

Uncertainty in Quantities

How many significant figures are contained in each of the following numbers?

1. 418 _____

2. 4200 _____

3. 0.017 _____

4. 300.7 _____

5. 0.00620 _____

6. 1.2 _____

7. 0.25 _____

8. 3×10^6 _____

9. 0.10040 _____

10. 7.25756 _____

11. 16.0000 _____

12. 210. _____

Perform the following indicated operations giving an answer with the proper number of significant figures:

13.
$$\begin{array}{r} 25.37 \\ 5.198 \\ +147.2 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 354.89 \\ -17.942 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 0.09754 \\ 1.086429 \\ +3.1875 \\ \hline \end{array}$$

16. $7.198 \times 3.1414 =$

17. $0.00875 / 0.00135 =$

18. $9.57/5.183 =$

19. $6.35 \times 1.05 \times 2.168 =$

20. $(2.50)^4 =$

21. $8.935 \times 1.14 =$

22. $67.90 \times 0.00918 =$