

Algebra 1 3207
Chapters 9A and 9B Review

Name: _____

9.1 – Simplify. Write your answer in standard form.

1. $(5x^3 + 3x^2 - 7x + 10) - (3x^3 - x^2 + 4x - 1)$ 2. $(4m^3 + 7m - 4) + (2m^3 - 6m + 8)$

3. $(-7c^3 + c^2 - 8c - 11) - (3c^3 + 2c^2 + c - 4)$ 4. $(s^4 - s^3 - 5s^2 + 3s) + (5s^4 + s^3 - 7s^2 - s)$

9.2 – Simplify each product. Write your answer in standard form.

5. $4b(b^2 + 3)$ 6. $8m(4m - 5)$ 7. $5r^2(r^2 + 4r - 2)$

Find the GCF of the terms of each polynomial. Then factor.

8. $t^6 + t^4 - t^5 + t^2$ 9. $16c^2 - 4c^3 + 12c^5$ 10. $6n^2 - 3n^3 + 2n^4$

9.3 & 9.4 – Simplify each product. Write your answer in standard form.

11. $(5c + 3)(-c + 2)$ 12. $(w + 2)(w^2 + 2w - 1)$ 13. $(b + 3)(b + 7)$

$$14. (5t + 4)^2$$

$$15. (a + 4)(a - 4)$$

$$16. (w^2 + 2)(w^2 - 2)$$

9.5, 9.6, & 9.7 – Factor each expression:

$$17. x^2 - 4x + 3$$

$$18. v^2 + v - 2$$

$$19. m^2 + 9m - 22$$

$$20. 2n^2 + n - 3$$

$$21. m^2 - 25$$

$$22. 9y^2 + 6y + 1$$

$$23. x^2 + 6x + 9$$

$$24. 4t^2 + t - 3$$

$$25. 4m^2 - 121$$

$$26. 4g^2 + 4g + 1$$

$$27. 9t^2 + 12t + 4$$

$$28. 36s^2 - 1$$