

Lesson 5 Homework Practice

Compute with Scientific Notation

Evaluate each expression. Express the result in scientific notation.

1. $(50,000)(4.2 \times 10^2)$

2. $(9.3 \times 10^5)(1.26 \times 10^{-2})$

3. $(2.9 \times 10^4)(1.5 \times 10^{-6})$

4. $(6.7 \times 10^{-1})(40,000)$

5. $(5.5 \times 10^3)(7 \times 10^3)$

6. $(4.3 \times 10^6)(2.1 \times 10^{-2})$

7. $\frac{7.6 \times 10^2}{3.8}$

8. $\frac{2.38 \times 10^{-4}}{1.7 \times 10^3}$

9. $\frac{1.44 \times 10^4}{6000}$

10. $\frac{6.03 \times 10^{14}}{9 \times 10^{-8}}$

11. $\frac{8.05 \times 10^3}{2.3 \times 10^2}$

12. $\frac{4.8 \times 10^{-1}}{5 \times 10^7}$

13. $(1.6 \times 10^2) + (2.29 \times 10^3)$

14. $(9.38 \times 10^1) + (5 \times 10^3)$

15. $(3.5 \times 10^7) - (1.7 \times 10^6)$

16. $(8.88 \times 10^{-1}) - (1.45 \times 10^{-2})$

17. $(63,000) + (3.1 \times 10^3)$

18. $(7.14 \times 10^4) + (12,000)$

19. $(6.35 \times 10^8) - (7.9 \times 10^8)$

20. $(4 \times 10^7) - (2 \times 10^5)$

21. $(8100) + (3.0 \times 10^3)$

22. $(1.06 \times 10^4) + (1.3 \times 10^4)$

23. $(5.4 \times 10^6) - (147,000)$

24. $(8.19 \times 10^2) - (7.15 \times 10^1)$

25. The distance from Earth to the Sun is 9.3×10^7 miles, and the distance from Earth to Mars is 4.6×10^7 miles. How many more miles is it from Earth to the Sun than Earth to Mars?

26. The area of the United States (including water) is approximately 3.8×10^6 sq. miles. The area of Alaska (including water) is approximately 6.6×10^5 sq. miles. About how many times the number of square miles of Alaska is the United States?