NAME _____ DATE _____ PERIOD _____

Practice

Multiplying Polynomials

Find each product.

1. $(q + 6)(q + 5)$

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

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

4. $(n - 4)(n - 6)$

5. $(a - 5)(a - 8)$

6. $(w - 6)(w - 9)$

7. $(4c + 6)(c - 4)$

8. $(2x - 9)(2x + 4)$

9. $(4d - 5)(2d - 3)$

10. $(4b + 3)(3b - 4)$

11. $(4m + 2)(4m - 3)$

12. $(5c - 5)(7c + 9)$

13. $(6a - 3)(7a - 4)$

14. $(6h - 3)(4h - 2)$

15. $(2x - 2)(5x - 4)$

16. $(3a - b)(2a - b)$

17. $(4g + 3h)(2g + 3h)$

18. $(4x + y)(4x + y)$

19. $(m + 5)(m^2 + 4m - 8)$

20. $(t + 3)(t^2 + 4t + 7)$

21. $(2h + 3)(2h^2 + 3h + 4)$

22. $(3d + 3)(2d^2 + 5d - 2)$

23. $(3q + 2)(9q^2 - 12q + 4)$

24. $(3r + 2)(9r^2 + 6r + 4)$

25. $(3c^2 + 2c - 1)(2c^2 + c + 9)$

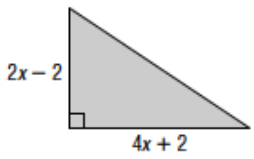
26. $(2\ell^2 + \ell + 3)(4\ell^2 + 2\ell - 2)$

27. $(2x^2 - 2x - 3)(2x^2 - 4x + 3)$

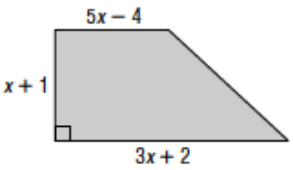
28. $(3y^2 + 2y + 2)(3y^2 - 4y - 5)$

GEOMETRY Write an expression to represent the area of each figure.

29.



30.



31. NUMBER THEORY Let x be an even integer. What is the product of the next two consecutive even integers?

32. GEOMETRY The volume of a rectangular pyramid is one third the product of the area of its base and its height. Find an expression for the volume of a rectangular pyramid whose base has an area of $3x^2 + 12x + 9$ square feet and whose height is $x + 3$ feet.