

Name: _____

Ch 9.1- 9.4 Review Worksheet

Write each polynomial in standard form.

1. $5x + 4 - x^2$

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

3. $5 + 3x$

Simplify. Write each answer in standard form.

4. $(8y^3 - y + 7) - (6y^3 + 3y - 3)$

5. $(2a^3 + 3a^2 + 7a) + (a^3 + a^2 - 2a)$

6. $(3c^2 - 8c + 4) - (7 + c^2 - 8c)$

7. $(x^2 - 6) + (5x^2 + x - 3)$

Find the GCF of the terms of each polynomial.

8. $8x + 10$

9. $6a^3 - 12a^2 + 14a$

Factor each polynomial.

10. $4c^3 - 8c^2 + 8$

11. $8d^3 + 4d^2 + 12d$

12. $18c^4 - 9c^2 + 7c$

13. $x^3 - 5x^2$

Simplify each product.

14. $(x + 4)(2x + 5)$

15. $(x + 2)(x - 7)$

16. $(3x + 2)(3x + 2)$

17. $(7x + 4)(2x - 4)$

18. $(x + y)(x - y)$

19. $(x - y)^2$

20. $(3x - 5)^2$

21. $(x + 8)(x - 8)$

22. $(2x + 3)^2$