

Holt: Algebra I Textbook Alignment to Pacing Guide

1st 9 Weeks

Chapter 1:

Lesson 1: TLW translate between words and algebra. TLW evaluate algebraic expressions. PA-1d,2a

Lesson 2: TLW add and subtract real numbers with calculators. PA-1b

Lesson 3: TLW multiply and divide real numbers with calculators. PA-1b

Lesson 4: TLW evaluate expressions containing exponents. PA-1d, 2a

Lesson 5: TLW evaluate expressions containing square roots and classify numbers within the real number system. PA-1a, 1g

Lesson 6: TLW use the order of operations to simplify expressions. PA-1d

Lesson 7: TLW use the Commutative, Associative, and Distributive Properties to simplify expressions. TLW combine like terms. PA-2b, A-1a

Connecting to Geometry p. 52: TLW find perimeter of figures by combining like terms. A-4a

Lesson 8: Introductions to Functions: TLW graph ordered pairs in the coordinate plane. TLW graph functions from ordered pairs. PA-2e, 2i

Chapter 2:

Lesson 1: TLW solve one-step equations in one variable by using addition and subtraction.

Lesson 2: TLW solve one-step equations in one variable by using multiplication and division.

Lesson 3: TLW solve two-step and multiple equations. A-2a

Lesson 4: TLW solve equations with variables on both sides. A-2a

Lesson 5: TLW solve a formula for a given variable. TLW solve an equation in two or more variables for one of the variables. A-2a

Lesson 6: TLW write and use ratios, rates, and unit rates. TLW write and solve proportions. PA-4b

Lesson 7: TLW use proportions to solve problems involving geometric figures. TLW use proportions and similar figures to measure objects indirectly. PA-4b

Lesson 8-10: Percentages are not 8th grade objective.

Extension p. 148: TLW solve equations in one variable that contain absolute-value expressions. A-2b

Extension p. 746: TLW organize data in a matrix. TLW add and subtract matrices and multiply a matrix by scalar. [Pull from different sources: Solving matrices equations.](#) A-1b

Chapter 3:

Lesson 1: TLW identify solutions of inequalities in one variable. TLW write and graph inequalities in one variable. A-2b

Lesson 2: TLW solve and graph one-step inequalities by adding or subtracting. A-2b

Lesson 3: TLW solve and graph one-step inequalities by multiplying or dividing. A-2b

Lesson 4: TLW solve and graph two-step and multi-step inequalities. A-2b

Lesson 5: TLW solve and graph inequalities with variables on both sides. A-2b

Lesson 6: TLW solve and graph compound inequalities. A-2b

Extension p. 212: TLW solve inequalities in one variable involving absolute-value expressions. A-2b

2nd 9 Weeks:

Chapter 4:

Lesson 1: TLW match simple graphs with situations. TLW graph a relationship.

Lesson 2: TLW identify functions. TLW find the domain and range of relations and functions. A-2c, 2d

Lab p. 243: Determining functions using the vertical line test.

Lesson 3: TLW identify independent and dependent variables. TLW write an equation in function notation and evaluate a function for given input values. A-2c, 2d

Lesson 4: TLW graph functions given a limited domain. TLW graph functions given a domain of all real numbers. A-2c, 2d

Lesson 5: TLW create and interpret scatter plots. TLW use trend lines to make predictions. A-5a

Lab p. 270: TLW interpret scatter plots and trend lines using graphing calculator. A-5b

Pull from different sources to completely cover scatter plot skills tested.

Lesson 6: skip

Chapter 5:

Lesson 1: TLW identify linear functions and linear equations. TLW graph linear functions that represent real-world situations and give their domain and range. A-2e

Lesson 2: TLW find x- and y-intercepts and interpret their meanings in real-world situations. TLW use x- and y-intercepts to graph lines. A-2e

Lesson 3: TLW find rates of change and slopes. TLW relate a constant rate of change to the slope of a line. A-2e

S68: TLW find midpoint using midpoint formula. A-4b

Lesson 4: TLW find slope by using the slope formula. A-2e, 3b

Lesson 6: TLW write a linear equation in slope-intercept form. TLW graph a line using slope-intercept form. A-2e, 3b

Lesson 7: TLW graph a line and write a linear equation using point-slope form. TLW write a linear equation given two points. A-2e, 3b

Lesson 8: TLW identify and graph parallel and perpendicular lines. TLW write equations to describe lines parallel and perpendicular to a given line. A-2e, 3a

Lesson 9: TLW describe how changing slope and y-intercept affect the graph of a linear function. A-2e

Extension p. 366: TLW graph absolute-value functions. A-2c

Chapter 6:

Lesson 1: TLW identify solutions of systems of linear equations in two variables. TLW solve systems of linear equations in two variables by graphing. A-2f

Lesson 2: TLW solve systems of linear equations in two variables by substitution. A-2f

Lesson 3: TLW solve systems of linear equations in two variables by elimination. TLW compare and choose an appropriate method for solving systems of linear equations. A-2f

Lesson 4: TLW solve special systems of linear equations in two variables. TLW classify systems of linear equations and determine the number of solutions. A-2f

Lesson 5: TLW graph and solve linear inequalities in two variables. A-2f, 2i

Lesson 6: TLW graph and solve systems of linear inequalities in two variables. A-2f, 2i

Lab p. 427: TLW solve systems of linear inequalities by graphing. A-2f, 2i

3rd 9 Weeks:

Chapter 7:

- Lesson 1: TLW evaluate and simplify expressions containing zero and integer exponents. PA-1e
- Lesson 2: TLW evaluate and multiply by powers of 10. TLW convert between scientific and standard notation. PA-1f
- Lesson 3: TLW use multiplication properties of exponents to evaluate and simplify expressions. PA-1e
- Lesson 4: TLW use division properties of exponents to evaluate and simplify expressions. PA-1e
- Lesson 5: TLW classify polynomials and write polynomials in standard form. TLW evaluate polynomial expressions.
- Lesson 6: TLW add and subtract polynomials. A-2g
- Lesson 7: TLW multiply polynomials. A-2g
- Lesson 8: TLW find special products of binomials. A-2g
Pull from different sources: Perimeter and area of shaded figures., A-4a, 4c

Chapter 8:

- Lesson 1: TLW write the prime factorization of numbers. TLW find the GCF of monomials. A-2h, 2j
Also cover LCM of monomials for Pre-Algebra Test
- Lesson 2: TLW factor polynomials by using the GCF. A-2h, 2j
- Lesson 3: TLW factor quadratic trinomials of the form $x^2 + bx + c$. A-2h, 2j
- Lesson 4: TLW factor quadratic trinomials of the form $ax^2 + bx + c$. A-2h, 2j
- Lesson 5: TLW factor perfect square trinomials. TLW factor the difference of two squares. A-2h, 2j
- Lesson 6: TLW choose an appropriate method for factoring a polynomial. TLW combine methods for factoring a polynomial. A-2h, 2j

Chapter 9:

- Chapter 11, Lesson 6: TLW simplify radical expressions.
*Needs to be covered before solving quadratics.
- Lesson 1: TLW identify quadratic functions and determine whether they have a minimum or maximum. TLW graph quadratic functions and give the domain and range. A-2c
- Lesson 2: TLW find the zeros of a quadratic functions from its graph. TLW find the axes of symmetry and the vertex of a parabola.
- Lesson 3: TLW graph a quadratic function in the form $y = ax^2 + bx + c$.
- Lesson 4: TLW transfer quadratic functions.
- Lesson 5: TLW solve quadratic equations by graphing. A-2i
- Lesson 6: TLW solve quadratic equations by factoring. A-2i
- Lesson 7: TLW solve quadratic equations by using square roots. A-2i
- Lesson 8: TLW solve quadratic equations by completing the square. A-2i
- Lesson 9: TLW solve quadratic equations by using the quadratic formula. TLW determine the number of solutions of a quadratic equation by using the discriminant. A-2i
- Extension p. 642: Distance Formula. A-4b

4th 9 Weeks: Review for Algebra State Test and MCT2

Chapter 10:

8th graders will need to know some of these skills for MCT2 but not SATP

Chapter 11 and 12:

These are not objectives for SATP or MCT2