

8-8 Skills Practice

Special Products

Find each product.

1. $(n + 3)^2$

3. $(y - 7)^2$

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

7. $(p - 4)^2$

9. $(\ell + 2)(\ell + 2)$

11. $(3g + 2)(3g - 2)$

13. $(6 + u)^2$

15. $(3q + 1)(3q - 1)$

17. $(2k - 2)^2$

19. $(3p - 4)(3p + 4)$

21. $(x - 4y)^2$

23. $(3y - 3g)(3y + 3g)$

25. $(2k + m^2)^2$

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

4. $(\ell - 3)(\ell - 3)$

6. $(a - 5)(a + 5)$

8. $(z + 3)(z - 3)$

10. $(r - 1)(r - 1)$

12. $(2m - 3)(2m + 3)$

14. $(r + s)^2$

16. $(c - e)^2$

18. $(w + 3h)^2$

20. $(t + 2u)^2$

22. $(3b + 7)(3b - 7)$

24. $(s^2 + r^2)^2$

26. $(3u^2 - n)^2$

*{ALL WORK ON LOOSELEAF

**{EXCEPT, IF YOU RECOGNIZE
A SPECIAL PATTERN, YOU
CAN USE MENTAL MATH
AND WRITE THE ANSWER
ON THIS SIDE.

BONUS

27. **GEOMETRY** The length of a rectangle is the sum of two whole numbers. The width of the rectangle is the difference of the same two whole numbers. Using these facts, write a verbal expression for the area of the rectangle.

9-1**Skills Practice*****Factors and Greatest Common Factors***

Find the factors of each number. Then classify each number as *prime* or *composite*.

1. 10

2. 31

3. 16

4. 52

5. 38

6. 105

Find the prime factorization of each integer.

7. -16

8. 20

9. 24

10. 36

11. 112

12. -72

Factor each monomial completely.

13. $10a^4$

14. $-27x^3y^2$

15. $28pq^2$

16. $44m^2ns^3$

Find the GCF of each set of monomials.

17. 12, 18

18. 20, 27

19. 30, 48

20. 24, 81

21. 20, 36, 64

22. 42, 60, 78

23. $16c$, $21b^2d$

24. $18a$, $48a^4$

25. $32xyz$, $48xy^4$

26. $12m^3n^2$, $44mn^3$