

Orchard has addressed your need for higher-level mathematics in our Algebra programs. These four titles continue the Orchard tradition of excellent educational software and will be a hit in any math classroom. These programs cover the standard curriculum taught in Algebra I throughout North America and are correlated to NCTM standards.

### Series Benefits

- Interactive tutorials engage students
- Includes two types of assessment—a student-generated practice for self-assessment and an option for the teacher to pre-select question sets for quizzes.
- Scientific calculator and graphing tools for easy reference
- Journal and journal-writing tasks connect math and writing
- Immediate feedback motivates student learning
- Varying levels of difficulty for a variety of needs
- Different learning styles/modalities are addressed

### Series Applications

- May be used in individual, group, and culminating performance activities
- Teacher resource manual includes overview, additional classroom resources, scope and sequence, instructions, and more.

### Series Management

- The tracking system records students' time on task, quiz results, and tutorial activity. Students see their results at the completion of a session, while teachers may access the data from the manager.

Enrichment		Core		Remedial	
K	1	2	3	4	5
6	7	8	9	10	11
12					

## ALGEBRAIC FOUNDATIONS

City	Temperatures °C		
	Low	High	Difference
Oakland, U.S.	22	28	6
Honolulu, U.S.	29	34	5
Raleigh, U.S.	15	17	2
Dakar, Senegal	36	40	4
Ottawa, Canada	1	2	1
Munich, Germany	8	11	3

Click on the city with the largest difference (change) in temperature.

Students use their problem-solving skills to master algebraic foundations that are essential in any math curriculum. They work through tutorials and test their skills.

### Key Concepts include:

- Numbers, polynomials
- Rational expressions
- Factoring
- Equations, inequalities

## LINEAR RELATIONS

Plot the points and then draw the lines. If an inequality does not have an equal sign its line must be dotted.

Test each inequality with the point (0, 0). If the inequality is true, shade that side of the line; otherwise shade the other side.

All points in the area included by both inequalities (in green) are solutions to the system.

Students learn to understand linear functions through interactive tutorials, activities, and problem-solving applications.

### Key Concepts include:

- Linear functions, linear systems
- Slopes and intercepts
- Interpolation and extrapolation
- Inequalities

## FUNCTIONAL, GEOMETRIC, & STATISTICAL RELATIONSHIPS

Relations can be described in many different ways. Here are some examples:

Graphs

Height in feet

Jane, Mohamed, Tessa, Lilly, Sigrud, Simon

Students gain knowledge about relationships that exist in everyday life. They learn to collect, organize, and analyze data.

### Key Concepts include:

- Domain and range
- Polygons, surface area, and volume
- Values and zeros
- Line and curve of best fit
- Angles and triangles

## QUADRATIC RELATIONS

Here is the graph of  $y = x$ . Notice the effect of adding a number to the right side of the equation.

For example, if 4 is added, the equation becomes  $y = x + 4$ . The graph moves up, while the slope of the line stays the same.

Something similar happens when a number is added to the right side of the equation  $y = x^2$ .

Help your students master quadratic equations through the use of explorations, activities, and problem solving.

### Key Concepts include:

- Quadratic equations, quadratic functions
- Solving by completing the square
- Solving by isolation or factoring
- Solving with quadratic formula



PRICING		\$69.95	\$169.95	\$599.95
Title	Platform	One Computer	Labs (5)	Net/Site (unlimited)
Algebraic Foundations	MAC/WIN CD	2641	2641L	2641S
Functional, Geometric, & Statistical Relationships	MAC/WIN CD	2642	2642L	2642S
Linear Relations	MAC/WIN CD	2643	2643L	2643S
Quadratic Relations	MAC/WIN CD	2644	2644L	2644S
<b>BUNDLE &amp; SAVE</b>		<b>\$249.95</b>	<b>\$599.95</b>	<b>\$2,159.95</b>
Includes all 4 Titles	MAC/WIN CD	2645	2645L	2645S