



# Secondary Mathematics

EDITION 1

# Algebra I

## ELPS Summary

**Acknowledgment**

Thank you to all the Texas educators and stakeholders who supported the review process and provided feedback. These materials are the result of the work of numerous individuals, and we are deeply grateful for their contributions.

**Notice**

These learning resources have been built for Texas students, aligned to the Texas Essential Knowledge and Skills, and are made available pursuant to Chapter 31, Subchapter B-1 of the Texas Education Code.

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# ALGEBRA I ELPS SUMMARY

Module	Topic	Lesson	Lesson Title	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F		
			Introduction Lesson					•											
Module 1: Searching for Patterns	Topic 1: Quantities and Relationships	1	Understanding Quantities and Their Relationships			•			•					•		•			
		2	Analyzing and Sorting Graphs	•	•				•										
		3	Recognizing Functions and Function Families			•													
		4	Recognizing Functions by Characteristics																
	Topic 2: Sequences	1	Recognizing Patterns and Sequences				•												
		2	Arithmetic and Geometric Sequences																
		3	Determining Recursive and Explicit Expressions from Contexts	•					•										
Module 2: Exploring Constant Change	Topic 1: Linear Functions	1	Least Squares Regressions			•								•					
		2	Correlation					•									•		
		3	Making Connections Between Arithmetic Sequences and Linear Functions													•			
		4	Point-Slope Form of a Line																
		5	Using Linear Equations				•												
		6	Making Sense of Different Representations of a Linear Function									•							
	Topic 2: Transforming and Comparing Linear Functions	1	Transforming Linear Functions																
		2	Vertical and Horizontal Transformations of Linear Functions					•								•			
		3	Determining Slopes of Perpendicular Lines																
		4	Comparing Linear Functions in Different Forms				•												



# ALGEBRA I ELPS SUMMARY

Module	Topic	Lesson	Lesson Title	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F	
Module 3: Modeling Linear Equations and Inequalities	Topic 1: Linear Equations and Inequalities	1	Solving Linear Equations								•		•					
		2	Literal Equations															
		3	Modeling Linear Inequalities												•			
	Topic 2: Systems of Linear Equations and Inequalities	1	Using Graphing to Solve Systems of Equations											•				
		2	Using Substitution to Solve Linear Systems													•		
		3	Using Linear Combinations to Solve a System of Linear Equations															
		4	Graphing Inequalities in Two Variables				•											
		5	Systems of Linear Inequalities															
		6	Solving Systems of Equations and Inequalities														•	
Module 4: Investigating Growth and Decay	Topic 1: Introduction to Exponential Functions	1	Properties of Powers with Integer Exponents					•										
		2	Analyzing Properties of Powers													•		
		3	Geometric Sequences and Exponential Functions								•							
		4	Rewriting Square Roots		•								•					
		5	Rational Exponents and Graphs of Exponential Functions															
	Topic 2: Using Exponential Equations	1	Exponential Equations for Growth and Decay	•														
		2	Interpreting Parameters in Context			•							•					
		3	Modeling Using Exponential Functions				•								•			

# ALGEBRA I ELPS SUMMARY

2.G	2.H	2.I	3.A	3.B	3.C	3.D	3.E	3.F	3.G	3.H	3.I	3.J	4.A	4.B	4.C	4.D	4.E	4.F	4.G	4.H	4.I	4.J	4.K	5.A	5.B	5.C	5.D	5.E	5.F	5.G
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# ALGEBRA I ELPS SUMMARY

Module	Topic	Lesson	Lesson Title	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F	
Module 5: Maximizing and Minimizing	Topic 1: Introduction to Quadratic Functions	1	Exploring Quadratic Functions														•	
		2	Key Characteristics of Quadratic Functions								•							
		3	Quadratic Function Transformations												•			
		4	Horizontal Transformations and Vertex Form	•														
	Topic 2: Polynomial Operations	1	Adding and Subtracting Polynomials					•				•						
		2	Multiplying Polynomials					•										
		3	Polynomial Division															
	Topic 3: Solving Quadratic Equations	1	Representing Solutions to Quadratic Equations					•										
		2	Solutions to Quadratic Equations in Vertex Form															
		3	Factoring and Completing the Square					•										
		4	The Quadratic Formula				•								•			
		5	Using Quadratic Functions to Model Data									•		•				



# ALGEBRA I ELPS SUMMARY

2.G	2.H	2.I	3.A	3.B	3.C	3.D	3.E	3.F	3.G	3.H	3.I	3.J	4.A	4.B	4.C	4.D	4.E	4.F	4.G	4.H	4.I	4.J	4.K	5.A	5.B	5.C	5.D	5.E	5.F	5.G		
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# ALGEBRA I ELPS SUMMARY

Algebra I ELPS Summary by Module and Topic	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F	2.G	2.H	2.I
<b>Module 1 ELPS Summary</b>	•	•	•		•	•					•		•				•
M1 Topic 1 ELPS Summary	•	•	•		•	•					•		•				•
M1 Topic 2 ELPS Summary	•		•		•												
<b>Module 2 ELPS Summary</b>			•	•	•			•			•	•	•		•	•	•
M2 Topic 1 ELPS Summary			•	•	•			•			•	•	•		•		
M2 Topic 2 ELPS Summary				•	•							•			•	•	•
<b>Module 3 ELPS Summary</b>				•				•		•	•	•				•	•
M3 Topic 1 ELPS Summary								•		•	•					•	
M3 Topic 2 ELPS Summary				•						•		•				•	•
<b>Module 4 ELPS Summary</b>	•	•	•	•	•		•		•		•	•			•	•	•
M4 Topic 1 ELPS Summary		•			•		•		•			•				•	•
M4 Topic 2 ELPS Summary	•		•	•					•		•				•		
<b>Module 5 ELPS Summary</b>	•			•	•			•	•	•	•	•		•	•		•
M5 Topic 1 ELPS Summary	•							•				•		•	•		•
M5 Topic 2 ELPS Summary					•				•								
M5 Topic 3 ELPS Summary				•	•			•		•	•						

Algebra I ELPS Course Summary	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F	2.G	2.H	2.I
Algebra I ELPS Course Summary	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Algebra I ELPS Summary by Module	1.A	1.B	1.C	1.D	1.E	1.F	1.G	1.H	2.A	2.B	2.C	2.D	2.E	2.F	2.G	2.H	2.I
Module 1 ELPS Summary	•	•	•		•	•					•		•				•
Module 2 ELPS Summary			•	•	•			•			•	•	•		•	•	•
Module 3 ELPS Summary				•				•		•	•	•				•	•
Module 4 ELPS Summary	•	•	•	•	•		•		•		•	•			•	•	•
Module 5 ELPS Summary	•			•	•			•	•	•	•	•		•	•		•



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