

Name: _____ Date: _____ Period: _____

Chapter 8 Test Review

Simplify each polynomial by distributing and combining all like terms. Then write in standard form and name it by degree and number of terms.

1. $5x(2x^2 - 4x - 4) - (7x - 4)$

2. $4(2x^2 - 4x + 3) + 5(-8x + 1)$

3. $-(6x^2 - 4x - 2) - (7x - 1) - 3$

Factor each polynomial by factoring out the GCF.

4. $25x^5 - 10x^2 + 15x^3 - 5x$

5. $16a^3b - 32ab^2 + 8a^2b$

6. $12a^4b^3 + 24ab^3 - 72a^4b^2$

7. $12x^7y^3z^4 + 3x^6y^2z^3 - 18x^9y^5z^3$

Multiply the polynomial.

8. $(3x^2 - 4x + 1)(4x - 3)$

9. $(3x^2 + x + 7)(4x^2 - 2x - 6)$

Factor each polynomial. Always check for GCF first!

10. $9x^2 - 88x - 20$

11. $20x^2 - 85x - 75$

12. $10x^2 - 3x + 1$

13. $54x^2 + 156x + 96$

14. $9x^2 - 16$

15. $16x^2 + 16x + 4$

16. $24x^2 + 150x + 150$

17. $45x^2 - 125$

18. $4n^3 + 12n^2 - n - 3$

19. $12n^3 - 27n^2 - 40n + 90$