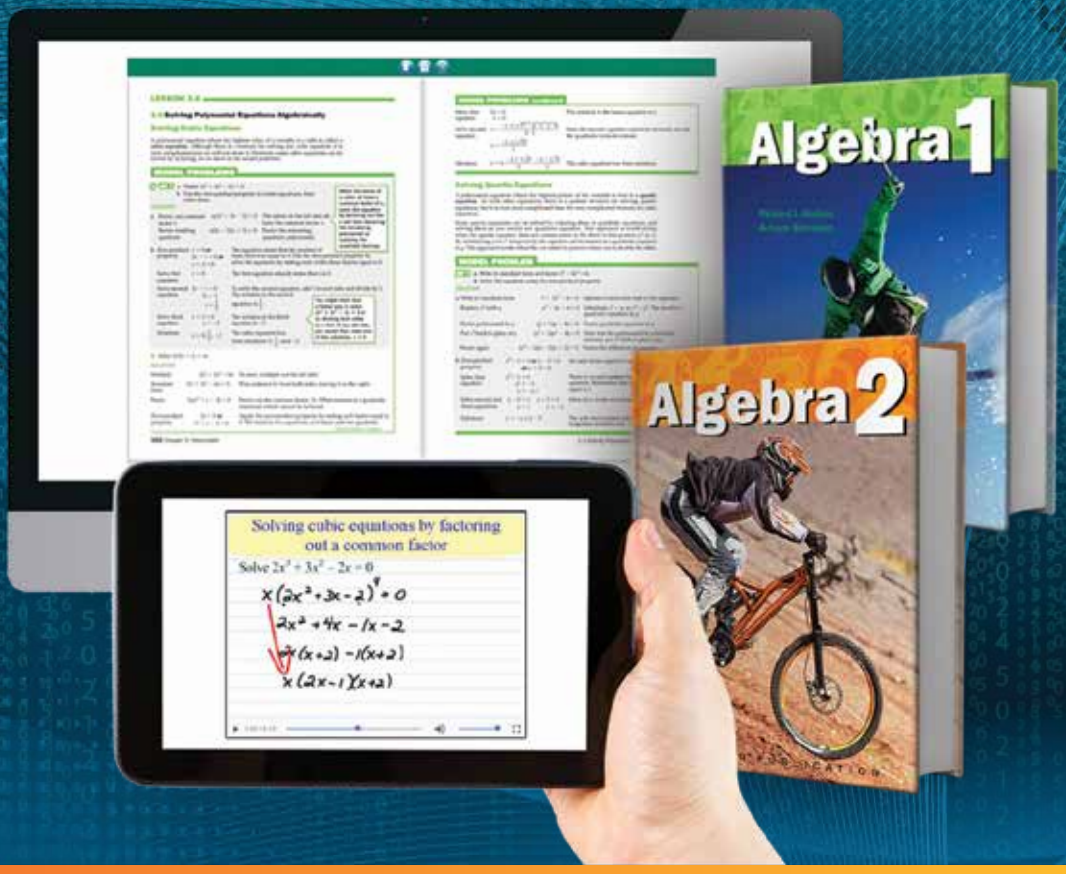
Approved by the South Carolina State Board of Education



AMSCOmath

Build conceptual understanding and mathematical fluency through engaging print and digital instruction, real world problems and practice simulations, and assessment

- **short, focused instruction** aligned to the South Carolina standards
- **step-by-step model problems** move from simpler to more complex tasks and develop conceptual understanding of multi-step problem solving
- **real world problems** prepare students for rigorous assessment
- **extensive problem sets** provide abundant fluency practice, contextual problem practice, and performance task practice

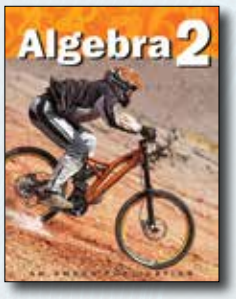
Perfection LEARNING

southcarolina.perfectionlearning.com | (800) 831-4190

Tables of Contents

Algebra 1

Algebra 2



Mathematical Practices

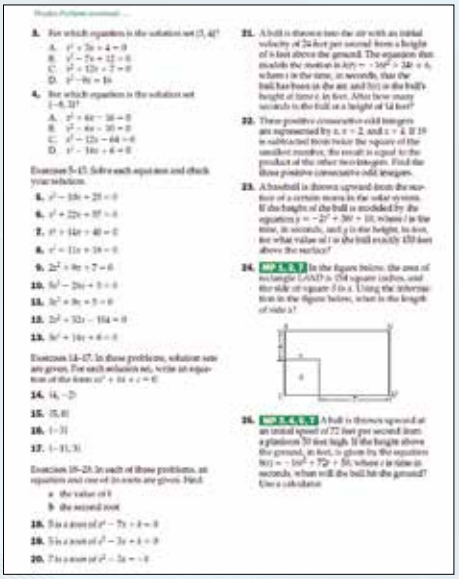
- explained in student friendly language
- various questioning techniques develop the eight mathematical practices
- embedded throughout the student edition with accompanying teacher support

Practice Standards	Questions to ask to develop mathematical thinking
MP 3 Construct viable arguments and critique the reasoning of others. Ask questions, defend answers, and/or make speculations using correct math vocabulary. • use assumptions, definitions, and previously established results • make conjectures and build a valid progression of statements • use counterexamples • justify conclusions and communicate them to others • determine whether the arguments of others seem right	• How would you describe ...? Use written explanations, equations, inequalities, graphs, tables, and data representations. • Do you think ... or ...? • How sure are you of your answer? • Can you prove your answer with drawings, diagrams, actions, mathematical definitions, and/or previously established results? • How do you know whether your approach worked? • Will that approach always work? Why or why not? • What examples could prove or disprove your argument? • Can you build a valid progression of statements that justify your conclusion? • Does your classmate's conclusion seem accurate to you? Why or why not? • Can you find a counterexample? • What questions do you still have?
MP 4 Model with mathematics. Show the relevance of math by solving real-world problems. Look for opportunities to use math for current situations in and outside of school in all subject areas. • apply mathematics to solve everyday problems • analyze and chart relationships using diagrams, two-way tables, graphs, flowcharts, and formulas to draw conclusions • apply knowledge to simplify a complicated situation • interpret results and consider whether answers make sense	• What are some situations that require math for solutions? • Can you find a number sentence that describes the situation? • What are some ways to visually symbolize the problem? • Is there a formula that might apply in this circumstance? • Can the problem be solved with proportional reasoning? • If you apply approximations to numerical values, will it make the task easier? • Do you see any connections to problems you have encountered in the past? • Would a diagram, graph, or two-way table be helpful? • Do your results make sense? • How would you use ... in your life? • Does the problem require an exact solution or an approximation? How does that change your course?

Problem Sets

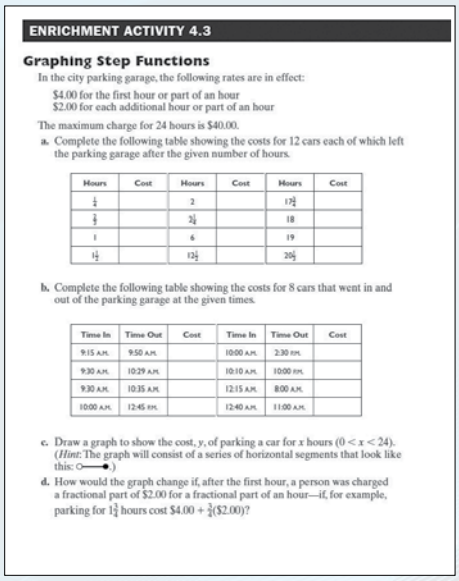
Extensive problem sets provide

- abundant fluency practice
- contextual problem practice
- performance task practice



Enrichment Activities

- challenge students to explore topics in greater depth
- perfect for collaborative study or enrichment



ENRICHMENT ACTIVITY 4.3

Graphing Step Functions

In the city parking garage, the following rates are in effect:

$4.00 for the first hour or part of an hour
$2.00 for each additional hour or part of an hour

The maximum charge for 24 hours is $40.00.

a. Complete the following table showing the costs for 12 cars each of which left the parking garage after the given number of hours.

Hours	Cost	Hours	Cost	Hours	Cost
$\frac{1}{2}$		2		$17\frac{1}{2}$	
$\frac{3}{4}$		$2\frac{1}{2}$		18	
1		6		19	
$1\frac{1}{2}$		$12\frac{1}{2}$		$20\frac{1}{2}$	

b. Complete the following table showing the costs for 8 cars that went in and out of the parking garage at the given times.

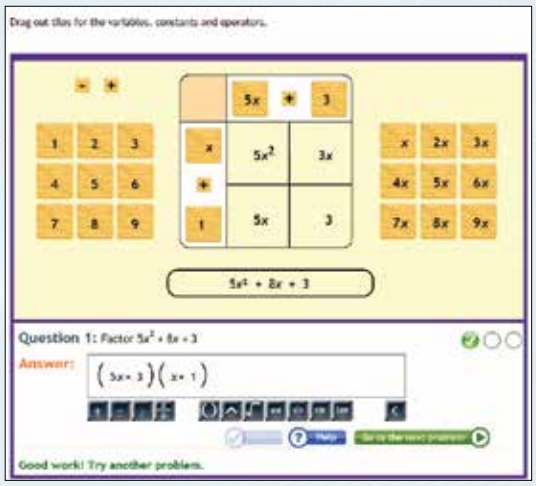
Time In	Time Out	Cost	Time In	Time Out	Cost
9:15 A.M.	9:50 A.M.		10:00 A.M.	2:30 P.M.	
9:30 A.M.	10:29 A.M.		10:10 A.M.	10:00 P.M.	
9:30 A.M.	10:35 A.M.		12:15 A.M.	8:00 A.M.	
10:00 A.M.	12:45 P.M.		12:40 A.M.	11:00 A.M.	

c. Draw a graph to show the cost, y, of parking a car for x hours ($0 < x < 24$). (*Hint:* The graph will consist of a series of horizontal segments that look like this: ⟶●.)

d. How would the graph change if, after the first hour, a person was charged a fractional part of $2.00 for a fractional part of an hour—if, for example, parking for $1\frac{1}{2}$ hours cost $4.00 + \frac{1}{2}($2.00)?

Companion Websites

- **exploration**—interactive investigation, simulations, and graphing tools
- **student-facing instructional videos** provide
  - —additional support for absent or struggling students
  - —the tools parents need to help students



AMSCOmath Digital

powered by mathˣ

LTI and OneRoster compliant

Students can view all assignments and their status including

- assigned date
- due date and teacher notification
- assignment type
- score

Point-of-use video instruction for each problem type **closes the learning gap**.

Guided Practice

Step-by-step help provides guided practice. Stepped out interactive fill-in-the-blank problems guide students through the problem-solving process.

Smart Feedback helps students identify common errors.

Personalized Practice and Assessment

***i*-Practice** personalized problem generator provides additional practice only on deficient skills.

- automatically differentiates instructional support for each student
- allows students to practice to success
- frees up teacher time for one-on-one interaction
- a real-time counter tells students which skills they have mastered, which need additional practice, and how many problems are yet to be completed

Assignment Management

Use pre-built assignments or create your own.

- create **custom assignments** from over 2,000 questions aligned by lesson or by standard
- choose problems that
  —deliver a different iteration to each student
  —have video support for students
  —have fill-in-the-blank stepped-out support

Assignment Types

- **Homework**—students are allowed multiple tries per problem and can access videos or step-by-step help.
- **Quiz**—students are allowed multiple tries per problem but cannot access videos or step-by-step help.
- **Test**—students are allowed one try per problem and cannot access videos or step-by-step help.
- ***i*-Practice**—students are allowed to keep trying with access to videos and step-by-step help. When a student completes and submits the assignment, Mathˣ will create a new assignment consisting of one similar problem for each problem missed.

Real-Time Progress Monitoring

- determine whether the class or individual students are on track, making strides in their knowledge, or falling behind
- identify the need for more individualized instruction by drilling down to performance on specific problems
- reports include tracking of standards by class or individual student

4943/0319/1