

Scientific Notation Worksheet

Name: _____ Class: _____ Date: _____ Marks : / 75

A. Write in Scientific Notation

Convert each number to scientific notation.

1. 1,5,000 = _____

2. 8,000 = _____

3. 12,000 = _____

4. 45,000 = _____

5. 72,000 = _____

6. 300,000 = _____

7. 650,000 = _____

8. 1,200,000 = _____

9. 4,500,000 = _____

10. 9,800,000 = _____

11. 56,000,000 = _____

12. 125,000,000 = _____

13. 700,000,000 = _____

14. 3,400,000,000 = _____

15. 8,900,000,000 = _____

B. Write Small Numbers in Scientific Notation

16. 0.5 = _____

17. 0.08 = _____

18. 0.006 = _____

19. 0.0045 = _____

20. 0.00072 = _____

21. 0.00009 = _____

22. 0.000006 = _____

23. 0.0000035 = _____

24. 0.00000081 = _____

25. 0.000000045 = _____

C. Convert Scientific Notation to Standard Form

26. 3×10^2 = _____

27. 7×10^3 = _____

28. 4.5×10^4 = _____

29. 6.2×10^5 = _____

30. 8×10^6 = _____

31. 2.5×10^7 = _____

32. 9.1×10^8 = _____

33. 1.2×10^9 = _____

34. 5×10^{-2} = _____

35. 7×10^{-3} = _____

36. 4.8×10^{-4} = _____

38. 6.5×10^{-5} = _____

39. 3×10^{-6} = _____

40. 8.2×10^{-7} = _____

41. 9.4×10^{-8} = _____

D. Fill in the Missing Exponent

41. $5,000 = 5 \times 10$ ____ 42. $70,000 = 7 \times 10$ ____ 43. $900,000 = 9 \times 10$ ____
44. $3,000,000 = 3 \times 10$ ____ 45. $0.05 = 5 \times 10$ ____ 46. $0.007 = 7 \times 10$ ____
47. $0.0004 = 4 \times 10$ ____ 48. $0.00008 = 8 \times 10$ ____ 49. $2,500 = 2.5 \times 10$ ____
50. $0.00036 = 3.6 \times 10$ ____

E. Choose the Correct Answer

51. Which is the scientific notation for 25,000? a) 2.5×10^4 b) 25×10^3 c) 2.5×10^5
52. Which is the scientific notation for 600,000? a) 6×10^4 b) 6×10^5 c) 60×10^4
53. Which is the standard form of 4×10^3 ? a) 400 b) 4,000 c) 40,000
54. Which is the standard form of 7.2×10^5 ? a) 72,000 b) 720,000 c) 7,200
55. Which is the scientific notation for 0.0006? a) 6×10^{-3} b) 6×10^{-4} c) 6×10^{-5}
56. Which is the standard form of 3.5×10^{-3} ? a) 0.035 b) 0.0035 c) 0.00035
57. Which number is written correctly in scientific notation? a) 45×10^2 b) 4.5×10^3 c) 0.45×10^4
58. Which is the scientific notation for 9,000,000? a) 9×10^6 b) 9×10^7 c) 90×10^6
59. Which is the standard form of 8.1×10^{-4} ? a) 0.081 b) 0.0081 c) 0.00081
60. Which number is greater? a) 3×10^4 b) 3×10^5 c) They are equal.

F. True or False

61. $4,000 = 4 \times 10^3$. _____
62. $0.005 = 5 \times 10^{-3}$. _____
63. $7.2 \times 10^4 = 72,000$. _____
64. $3 \times 10^{-2} = 0.03$. _____
65. 25×10^3 is correctly written in scientific notation. _____
66. The exponent is negative when the number is between 0 and 1. _____
67. $6.5 \times 10^6 = 6,500,000$. _____
68. $8 \times 10^{-5} = 0.00008$. _____

G. Challenge Questions

69. Write 45,600 in scientific notation.
70. Write 0.000056 in scientific notation.
71. Write 7.89×10^7 in standard form.
72. Write 2.34×10^{-5} in standard form.
73. Express 350,000,000 in scientific notation.
74. Express 0.00000092 in scientific notation.
75. Which is greater: 5.2×10^6 or 5.2×10^5 ?