

Physics ch 1

Practice Quiz

How many Significant digits are in each of the following?

1. 0.238 km ____
2. 180.0 min _____
3. 0.003050 g _____
4. 14.809 cm _____
5. 340060 mm _____
6. 50 moles _____
7. 4500 km _____
8. 900. mL _____
9. 0.08 m _____

Calculate the following and write your answer using significant digits:

10. $82.5 \text{ cm} + 23.59 \text{ cm} =$
11. $80 \text{ cm} + 145.88 \text{ cm} + 121 \text{ cm} =$
12. $13.89 \text{ m} - 6.8932 \text{ m} =$
13. $133 \text{ L} - 6.45 \text{ L} =$
14. $3000 \text{ kg} + 12.24 \text{ kg} + .998 \text{ kg} =$
15. $32.88 \text{ m}^2 / 4.41 \text{ m} =$
16. $0.045 \text{ g} / 0.900 \text{ ml} =$
17. $2.005 \text{ cm} \times 5.0 \text{ cm} =$
18. $2.5 \text{ mm} \times 1.338 \text{ mm} =$
19. $120 \text{ km}^3 / 8.56 \text{ km}^2 =$

Write the following in proper scientific notation:

20. 0.000044 L
21. 12335400000 sec
22. 250.02 km
23. 18.03×10^{23} molecules

Compute the following using scientific notation, leaving your answers in proper scientific notation:

24. $(2.040 \times 10^4 \text{ m}) (7.002 \times 10^{-6} \text{ m}) =$
25. $(1.8 \times 10^{-2} \text{ cm}) (1.09 \times 10^{-3} \text{ cm}) =$
26. $(2.55 \times 10^5 \text{ m}) (6.233 \times 10^8 \text{ m}) =$
27. $(4.05 \times 10^7 \text{ mm}^3) / (9.00 \times 10^8 \text{ mm}) =$
28. $(5.66 \times 10^{-4} \text{ g}) / ((9.4 \times 10^5 \text{ cm})(2.00 \times 10^{-8} \text{ cm})) =$