

Pg 429 #1,2,9,10,14-28 even, 39-41,58-63

Do you know **HOW?**

1. What is $8^4 \cdot 8^8$ written using each base only once?

2. What is the simplified form of $2n^3 \cdot 3n^{-2}$?

Rewrite each expression using each base only once.

9. $(-6)^{12} \cdot (-6)^5 \cdot (-6)^2$

10. $9^6 \cdot 9^{-4} \cdot 9^{-2}$

Simplify each expression.

14. m^3m^4

18. $3x^2 \cdot x^2$

16. $4t^{-5} \cdot 2t^{-3}$

20. $b^{-2} \cdot b^4 \cdot b$

24. $(5x^5)(3y^6)(3x^2)$

22. $(15a^3)(-3a)$

26. $x^6 \cdot y^2 \cdot x^4$

28. $-m^2 \cdot 4r^3 \cdot 12r^{-4} \cdot 5m$

Complete each equation.

37. $5^2 \cdot 5^{\square} = 5^{11}$

38. $5^7 \cdot 5^{\square} = 5^3$

39. $2^{\square} \cdot 2^4 = 2^1$

40. $c^{-5} \cdot c^{\square} = c^6$

41. $m^{\square} \cdot m^{-4} = m^{-9}$

Simplify each expression.

58. $\frac{1}{x^3 \cdot x^{-7}}$

59. $\frac{1}{a^4 \cdot a^{-3}}$

60. $\frac{4}{c \cdot c^{-5}}$

61. $2a^3(3a + 1)$

62. $8m^3(m^4 + 2)$

63. $-4x^3(3x^3 - 10x)$