Name _____ Class _____ Date _____

8-2 Practice

Form G

Multiplying and Factoring

Simplify each product by distributing.

1. $2x(x + 8)$

2. $(n + 7)5n$

3. $6h^2(7 + h)$

7. $4t(t^2 - 6t + 2)$

8. $-m(4m^3 - 8m^2 + m)$

9. $7j(-2j^2 - 8j - 3)$

Find the GCF of the terms of each polynomial.

10. $15x + 27$

11. $6w^3 - 14w$

12. $63s + 45$

13. $b^3 + 5b^2 - 20b$

14. $9m^3 + 30m - 24$

15. $4p^3 + 12p^2 - 18p$

Factor each polynomial.

16. $12x - 9$

17. $18s^2 + 54$

18. $108t^2 - 60t$

19. $12n^3 - 36n^2 + 18$

20. $40t^3 + 25t^2 + 80t$

21. $42x^4 - 56x^3 + 28x^2$

22. $36p^4 + 14p^3 + 35p^2$

23. $9a^5 + 27a^4 + 63a^2$

24. $4b^4 + 20b^3 + 12b$

Simplify. Write in standard form.

25. $p(p + 4) - 2p(p - 8)$

26. $t(t + 4) + t(4t^2 - 2)$

27. $6c(2c^2 - 4) - c(8c)$

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Simplify each product.

9. $7x(x + 4)$

10. $(b + 11)2b$

11. $3m^2(10 + m)$

13. $4x(2x^3 - 7x^2 + x)$

14. $-8y^3(7y^2 - 4y - 1)$

Simplify. Write in standard form.

29. $-2x(5x^2 - 4x + 13)$

31. $10a(-6a^2 + 2a - 7)$

44. Simplify the product $4x(5x^2 + 3x + 7)$. What is the coefficient of the x^2-term?