

Chapter Nine: Exponents and Exponential Functions

Objectives: By the end of the chapter you will:

- Extend your knowledge about polynomial expressions and equations;
- Recognize and categorize polynomials by their degree and number of terms;
- Learn how to add, subtract, and multiply polynomials;
- Learn how to break polynomials down into factored form; and
- Learn how to apply what you have learned to multiply binomials to model various real-world situations.

9-1 Adding and Subtracting Polynomials pp456–461
Pre-lesson prep: Read Section 9-1; do Check Understanding 1 to 4.
New vocabulary:
HW: Practice 9-1, Problems #

9-2 Multiplying and Factoring pp461–466
Pre-lesson prep: Read Section 9-2; do Check Understanding 1 to 6.
New vocabulary: scientific notation, mantissa, base, power
HW: Practice 9-2, Problems #

QUIZ on 9-1 to 9-2

9-3 Multiplying Binomials pp467–472
Pre-lesson prep: Read Section 9-3; do Check Understanding 1 to 3.
New vocabulary: dimensional analysis
HW: Practice 9-3, Problems #

9-4 Multiplying Special Cases pp474–480
Pre-lesson prep: Read Section 9-4; do Check Understanding 1 to 5.
New vocabulary: powers of powers
HW: Practice 9-4, Problems #

QUIZ on 9-3 to 9-4

9-5 Factoring Trinomials of the Type x^2+bx+c pp481–485
Pre-lesson prep: Read Section 9-5; do Check Understanding 1 to 4.
New vocabulary: linear inequality; solutions of an inequality
HW: Practice 9-5, Problems #1, 2, 5, 9, 13, 17, 23.
Also, textbook Problem #45 on Page 375.

9-6 Factoring Trinomials of the Type ax^2+bx+c pp486–489
Pre-lesson prep: Read Section 9-6; do Check Understanding 1 to 5.
New vocabulary: system of linear inequalities;
solution of a system of linear inequalities
HW: Practice 9-6, Problems #1, 2, 5, 9, 13, 15, 21.
Also, textbook Problem 43 on Page 383.

QUIZ on 9-5 to 9-6

9-7	Factoring Special Cases Pre-lesson prep: Read Section 9-6; do Check Understanding 1 to 4. New vocabulary: system of linear inequalities; solution of a system of linear inequalities HW: Practice 9-7, Problems #1, 2, 5, 9, 13, 15, 21.	pp490-495
9-8	Factoring by Grouping Pre-lesson prep: Read Section 9-6; do Check Understanding 1 to 4. New vocabulary: system of linear inequalities; solution of a system of linear inequalities HW: Practice 9-8, Problems #1, 2, 5, 9, 13, 15, 21.	pp496-502
	Chapter 9 Review	pp503-505

CHAPTER 9 TEST