

7-4 Skills Practice***Scientific Notation*****Express each number in scientific notation.**

1. 3,400,000,000

2. 0.000000312

3. 2,091,000

4. 980,200,000,000,000

5. 0.000000000008

6. 0.00142

Express each number in standard form.

7. 2.1×10^5

8. 8.023×10^{-7}

9. 3.63×10^{-6}

10. 7.15×10^8

11. 1.86×10^{-4}

12. 4.9×10^5

Evaluate each product. Express the results in both scientific notation and standard form.

13. $(6.1 \times 10^5)(2 \times 10^5)$

14. $(4.4 \times 10^6)(1.6 \times 10^{-9})$

15. $(8.8 \times 10^8)(3.5 \times 10^{-13})$

16. $(1.35 \times 10^8)(7.2 \times 10^{-4})$

17. $(2.2 \times 10^{-3})^2$

18. $(3.4 \times 10^2)^2$

Evaluate each quotient. Express the results in both scientific notation and standard form.

19. $\frac{(9.2 \times 10^{-8})}{(2 \times 10^{-6})}$

20. $\frac{(4.8 \times 10^4)}{(3 \times 10^{-5})}$

21. $\frac{(1.161 \times 10^{-9})}{(4.3 \times 10^{-6})}$

22. $\frac{(4.625 \times 10^{10})}{(1.25 \times 10^4)}$

23. $\frac{(2.376 \times 10^{-4})}{(7.2 \times 10^{-8})}$

24. $\frac{(8.74 \times 10^{-3})}{(1.9 \times 10^5)}$