

LESSON
2-4**Operations with Scientific Notation****Practice and Problem Solving: A/B****Add or subtract. Write your answer in scientific notation.**

1. $6.4 \times 10^3 + 1.4 \times 10^4 + 7.5 \times 10^3$

2. $4.2 \times 10^6 - 1.2 \times 10^5 - 2.5 \times 10^5$

3. $3.3 \times 10^9 + 2.6 \times 10^9 + 7.7 \times 10^8$

4. $8.0 \times 10^4 - 3.4 \times 10^4 - 1.2 \times 10^3$

Multiply or divide. Write your answer in scientific notation.

5. $(3.2 \times 10^8)(1.3 \times 10^9) =$ _____

6. $\frac{8.8 \times 10^7}{4.4 \times 10^4} =$ _____

7. $(1.5 \times 10^6)(5.9 \times 10^4) =$ _____

8. $\frac{1.44 \times 10^{10}}{2.4 \times 10^2} =$ _____

Write each number using calculator notation.

9. $4.1 \times 10^4 =$ _____

10. $9.4 \times 10^{-6} =$ _____

Write each number using scientific notation.

11. $5.2E-6 =$ _____

12. $8.3E+2 =$ _____

Use the situation below to complete Exercises 13–16. Express each answer in scientific notation.

A runner tries to keep a consistent stride length in a marathon. But, the length will change during the race. A runner has a stride length of 5 feet for the first half of the race and a stride length of 4.5 feet for the second half.

13. A marathon is 26 miles 385 yards long. That is about 1.4×10^5 feet. How many feet long is half a marathon?

14. How many strides would it take to finish the first half of the marathon?

15. How many strides would it take to finish the second half of the marathon?

16. How many strides would it take the runner to complete marathon?
Express your answer in both scientific notation and standard notation.

Hint: Write 5 ft as 5.0×10^0 and 4.5 feet as 4.5×10^0 .

