

LESSON
15-3

Scientific Notation with Negative Powers of 10

Practice and Problem Solving: A/B

Write each number as a negative power of ten.

1. $\frac{1}{10^2} =$ _____

2. $\frac{1}{10^4} =$ _____

3. $\frac{1}{10^5} =$ _____

4. $\frac{1}{10^7} =$ _____

5. $\frac{1}{10^6} =$ _____

6. $\frac{1}{10^3} =$ _____

7. $\frac{1}{10^9} =$ _____

8. $\frac{1}{10^1} =$ _____

Write each power of ten in standard notation.

9. $10^{-3} =$ _____

10. $10^{-5} =$ _____

11. $10^{-1} =$ _____

12. $10^{-6} =$ _____

13. $10^{-2} =$ _____

14. $10^{-9} =$ _____

15. $10^{-4} =$ _____

16. $10^{-7} =$ _____

Write each number in scientific notation.

17. 0.025

18. 0.3

19. 0.000473

20. 0.0024

21. 0.000014565

22. 0.70010

23. 0.0190500

24. 0.00330000

Write each number in standard notation.

25. 6×10^{-3}

26. 4.5×10^{-2}

27. 7×10^{-7}

28. 1.05×10^{-6}

29. 3.052×10^{-8}

30. 5×10^{-1}

31. 9.87×10^{-4}

32. 5.43×10^{-5}

Solve.

33. An *E. coli* bacterium has a diameter of about 5×10^{-7} meter. Write this measurement as a decimal in standard notation.

34. A human hair has an average diameter of about 0.000017 meter. Write this measurement in scientific notation.
