

## Math 8 Sections ABC and EFH

### Algebra Topic 9: Polynomial Factoring (Ch. 9, continued)

Goal 1: Factor polynomials completely (9-6, 9-7, 9-8)

Goal 2: Use patterns to factor perfect square polynomials (9-7)

Goal 3: Use patterns to factor differences of squares (9-7)

Goal 4: Keep remembering the previously memorized perfect square and difference of squares patterns:

Multiplication patterns:

$$(a + b)^2 = a^2 + 2ab + b^2 \Leftrightarrow a^2 + 2ab + b^2 = (a + b)^2$$

$$(a - b)^2 = a^2 - 2ab + b^2 \Leftrightarrow a^2 - 2ab + b^2 = (a - b)^2$$

$$(a + b)(a - b) = a^2 - b^2 \Leftrightarrow a^2 - b^2 = (a + b)(a - b)$$

Factoring patterns:

Problem Sets:

Lesson	Page	Green	Blue	Black
9-6	487	1 – 29 odd, 44, 47, 49, 52	6 – 30 m3*, 34 – 40 even, 44, 47, 49, 51, 52	12 – 30 m3*, 37 – 42 all, 44 – 47 all, 51, 52, 77 (use a table for 77)
9-7	493	5 – 35 odd, 38, 55 – 59 odd, 71	7 – 11 odd, 19 – 35 odd, 55, 59 – 67 odd, 70, 72	3 – 7 odd, 11, 21 – 35 odd, 55, 59 – 65 odd, 66, 69, 70, 72
9-8	499	6 – 16 even, 26, 36, 38, 51, 65 – 68 all	6 – 24 m3*, 26, 30 – 45 m3, 51, 52, 66, 70, 74	6 – 24 m3*, 26, 30 – 51 m3, 53, 69 – 71, 84

Topic Summary:

The test on this unit will also review polynomial addition, subtraction, and multiplication (9-1 through 9-4).

Chapter Test	506	3 – 10 all, 11 – 25 odd, 27 – 29 all, 31 – 40 all
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Additional resources:

- Chapter Review pp. 503 – 505 (all answers in back of book)
- Page 710 (see me for answers)
- Resources on the Team 8 math page: [www.brookwood.edu/eighth\\_grade/math](http://www.brookwood.edu/eighth_grade/math)
- Your textbook web site: [http://www.phschool.com/atschool/phmath/program\\_page.html](http://www.phschool.com/atschool/phmath/program_page.html)

\*m3 = multiples of 3