

Name: _____ Period: _____

Score:

_____/_____
_____%

HW 6-1 - Scientific Notation

Identify if each number is written in scientific notation. If it is not, explain why not.

1. 14×10^8

3. 4.79×10^{-8}

5. 0.15×10^{22}

2. 2.6×10^{12}

4. 3.99×10^{16}

6. 6×10^3

Write the number in standard form.

7. 4×10^9

9. 3.7×10^6

11. 7.62×10^{10}

8. 2×10^{-5}

10. 4.12×10^{-3}

12. 9.908×10^{-12}

13. Light travels at 3×10^8 meters per second.

a. Write the speed of light in standard form.

b. How far has light traveled after 5 seconds?

Write the number in scientific notation.

14. 0.00002031

18. 0.1300000

22. 78,900,000

15. 43,680,000,000

19. 500,300,000,000

23. 0.000001

16. 0.02009

20. 89,000

17. 608,000,000

21. 0.00002007

Write the number in standard form.

24. 8.25×10^{-4}

29. 1.234×10^9

25. 3.14×10^8

30. 5.027×10^{11}

26. 1.111×10^{-7}

31. 4.2×10^1

27. 9.876×10^3

32. 3.303×10^3

28. 7.034×10^{-1}

33. 5.008×10^{-10}

Determine which number is bigger ($>$ or $<$)

34. 1.2×10^6 _____ 9.1×10^5

36. 1.23×10^4 _____ 6.7086×10^3

35. 4.0037×10^8 _____ 6.5×10^8

37. 2.86×10^5 _____ 3.1×10^2

Convert to scientific notation then order the following numbers from least to greatest.

38. 3.14×10^3 , 5.319×10^4 , 3040, 0.523×10^3 , 55,683

39. 5.368×10^7 , 4.269×10^9 , 9.2×10^6 , 376,000, 8.34×10^{-8} , 57,000,000