Grade 8 Scientific Notation Worksheet

Name: _____ Date: _____ Score: _____

Convert each number to or from scientific notation.

1. 4 × 10^3 ? 9 × 10^4 (>, <, or =)

   _____

2. Simplify: (9 × 10^2) × 10^1. What is the new exponent? (9 × 10^_)

   _____

3. Write 2,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

   _____

4. Write 7,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

   _____

5. Write 900,000 in scientific notation. What is the coefficient? (_ × 10^5)

   _____

6. Write 9,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

   _____

7. Simplify: (4 × 10^3) × 10^1. What is the new exponent? (4 × 10^_)

   _____

8. Write 500,000 in scientific notation. What is the exponent? (5 × 10^_)

   _____

9. 5 × 10^4 ? 3 × 10^6 (>, <, or =)

   _____

10. Write 60,000 in scientific notation. What is the exponent? (6 × 10^_)

    _____

11. 6 × 10^4 ? 9 × 10^3 (>, <, or =)

    _____

12. 7 × 10^6 ? 1 × 10^6 (>, <, or =)

    _____

13. Write 80,000 in scientific notation. What is the coefficient? (_ × 10^4)

    _____

14. What is 7 × 10^4 in standard form?

    _____

15. Simplify: (6 × 10^2) × 10^3. What is the new exponent? (6 × 10^_)

    _____

16. Simplify: (3 × 10^2) × 10^1. What is the new exponent? (3 × 10^_)

    _____

17. Write 40,000,000 in scientific notation. What is the coefficient? (_ × 10^7)

    _____

18. Write 50,000,000 in scientific notation. What is the exponent? (5 × 10^_)

    _____

19. What is 1 × 10^2 in standard form?

    _____

20. Write 4,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

21. Write 800,000 in scientific notation. What is the exponent? (8 × 10^_)

    _____

_____

22. 2 × 10^5 ? 3 × 10^6 (>, <, or =)

    _____

23. What is 8 × 10^2 in standard form?

    _____

24. Write 9,000 in scientific notation. What is the exponent? (9 × 10^_)

    _____

25. Write 3,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

    _____

26. 1 × 10^3 ? 8 × 10^4 (>, <, or =)

    _____

27. Simplify: (4 × 10^2) × 10^3. What is the new exponent? (4 × 10^_)

    _____

28. Write 1,000,000 in scientific notation. What is the exponent? (1 × 10^_)

    _____

29. Write 900 in scientific notation. What is the coefficient? (_ × 10^2)

    _____

30. Write 60,000,000 in scientific notation. What is the exponent? (6 × 10^_)

    _____

ANSWER KEY

Grade 8 Scientific Notation Worksheet

1. 4 × 10^3 ? 9 × 10^4 (>, <, or =)
   <
2. Simplify: (9 × 10^2) × 10^1. What is the new exponent? (9 × 10^_)
   3
3. Write 2,000,000 in scientific notation. What is the coefficient? (_ × 10^6)
   2
4. Write 7,000,000 in scientific notation. What is the coefficient? (_ × 10^6)
   7
5. Write 900,000 in scientific notation. What is the coefficient? (_ × 10^5)
   9
6. Write 9,000,000 in scientific notation. What is the coefficient? (_ × 10^6)
   9
7. Simplify: (4 × 10^3) × 10^1. What is the new exponent? (4 × 10^_)
   4
8. Write 500,000 in scientific notation. What is the exponent? (5 × 10^_)
   5
9. 5 × 10^4 ? 3 × 10^6 (>, <, or =)
   <
10. Write 60,000 in scientific notation. What is the exponent? (6 × 10^_)
    4
11. 6 × 10^4 ? 9 × 10^3 (>, <, or =)
    >
12. 7 × 10^6 ? 1 × 10^6 (>, <, or =)
    >
13. Write 80,000 in scientific notation. What is the coefficient? (_ × 10^4)
    8
14. What is 7 × 10^4 in standard form?
    70000
15. Simplify: (6 × 10^2) × 10^3. What is the new exponent? (6 × 10^_)
    5
16. Simplify: (3 × 10^2) × 10^1. What is the new exponent? (3 × 10^_)
    3
17. Write 40,000,000 in scientific notation. What is the coefficient? (_ × 10^7)
    4
18. Write 50,000,000 in scientific notation. What is the exponent? (5 × 10^_)
    7

19. What is 1 × 10^2 in standard form?

100

20. Write 4,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

4

21. Write 800,000 in scientific notation. What is the exponent? (8 × 10^_)

5

22. 2 × 10^5 ? 3 × 10^6 (>, <, or =)

<

23. What is 8 × 10^2 in standard form?

800

24. Write 9,000 in scientific notation. What is the exponent? (9 × 10^_)

3

25. Write 3,000,000 in scientific notation. What is the coefficient? (_ × 10^6)

3

26. 1 × 10^3 ? 8 × 10^4 (>, <, or =)

<

27. Simplify: (4 × 10^2) × 10^3. What is the new exponent? (4 × 10^_)

5

28. Write 1,000,000 in scientific notation. What is the exponent? (1 × 10^_)

6

29. Write 900 in scientific notation. What is the coefficient? (_ × 10^2)

9

30. Write 60,000,000 in scientific notation. What is the exponent? (6 × 10^_)

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