

13 Algebra: Exploring Polynomials



Chapter Pacing Guide

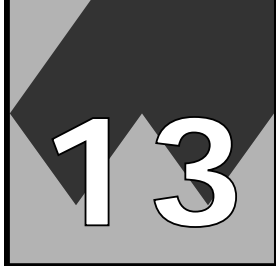
Please note that this pacing guide is based upon completing the entire text in 165 classes, approximately 50 minutes each. More time can be allotted for this chapter if you do not plan to teach the entire text.

Day (Standard)	Day (Honors)	Lesson	Title
	1	*Chapter Project	Theme: Basketball Hit or Miss
		*13-1A	<small>HANDS-ON LAB</small> Cooperative Learning Algebra Tiles
	1	13-1	Modeling Polynomials
	2	13-2	Simplifying Polynomials
	3	13-3	Adding Polynomials
	4	13-4	Subtracting Polynomials
		*13-5A	<small>HANDS-ON LAB</small> Cooperative Learning Modeling Products
	5	13-5	Multiplying Monomials and Polynomials
	6	13-6	Multiplying Binomials
	7	13-7A	<small>THINKING LAB</small> Problem Solving Guess and Check
	8	13-7	Factoring Polynomials
	9	Review: Study Guide and Assessment	
	10	Assessment: Chapter Test	

* Optional

Chapter Resources

<p>Meeting Individual Needs <i>Investigations for the Special Education Student, Yard Sale</i>, pp. 35-38 <i>Spanish Study Guide and Assessment Study Guide and Practice Workbook</i></p>	<p>Technology <i>Electronic Teacher's Classroom Resources (ETCR)</i> www.glencoe.com/sec/math/mac/mathnet</p>
<p>Interactive Mathematics: Activities and Investigations Units 9 and 13</p>	<p>Applications <i>Family Letters and Activities</i>, pp. 77-78 <i>Spanish Family Letters and Activities</i>, pp. 77-78</p>



Chapter Project (pp. 558-559)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

- _____ Convert percents to probabilities.
- _____ Create area models to describe probabilities.
- _____ Create algebraic models to describe probabilities.

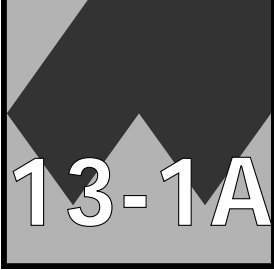
Theme: Solar System

- _____ Chapter Project, *SE*, p. 559
- _____ Chapter 13 Notes, *TWE*, p. 558
- _____ Question of the Day, *TWE*, p. 558
- _____ ⇨ *Investigations and Projects Masters*, pp. 65-68

Homework Assignments

- _____ p. 564, Working on the Chapter Project, Exercise 34
- _____ p. 585, Working on the Chapter Project, Exercise 21
- _____ p. 591, Working on the Chapter Project, Exercise 25
- _____ p. 595, Completing the Chapter Project, Alternative Assessment

KEY SE = Student Edition TWE = Teacher's Wraparound Edition ⇨ = Other Program Components



Lesson Planning Guide (p. 560)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Make algebra tiles for algebraic expressions.

The California Mathematics
Academic Content Standards

Grade 7:
Optional Lesson

MANAGEMENT

_____ Getting Started, *TWE*, p. 560

_____ ⇨ *Hands-On Lab Masters*, p. 29: algebra tiles

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 13-1A

_____ ⇨ *Overhead Manipulative Resources*: algebra tiles

ASSESS

_____ *TWE*, p. 560

_____ ⇨ *Hands-On Lab Masters*, p. 66

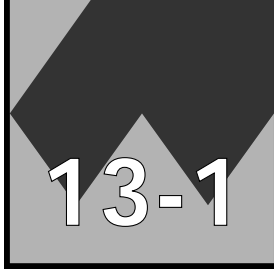
Class Activity (p. 560)

_____ All: 1-5

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 560

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Lesson Planning Guide (pp. 561-564)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

____ Represent polynomials with algebra tiles.

The California Mathematics Academic Content Standards
Grade 7: AF2.1
Basic Lesson

1 FOCUS

- ____ 5-Minute Check, *TWE*, p. 561
- ____ ⇨ Transparency 13-1A
- ____ Motivating the Lesson, Communication, *TWE*, p. 561
- ____ Cross-Curriculum Cue, *TWE*, p. 561

2 TEACH

- ____ ⇨ Transparency 13-1B
- ____ Thinking Algebraically, *TWE*, p. 562
- ____ In-Class Examples, *TWE*, p. 562
- ____ ⇨ *Study Guide Masters*, p. 100
- ____ Reteaching the Lesson, *TWE*, p. 562
- ____ ⇨ *CD-ROM Program*, Resource Lesson 13-1, Interactive Lesson 13-1

3 PRACTICE/APPLY

- ____ Check for Understanding, *SE*, pp. 562-563

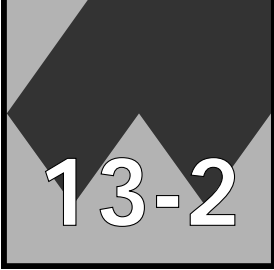
Homework Assignments (pp. 563-564)	
____ Core: 13-33 odd, 35-39	____ Enriched: 12-30 even, 32, 33, 35-39
____ Optional: 34 (Working on the Chapter Project)	
____ Alternate Assignment: _____	

- ____ Extra Practice, *SE*, p. 642
- ____ ⇨ *Practice Masters*, p. 100
- ____ ⇨ *School to Career Masters*, p. 39

4 ASSESS

- ____ Closing Activity, Modeling, *TWE*, p. 564
- ____ Extending the Lesson, *TWE*, p. 564
- ____ ⇨ *Enrichment Masters*, p. 100

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Lesson Planning Guide (pp. 565-569)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Simplify polynomials by using algebra tiles.

**The California Mathematics
Academic Content Standards**

**Grade 7: AF1.4, AF2.1
Basic Lesson**

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 565
- _____ ⇨ Transparency 13-2A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 565
- _____ Multiple Learning Styles, Interpersonal, *TWE*, p. 565

2 TEACH

- _____ ⇨ Transparency 13-2B
- _____ Using the Mini-Lab, *TWE*, p. 566
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-2
- _____ In-Class Examples, *TWE*, pp. 566, 567
- _____ ⇨ *Study Guide Masters*, p. 101
- _____ Reteaching the Lesson, *TWE*, p. 567
- _____ Error Analysis, *TWE*, p. 567
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-2

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 567

Homework Assignments (pp. 568-569)

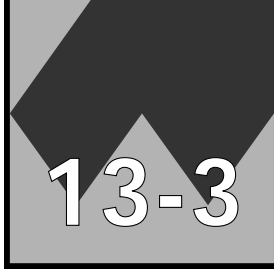
- _____ Core: 13-35 odd, 36-40 _____ Enriched: 12-32 even, 33-40
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 642
- _____ ⇨ *Practice Masters*, p. 101
- _____ ⇨ *Technology Masters*, Calculator Activity, p. 77

4 ASSESS

- _____ Closing Activity, Modeling, *TWE*, p. 569
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz A, p. 351
- _____ Extending the Lesson, *TWE*, p. 569
- _____ ⇨ *Enrichment Masters*, p. 101

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Lesson Planning Guide (pp. 570-572)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Add polynomials by using algebra tiles.

The California Mathematics Academic Content Standards
Grade 7: AF2.1 Basic Lesson

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 570
- _____ ⇨ Transparency 13-3A
- _____ Motivating the Lesson, Problem Solving, *TWE*, p. 570
- _____ Multiple Learning Styles, Interpersonal, *TWE*, p. 570

2 TEACH

- _____ ⇨ Transparency 13-3B
- _____ Using the Mini-Lab, *TWE*, p. 570
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-3
- _____ In-Class Examples, *TWE*, p. 571
- _____ ⇨ *Study Guide Masters*, p. 102
- _____ Reteaching the Lesson, *TWE*, p. 571
- _____ Error Analysis, *TWE*, p. 571
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-3, Interactive Lesson 13-3
- _____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, p. 571

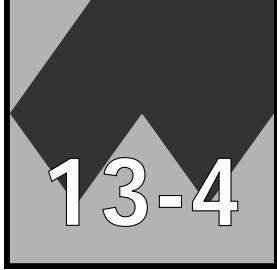
Homework Assignments (p. 572)	
_____ Core: 11-29 odd, 30-34	_____ Enriched: 10-26 even, 28-34
_____ Alternate Assignment: _____	

- _____ Extra Practice, *SE*, p. 642
- _____ ⇨ *Practice Masters*, p. 102

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 572
- _____ Extending the Lesson, *TWE*, p. 572
- _____ ⇨ *Enrichment Masters*, p. 102

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Lesson Planning Guide (pp. 573-576)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Subtract polynomials by using algebra tiles.

**The California Mathematics
Academic Content Standards**

Grade 7: AF2.1, MR2.8,
MR3.1

Basic Lesson

1 FOCUS

_____ 5-Minute Check, *TWE*, p. 573

_____ ⇨ Transparency 13-4A

_____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 573

2 TEACH

_____ ⇨ Transparency 13-4B

_____ Using the Mini-Lab, *TWE*, p. 574

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-4

_____ In-Class Examples, *TWE*, p. 574

_____ ⇨ *Study Guide Masters*, p. 103

_____ Reteaching the Lesson, *TWE*, p. 574

_____ Error Analysis, *TWE*, p. 574

_____ ⇨ *CD-ROM Program*, Resource Lesson 13-4, Interactive Lesson 13-4

_____ ⇨ *Interactive Mathematics Tools Software*

3 PRACTICE/APPLY

_____ Check for Understanding, *SE*, pp. 574-575

Homework Assignments (pp. 575-576)

_____ Core: 11-27 odd, 28-32

_____ Enriched: 10-24 even, 26-32

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 643

_____ ⇨ *Practice Masters*, p. 103

_____ ⇨ *Hands-On Lab Masters*, p. 80

4 ASSESS

_____ Closing Activity, Writing, *TWE*, p. 575

_____ ⇨ *Assessment and Evaluation Masters*, Mid-Chapter Test, p. 350

_____ ⇨ *Assessment and Evaluation Masters*, Quiz B, p. 351

_____ Extending the Lesson, *TWE*, p. 576

_____ ⇨ *Enrichment Masters*, p. 103

_____ Mid-Chapter Self Test, *SE*, p. 576

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Lesson Planning Guide (p. 577)



Teacher's Name _____ Dates _____
Grade _____ Class _____ M Tu W Th F

Objectives

_____ Model products by using algebra tiles.

The California Mathematics
Academic Content Standards

Grade 7:
Optional Lesson

MANAGEMENT

_____ Getting Started, *TWE*, p. 577

_____ ⇨ *Hands-On Lab Masters*, p. 29: algebra tiles

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Lesson 13-5A

_____ Manipulative Resources: algebra tiles, product mat

ASSESS

_____ *TWE*, p. 577

_____ ⇨ *Hands-On Lab Masters*, p. 67

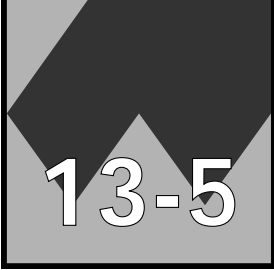
Class Activity (p. 577)

_____ All: 1-4

_____ Alternate Assignment: _____

_____ Math Journal, *TWE*, p. 577

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Lesson Planning Guide (pp. 578-582)




Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Multiply monomials and polynomials.

The California Mathematics Academic Content Standards	
Grade 7:	NS2.1, AF1.3, AF2.1, AF2.2
	Key Lesson

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 578
- _____ ⇨ Transparency 13-5A
- _____ Motivating the Lesson, Communication, *TWE*, p. 578

2 TEACH

- _____ ⇨ Transparency 13-5B
- _____ Using the Mini-Lab, *TWE*, p. 578
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-5
- _____ In-Class Examples, *TWE*, p. 579
- _____ ⇨ *Study Guide Masters*, p. 104
- _____ Reteaching the Lesson, *TWE*, p. 580
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-5

3 PRACTICE/APPLY



- _____ Check for Understanding, *SE*, p. 580

Homework Assignments (pp. 580-581)

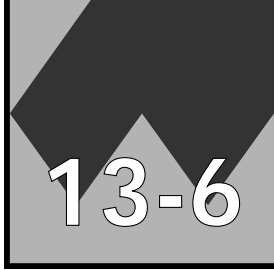
- _____ Core: 11-27 odd, 28-32 _____ Enriched: 10-24 even, 25-32
- _____ Alternate Assignment: _____

- _____ Extra Practice, *SE*, p. 643
- _____ ⇨ *Practice Masters*, p. 104
- _____ *School to Career Masters*, *SE*, p. 582

4 ASSESS

- _____ Closing Activity, Writing, *TWE*, p. 581
- _____ Extending the Lesson, *TWE*, p. 581
- _____ ⇨ *Enrichment Masters*, p. 104
- _____ ⇨  *California Practice and Sample Test Workbook, Grade 7*
- _____ ⇨  *California Practice Transparencies, Grade 7*

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Lesson Planning Guide (pp. 583-585)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Multiply binomials by using algebra tiles.

The California Mathematics Academic Content Standards
Grade 7: Optional Lesson

1 FOCUS

- _____ 5-Minute Check, *TWE*, p. 583
- _____ ⇨ Transparency 13-6A
- _____ Motivating the Lesson, Hands-On-Activity, *TWE*, p. 583

2 TEACH

- _____ ⇨ Transparency 13-6B
- _____ Using the Mini-Lab, *TWE*, p. 583
- _____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-6
- _____ Multiple Learning Styles, Verbal/Linguistic, *TWE*, p. 583
- _____ In-Class Examples, *TWE*, p. 584
- _____ ⇨ *Study Guide Masters*, p. 105
- _____ Reteaching the Lesson, *TWE*, p. 584
- _____ ⇨ *CD-ROM Program*, Resource Lesson 13-6

3 PRACTICE/APPLY

- _____ Check for Understanding, *SE*, pp. 584-585

Homework Assignments (p. 585)

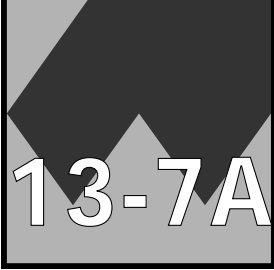
- | | |
|---|--|
| _____ Core: 9-19 odd, 22-25 | _____ Enriched: 8-18 even, 19, 20, 22-25 |
| _____ Optional: 21 (Working on the Chapter Project) | |
| _____ Alternate Assignment: _____ | |

- _____ Extra Practice, *SE*, p. 643
- _____ ⇨ *Practice Masters*, p. 105
- _____ ⇨ *Diversity Masters*, p. 39
- _____ Family Activity, *SE*, p. 585

4 ASSESS

- _____ Closing Activity, Speaking, *TWE*, p. 585
- _____ ⇨ *Assessment and Evaluation Masters*, Quiz C, p. 352
- _____ Extending the Lesson, *TWE*, p. 585
- _____ ⇨ *Enrichment Masters*, p. 105

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Lesson Planning Guide (pp. 586-587)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Solve problems by using guess and check.

The California Mathematics Academic Content Standards
Grade 7: Optional Lesson

1 FOCUS

_____ Getting Started, *TWE*, p. 586

2 TEACH

_____ In-Class Example, *TWE*, p. 586

_____ Reteaching the Lesson, *TWE*, p. 586

3 PRACTICE/APPLY

_____ Check for Understanding, *TWE*, p. 587

Homework Assignments (p. 587)

_____ All: 4-14

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 644

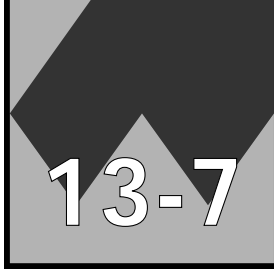
_____ Mixed Problem Solving, *SE*, pp. 645-646

4 ASSESS

_____ Closing Activity, Modeling, *TWE*, p. 587

_____ Extending the Lesson, *TWE*, p. 587

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Lesson Planning Guide (pp. 588-591)



Teacher's Name _____ Dates _____

Grade _____ Class _____ M Tu W Th F

Objectives

_____ Factor polynomials by using algebra tiles.

The California Mathematics
Academic Content Standards

Grade 7: AF2.2
Basic Lesson

1 FOCUS

_____ 5-Minute Check, *TWE*, p. 588

_____ ⇨ Transparency 13-7A

_____ Motivating the Lesson, Problem Solving, *TWE*, p. 588

2 TEACH

_____ ⇨ Transparency 13-7B

_____ Using the Mini-Lab, *TWE*, p. 588

_____ ⇨ *Teacher's Guide for Overhead Manipulative Resources*, Mini-Lab for Lesson 13-7

_____ In-Class Examples, *TWE*, p. 589

_____ ⇨ *Study Guide Masters*, p. 106

_____ Reteaching the Lesson, *TWE*, p. 589

_____ ⇨ *CD-ROM Program*, Resource Lesson 13-7

3 PRACTICE/APPLY

_____ Check for Understanding, *SE*, pp. 589-590

Homework Assignments (pp. 590-591)

_____ Core: 9-23 odd, 26-29 _____ Enriched: 10-22 even, 23, 24, 26-29

_____ Optional: 25 (Working on the Chapter Project)

_____ Alternate Assignment: _____

_____ Extra Practice, *SE*, p. 644

_____ ⇨ *Practice Masters*, p. 106

_____ ⇨ *Technology Masters*, Spreadsheet Activity, p. 78

_____ ⇨ *Classroom Games*, pp. 43-45

4 ASSESS

_____ Let the Games Begin, *SE*, p. 591

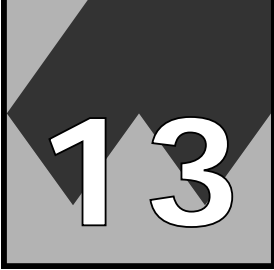
_____ Closing Activity, Speaking, *TWE*, p. 591

_____ ⇨ *Assessment and Evaluation Masters*, Quiz D, p. 352

_____ Extending the Lesson, *TWE*, p. 591

_____ ⇨ *Enrichment Masters*, p. 106

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Review and Assessment (pp. 592-597)



Teacher's Name _____ Dates _____

Grade _____ Class _____
Review M Tu W Th F
Testing M Tu W Th F

- _____ Study Guide and Assessment, *SE*, pp. 592-595
- _____ Standardized Test Practice, *SE*, pp. 596-597
- _____ Chapter Test, *SE*, p. 659



⇔ **Assessment and Evaluation Masters (pp. 337-355)**

Multiple-Choice Tests

- _____ Form 1A, 1B, or 1C, pp. 337-342
- _____ Standardized Test Practice,
pp. 353-354

Free-Response Tests

- _____ Form 2A, 2B, or 2C, pp. 343-348
- _____ Performance Assessment, p. 349
- _____ Cumulative Review, p. 355

- _____ ⇔ *MindJogger Videoquizzes*, Chapter 13
- _____ ⇔ *Test and Review Software*
- _____ ⇔ *CD-ROM Assessment Game*
- _____ ⇔ *State Test Preparation CD-ROM*
- _____ ⇔  *California Practice and Sample Test Workbook, Grade 7*
- _____ ⇔  *California Practice Transparencies, Grade 7*

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