


# Algebra Series By Chapter Learning Management System (LMS)

This is an 8-Chapter Series intended for first year algebra students with a solid pre-algebra foundation and for continuing second year algebra students. Students learn from the "body" of the program's learning sections. Flexible options are available for placement and testing.

## Learning Sections

**Chapter 4** **Polynomials Products & Factors** **MENU**

Write down the problems. Write the steps. Enter your answers. 

1 **Intro to Polynomials**  
monomial trinomial binomial

2 **Using Exponents**  
(check on your choice)  
 $x^2 \cdot x = x^{2+1}$

3 **Multiply Polynomials "FOIL"**  
 $(x + 5)(x + 1)$

4 **Prime Factoring**  
 $96 = 2^5 \cdot 3$

5 **Factoring Polynomials**  
GCF  $x^2 - x$   
 $x(x - 1)$

6 **Factoring Quadratics**  
 $x^2 + 2x - 3$   
 $(x + 3)(x - 1)$

7 **Polynomial Equations**  
 $2x^2 - 5x - 1 = 0$

8 **Problem Solving**

9 **Polynomial Inequalities**  
 $(2x + 5)(x - 1) \geq 0$

**Exit** **Quiz Menu** **Practice TEST** **TEST**

## Assessments


Every section of every program has a corresponding Quiz to test the student's achievement. Scores are calculated and automatically sent to the included database. Use the Quizzes for placement or accountability. Once the students have proven proficiency, they will take the Practice Test which contains questions from all the learning sections in the chapter and includes HINTs and solutions. After the Practice Test, students will take the concluding Chapter Test which will be scored and recorded.

## Learning Sections

Each section contains instructions, examples, and practice problems with hints and complete step-by-step solutions. Different techniques and perspectives are used to explain complex concepts to accommodate different learning styles.

## Quizzes

**Chapter 4** **Polynomials Products & Factors** **QUIZ MENU**

Write down the problems. Write the steps. Enter your answers. 

1 **Intro to Polynomials**  
monomial trinomial binomial

2 **Using Exponents**  
(check on your choice)  
 $x^2 \cdot x = x^{2+1}$

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 $(2x + 5)(x - 1) \geq 0$

## Practice Test

Students may take the Practice Test before or after studying the learning sections OR before or after taking the Test for a recorded score. The Practice Test includes HINTs and solutions.



## Chapter Test

**ALGEBRA TEST**  
**Chapter 4**  
**Polynomials: Products & Factors**  
**This test will be scored.**

This button appears on each Question screen and allows you to stop, review, take a break or go to any question.

**MENU** **Go To Specific Question** **Begin Test**

## Sample Question

**Algebra Series > Chapter 4: "Polynomials" > Section 1: "Intro Polynomials" > Quiz**

**Simplify** **Q4**

Click in the blanks and enter your answers.

$(x+3)(x+1)$   $(x+3)(x-1)$   $(x-3)(x-1)$

$(2x+3)(x+1)$   $(2x+3)(x-1)$   $(2x-3)(x-1)$

**BACK** **NEXT**

## Quiz Score Report

**Algebra Series > Chapter 4: "Polynomials" > Section 1: "Intro Polynomials" > Quiz**

7/8/2010 Betsy Johnson

**Click here to score this quiz.**

correct 15 88.2 %  
wrong 2

**BACK** **MENU**

## Learning Management System (LMS)

Scores from the Quizzes and Test are automatically posted to the included database (LMS.csv) located in the program folder.

Microsoft Excel - LMS.csv										
File Home Insert Formulas Layout Data Window Help										
Type a question for help										
C2M 10:45:58 AM										
A B C D E F G										
1	MathModel Educational Software, Inc.									
2	Learning Management System									
3	Algebra Chapter 4: Polynomial Products and Factors									
4										
5	Topic	Date	Time	LAST Name	FIRST Name	Score %	Class	Code		
6	Alg CH4 Quiz 1 Intro Polynomials	7/6/2010	10:23:18 AM	Johnson	Betsy	88	Period 6			
7	Alg CH4 Quiz 1 Intro Polynomials	7/6/2010	11:23:18 AM	Johnson	Bob	100	Period 7			
8	Alg CH4 Quiz 1 Intro Polynomials	7/16/2010	12:23:18 PM	Johnson	Bob	82	Period 8			
9	Alg CH4 Quiz 1 Intro Polynomials	7/11/2010	1:23:18 PM	Wong	Suzie	100	Period 9			
10	Alg CH4 Quiz 1 Intro Polynomials	7/11/2010	2:23:18 PM	Wong	Suzie	100	Period 10			
11	Alg CH4 Quiz 2 Exponents	7/6/2010	10:36:44 AM	Johnson	Betsy	90	Period 6			
12	Alg CH4 Quiz 2 Multiply Polynomials	7/6/2010	10:37:30 AM	Johnson	Betsy	90	Period 6			
13	Alg CH4 Quiz 2 Prime Factoring	7/6/2010	11:37:48 AM	Johnson	Betsy	100	Period 6			
14	Alg CH4 Quiz 2 Factoring Polynomials	7/12/2010	10:37:58 AM	Johnson	Betsy	81	Period 6			
15	Alg CH4 Quiz 2 Factoring Polynomials	7/14/2010	1:40:09 PM	Johnson	Betsy	100	Period 6			
16	Alg CH4 Quiz 2 Factoring Polynomials	7/16/2010	1:30:02 PM	Patel	Scott	89	Period 10			
17	Alg CH4 Quiz 2 Prime Factoring	7/6/2010	2:45:17 PM	Wong	Suzie	80	Period 9			
18	Alg CH4 Quiz 2 Multiply Polynomials	7/6/2010	9:05:29 AM	Johnson	Bob	88	Period 6			
19	Alg CH4 Quiz 2 Exponents	7/12/2010	8:53:43 AM	Gomez	Joe	77	Period 7			
20	Alg CH4 Quiz 2 Exponents	7/12/2010	10:29:56 AM	Patel	Scott	100	Period 10			
21	Alg CH4 Quiz 2 Solving Quadratics	7/12/2010	11:40:11 AM	Johnson	Betsy	71	Period 6			
22	Alg CH4 Quiz 2 Problem Solving	7/13/2010	10:30:27 AM	Johnson	Betsy	66	Period 6			
23	Alg CH4 Quiz 2 Polynomial Identities	7/14/2010	9:40:38 AM	Johnson	Betsy	66	Period 6			
24	Algebra 4: CH4 TEST - Problem Solving	7/15/2010	10:45:58 AM	Johnson	Betsy	66	Period 6			

## Score Report

7/15/2010 Betsy Johnson

**Score report for Algebra: Chapter 4: Products & Factors**

Q 1	Q 5	Q 12	Score
1 1 1 1	1 1	1 1	37 / 43
Q 2	Q 6	Q 13	Alg 1 = 40 Points Alg 2 = 43 Points
1 1 1	1 1	1 1	86 %
Q 3	Q 7	Q 14	correct 37 wrong 43
1 1 1	0	1 1 1 1	
Q 4A	Q 8	Q 15	
1 1 1	0	1 1 1	
Q 4B	Q 9	Q 16	
1 1 1	1	1 1 1	
Q 10	Q 17	Q 18	
1 1 1	0	1 1 1	
Q 11	Q 19	Q 20	
1 1 1	0	1 1 1	

**MENU** **Go To Specific Question** **Click here to EVALUATE weaknesses**

## Evaluate Strengths and Weaknesses

**Chapter 4** **Polynomials Products & Factors**

**TEST EVALUATION: Study the topics with an "X".**

<input checked="" type="checkbox"/> <b>Intro to Polynomials</b> monomial trinomial binomial	<input checked="" type="checkbox"/> <b>Using Exponents</b> $x^2 \cdot x = x^{2+1}$	<input checked="" type="checkbox"/> <b>Multiply Polynomials "FOIL"</b> $(x + 5)(x + 1)$
<input checked="" type="checkbox"/> <b>Prime Factoring</b> $96 = 2^5 \cdot 3$	<input checked="" type="checkbox"/> <b>Factoring Polynomials</b> GCF $x^2 - x$ $x(x - 1)$	<input checked="" type="checkbox"/> <b>Factoring Quadratics</b> $x^2 + 2x - 3$ $(x + 3)(x - 1)$
<input checked="" type="checkbox"/> <b>Polynomial Equations</b> $2x^2 - 5x - 1 = 0$	<input checked="" type="checkbox"/> <b>Problem Solving</b>	<input checked="" type="checkbox"/> <b>Polynomial Inequalities</b> $(2x + 5)(x - 1) \geq 0$

**MENU** **Go To Specific Question**

Sections needing more practice are marked with an X.