

Side 1**Find the value of each expression.**

18. 4^5

19. 2^6

20. 3^6

21. 5^3

22. 10^4

23. 10^7

24. 100^3

25. 6^4

26. 8^3

27. 3^7

28. 10^8

29. 9^4

30. 2^8

31. 2^4

32. 2^5

33. 2^2

Simplify each product. Leave the product in exponent form.

34. $10^3 \cdot 10^4$

35. $10^3 \cdot 10^5$

36. $2^3 \cdot 2^4$

37. $3^4 \cdot 3^2$

38. $10^6 \cdot 10^2$

39. $10^4 \cdot 10^8$

40. $4^3 \cdot 4^5$

41. $6^2 \cdot 6^4$

42. Use your answers for Exercises 32 and 33 to evaluate $2^5 \cdot 2^2$.**43.** Express the result of Exercise 42 as a single power of 2.**Simplify each product.**

44. $(6x^2)(4x^2y^3)$

45. $(3x^3z^2)(-6y^5)$

46. $(5p^3)(-m^8p^2)$

47. $(-7m^5n^4)(8n^3)$

48. $(10g^3j^8v^6)(11gj^8)$

49. $(-13b^7)(2b^2f^4)$

50. $(4f^9h^3)(-5f^6)(-3h^2)$

51. $(3x^ay^bz^c)(-y^fz^g)$

LESSON 8.1

Find the value of each expression.

1. 4^3

2. 5^3

3. 8^4

4. 10^5

5. 7^2

6. 6^6

7. 9^4

8. 11^3

9. 30^4

10. 45^2

11. 100^2

12. 1^6

13. 2^9

14. 4^5

15. 6^3

16. 10^3

Simplify each product.

17. $10^2 \cdot 10^3$

18. $20^2 \cdot 20^2$

19. $3^3 \cdot 3^4$

20. $4^4 \cdot 4^2$

21. $5^3 \cdot 5^4$

22. $6^2 \cdot 6^3$

23. $9^2 \cdot 9^2$

24. $12^2 \cdot 12^3$

25. $7^2 \cdot 7$

26. $(5a^2)(7ab^2)$

27. $(4d^3e^5)(8d^4e^6)$

28. $(-12s^6t)(5st^2)$

29. $(8q^3p^9)(-2q^5p^8)$

30. $(9a^3b^4)(5a^2b^2c^2)$

31. $(4w^4x^8y)(-4w^6xy^{10})$

32. $(6h^4g^9)(-12h^6g^8)$

33. $(8c^2d^5)(4c^2d^3e^4)$

34. $(-j^3k^7l^6)(-j^6k^2l^{11})$