Advanced Math 7 Chapter 4 Quiz 2 Review

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. \(\frac{7.6 \times 10^2}{3.8}\)
6. \(\frac{2.38 \times 10^{-4}}{1.7 \times 10^3}\)
7. \(\frac{(6.03 \times 10^{14})(1.3 \times 10^{-3})}{9 \times 10^{12}}\)
8. \(\frac{(8.05 \times 10^3)(2.5 \times 10^{-8})}{2.3 \times 10^5}\)
9. \((1.6 \times 10^2) + (2.29 \times 10^3)\)
10. \((3.5 \times 10^7) - (1.7 \times 10^6)\)

11. An asteroid is about \(6 \times 10^5\) meters high. A golf ball is about .03 meters high. About how many times greater is the diameter of the asteroid that that of the golf ball.

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

13. The area of a square is 340 square inches. Find the measure of the side to the nearest integer.

14. A square tarpaulin covering a softball field has an area of \(441 \text{m}^2\). What is the length of one side of the tarpaulin.

Find the root of the following problems.
14. \(\sqrt[3]{-1331}\)
15. \(\pm \sqrt{289}\)
16. \(-\sqrt{121}\)

Estimate.
17. \(\sqrt[3]{-611}\)
18. \(\sqrt{230}\)
19. \(\sqrt{1012}\)

Determine if the number is Rational or Irrational.
20. \(\sqrt{225}\)
21. \(\pi\)
22. \(\sqrt{150}\)
28. \(0.12121212\)
23. \(\frac{1}{5}\)

(Math Accelerated • Chapter 4 Powers and Roots)