

Special Products and Factoring

Chapter 8

	Description and Homework
Factoring Expressions With Common Factors Section 8.2 Pg. 277-278	Review Common Factoring Factoring vs. Expanding P278 Classwork: 1, 2, 5, 6, 8, 10, 12, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 34a/b P278 Homework: 3, 4, 7, 9, 11, 13, 14, 16, 18, 20, 22, 24, 26, 28, 30, 34 c/d
Binomial Products Section 8.3 Pg. 279-280	Expanding - FOIL method P280 Classwork: 6, 8, 10, 11, 15, 19, 21, 24, 26, 31, 33, 37, 41, 44, 46, 47, 49, 51, 55a, 58 P280 Homework: 5, 7, 9, 12, 13, 16, 18, 20, 22, 23, 25, 28, 29, 32, 34, 35, 38, 40, 42, 43, 45, 48, 50, 52, 54, 55b
Factoring Trinomials Section 8.4 Pg. 281-283	What multiplies and add to give you....? Factoring Overview Sheet P283 Classwork: 5 (all), 7, 8, 9, 10, 21, 22, 23, 24, 29, 30, 33, 34, 38, 39, 40, 41, 43, 45, 47 P283 Homework: 6 (all), 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 25, 26, 27, 28, 31, 32, 35, 36, 37, 40, 42, 44, 46, 48, (49 bonus)
Special Product (Difference of Squares) Section 8.5 Pg. 284-285	P285 Classwork: 1, 3, 5, 8, 10, 12, 13, 18, 23, 32 P285 Homework: 2, 4, 6, 7, 9, 11, 14, 15, 16, 20, 24, 25, 34
Factoring the Difference of Squares Section 8.6 Pg. 286-287	P287 Classwork: 2, 4, 6, 10, 11, 15, 17, 19, 23, 27, 32, 33, 35, 39, 41, 43, 46 P287 Homework: 1, 3, 5, 12, 13, 18, 20, 24, 29, 34, 36, 37, 38, 40, 42, 44, 47, 48, 56, 58, (60 bonus)
Special Products Perfect Squares Section 8.7 Pg. 288-289	Follow the flow chart - can I factor more? Word problems for factoring and expanding P289 Classwork: 1, 4, 7, 27, 28, 29, 34, 37, 38, 39 P289 Homework: 3, 6, 7, 30, 31, 35, 36, 40, 41, 42 (43-48, 51 bonus)
Method of Decomposition	Trinomial Factoring with a twist Break the expression down - decompose it Back of assignment sheet Hand Outs
Products of Polynomials Section 8.8 Pg. 290-291	P291 Classwork: 1, 2, 7, 12, 15, 26, 30, 32, 34, 40a P291 Homework: 5, 6, 8, 14, 17, 22, 28, 36, 38, 40b, (40c bonus)
Review Chapter Check	Pg. 298-299; Pg. 300
Unit Test	Tentative Dates: Feb 27 & 28

DECOMPOSITION

Exercises 2 - 11

1. Find two integers with the following properties:

Product	Sum

- d) e) f)

Product	Sum

- a) b) c)

Omit

2. Factor:

- a) $2x^2 + 11x + 12$
 b) $2k^2 + 3k + 1$
 c) $2x^2 + 5x + 2$
 d) $3x^2 + 13x + 4$
 e) $3s^2 + 4s + 1$
 f) $3t^2 + 19t + 28$

3. Factor:

- a) $6x^2 + 11x + 3$
 b) $8x^2 + 10x + 3$
 c) $6x^2 + 17x + 12$
 d) $2x^2 + 13x + 15$
 e) $4x^2 + 19x + 21$
 f) $6x^2 + 25x + 14$

4. Factor:

- a) $2m^2 - 11m + 12$
 b) $2x^2 - 11x + 15$
 c) $3x^2 - 14x + 8$
 d) $3y^2 - 22y + 7$
 e) $6x^2 - 19x + 10$
 f) $4t^2 - 23t + 15$

5. Factor:

- a) $8m^2 - 14m + 3$
 b) $10x^2 - 29x + 10$
 c) $14x^2 - 13x + 3$
 d) $6m^2 - 17m + 12$
 e) $3a^2 - 16a + 16$
 f) $32x^2 - 20x + 3$

6. Factor:

- a) $3x^2 + 7x - 6$
 b) $5y^2 + 19y - 4$
 c) $6x^2 + 7x - 20$
 d) $6k^2 + 5k - 4$
 e) $6x^2 + 17x - 14$
 f) $15x^2 + 29x - 14$

7. Factor:

- a) $2m^2 - m - 21$
 b) $12x^2 - 7x - 10$
 c) $10x^2 - 19x - 15$
 d) $6x^2 - 11x - 35$
 e) $6x^2 - x - 12$
 f) $24s^2 - 13s - 2$

8. Factor:

- a) $9x^2y^2 - 48x^2y + 48x^2$
 b) $6m^2n - 26mn + 24n$
 c) $20x^2y^3 - 85xy^3 - 75y^3$
 d) $4x^3y + 21x^2y^2 - 18xy^3$
 e) $20m^4n^2 - 10m^3n^2 - 210m^2n^2$
 f) $-18x^2 + 21x + 9$

9. Find two integers with the following properties:

Product	Sum

- a) b) c)

Product	Sum

- d) e) f)

Omit

10. Factor:

- a) $9k^2 - 24k + 16$
 b) $15t^2 - st - 2s^2$
 c) $12x^2 - 5xy - 2y^2$
 d) $4x^2 + 21xy - 18y^2$
 e) $20m^2 - 7mn - 3n^2$
 f) $21x^2 + 25xy - 4y^2$

11. Factor:

- a) $21x^2 + 17x - 30$
 b) $72x^2 + 11x - 6$
 c) $15x^2 - 28x - 32$
 d) $48x^2 - 22xy - 15y^2$
 e) $2m^2 + 9m - 35$
 f) $40y^2 + yz - 6z^2$
 g) $3 - 26xy + 35x^2y^2$
 h) $6 - 17mn - 45m^2n^2$

12. Factor:

- a) $18x^2y + 51xy - 135y$
 b) $20x^3y^2 - 94x^2y^2 + 84xy^2$
 c) $36m^3n - 21m^2n^2 - 36mn^3$
 d) $30a^2b^2c^2d^2 - 8a^2b^2cd - 70a^2b^2$
 e) $-30x + 62x^2 + 48x^3$
 f) $420x^2 + 230x^2y - 100x^2y^2$