson: Solve inequalities using multiplication and division

Lesson: Solve multi-step inequalities

Lesson: Solve compound inequalities

Lesson: Solve absolute value equations

Lesson: Solve absolute value inequalities

Lesson: Graph linear inequalities in two variables

Assessment: Graded homework, Graded notebook, *Quizzes follow each lesson, Unit Tests (Vocabulary & Problem solving)*

#### *Unit 6: SYSTEMS OF EQUATIONS AND INEQUALITIES*

*Lesson: Solve linear systems by graphing*

*Lesson: Solve linear systems by substitution*

*Lesson: Solve linear systems by adding or subtracting*

*Lesson: Solve linear systems by multiplying first*

*Lesson: Solve special types of linear systems*

*Lesson: Solve systems of linear inequalities*

*Assessment: Graded homework, Graded notebook, Quizzes follow each lesson, Unit Tests (Vocabulary & Problem solving)*

4th Quarter:

Unit 7: EXPONENTS

*Lesson: Apply exponent properties involving products*

*Lesson: Apply exponent properties involving quotients*

*Lesson: Define and Use Zero and negative exponents*

*Assessment: Graded homework, Graded notebook, Quizzes follow each lesson,  
Unit Tests (Vocabulary & Problemsolving)*

Unit 8: POLYNOMIALS AND FACTORING

*Lesson: Add and subtract polynomials*

*Lesson: Multiply polynomials*

*Lesson: Find special products of polynomials*

*Lesson: Solve polynomial equations in factored form*

*Lesson: Factor  $x^2 + bx + c$*

*Lesson: Factor  $ax^2 + bx + c$*

*Lesson: Factor special products*

*Lesson: Factor polynomials completely*

*Assessment: Graded homework, Graded notebook, Quizzes follow each lesson,  
Unit Tests (Vocabulary & Problem solving) Final Exam for units 1 - 8*