II. Practice

Simplify

1. $3a + 4a$

2. $-12b + 6b - 4b$

3. $5a^2 - 6a + 7a^2 + 3a - 2 + 8a + 7$

4. $9x^3 - 7x^2 + 4x^2 - x + 4x^3 - 3x^2$

5. $2h^2 - 7h + 2h^2 - h + 6 + 4h - 9h$

6. $4ab - 6ab + 3a^2b + 4ab^2 + 5a^2b$

7. $7xy - 4x^2y^2 + 2xy^2 + 6xy + 3x^2y^2 - 7x^2y^2$

8. $4h^4j - 14h^3j^2 + 16h^2j^2 + 13h^4j + 15h^3j^2 - 17h^4j$

9. $8x^3y^2 - 7x^2y + 8x + 4 - 6x^3y^2 + 2x^2y + 4x^2y - 3x + 5$

10. $3r^3t + 5rt^2 - 6rt + 5 + 4rt - 3 + 6rt^2$

11. $8x^4 - 7x^3 + 4x^4 + 2y^3 - 7xy + 3y^3 + 12xy$

12. $3a^3b + 4a^2b^2 - 7a^3b + 2ab - 5a^2b^2 + 10a^3b$

13. $5y^5 + 4y^4 + 3y^3 - 6y^2 + 8 - 7y^3 + 11 - 6y^3$

14. $10c^2d^2 + 6cd^3 - 3c^2d + 5c^2d^2 - 4cd^3 + 3c^2d^2$

15. $4x^3 + 3x^2y + 2xy^2 - 6y^3 + 5x^3 - 25y^3 + 3xy^2$

16. $(3x^2 + 2xy + 4y^2) + (6x^2 - 5xy + 3y^2) + (9x^2 - 25y^2)$

17. $(4a^3 + 7a^2b + 6b^3) + (a^3 + 2a^2b + 4b^3)$

18. $(2x^2 - 3x + 6) + (5x^2 - 9x + 4) + (8x^2 + 12x)$

19. $(3x^2 - 4x + 7) + (3x - 3x^2) + (x - 7)$

20. $(12ab^2 - 7a^2b) + (3ab + 4a^2b + 6ab^2)$

IV. Challenge Problems