NAME _____ DATE _____

Module 11 Simplifying Algebraic Expressions with Polynomials
Lesson 5 Multiplying Polynomials

additional practice

Find each product. Write answers in simplest form.

1. $(c - 5)(c + 5)$

2. $(m + 2)^2$

3. $(a - 5)^2$

4. $(4y - 2)(4y + 2)$

5. $(7x - y)^2$

6. $(6r - 5s)(6r + 5s)$

7. $(3z + 7)^2$

8. $(3m - 8n)^2$

9. $(s - t)(s + t)$

10. $(13t - 5u)^2$

11. $(6u - 7v)^2$

12. $(4xy - 1)^2$

13. $(4p - 9q)(4p + 9q)$

14. $(7c - 15d)^2$

15. $(c + 2)(c^2 - 2c + 4)$

16. $(b + 3)(b^2 + 3b - 2)$

17. $(2b - 1)(4b^2 - b + 2)$

18. $(5d - 3)(2d^2 + 3d + 6)$

19. $(m + 3)(m^3 + 3m - 6)$

20. $(2j - 1)(j^2 + 3j + 4)$

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

22. $(2z^2 - 5z + 3)(3z^2 + 4z - 6)$

23. $(4g^2 - 5g + 3)(g^2 + g - 1)$

24. $(5s^2 - 2s + 4)(6s^2 - 5s + 7)$

25.
$$\begin{array}{r} a^2 + 2a + 5 \\ \times \quad a - 1 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 2f^2 - 3f + 1 \\ \times \quad 4f + 6 \\ \hline \end{array}$$

27.
$$\begin{array}{r} x^2 - 3x + 2 \\ \times 2x^2 + x - 4 \\ \hline \end{array}$$

28.
$$\begin{array}{r} 4y^2 - 5y + 6 \\ \times 2y^2 + 3y - 4 \\ \hline \end{array}$$