

Lesson #10 B: Factoring Complex Polynomials Review
(Reference: Lesson #23 & 61 in book)

Problem

1. Please fully factor each of the following Polynomials using the techniques learned in the previous factoring lessons.

1. $7x^2 + 19x + 10$

2. $8x^2 - 4x - 4$

3. $10x^2 + 29xy + 12y^2$

4. $4x^6 - 32x^5y + 60x^4y^2$

5. $9x^3y^2 + 12x^2y^2 - 45xy^2$

6. $18x^4y + 3x^3y^2 - 6x^2y^3$

7. $16x^2 + 56x + 49$

8. $2x^5 + 28x^4 + 98x^3$

9. $72x^3y^2 - 96x^2y^3 + 32xy^4$

10. $64x^4y^4 - 48x^3y^5 + 9x^2y^6$

11. $72x^4y - 32x^2y$

12. $27x^3y^2 - 75xy^4$

13. $27x^3 - 64y^3$

14. $64x^3 + 125y^3$

15. $54x^6 + 128x^3$

16. $27x^8y^4 - 64x^5y^7$

17. $9y^2z^5 + 18yz^6 + 8x^7y + 16zx^7$

18. $6x^3y^4 - 8x^2y^5 - 9xz^3 + 12yz^3$

19. $50x^4y^4 - 30x^3y^4 - 500x^3y^3 + 300x^2y^3$

20. $3x^3y^3z^3 - 4x^2y^3z^3 + 20xy^2z^3 - 15x^2y^2z^3$

21. $2x^2y^3 - 8xy^4 - 154y^5$

22. $18x^4y^6 + 63x^3y^6 + 27x^2y^6$

23. $12x^8y^4 + 6x^7y^5 - 36x^6y^6$

24. $28x^5y^4 - 58x^4y^5 - 30x^3y^6$