

Chapter 1

Sig Figs (cont.)

- we pay attention 2 sig figs so we don't overstate accuracy

Rules:

1. All non zero digits are sig figs ex: 23056 = 5 sig figs
2. Zeros between 2 sig figs also sig figs ex: 1005 = 4 sig figs
3. Zeros @ beg. of number NOT sig figs ex: 0.002 = 1 sig fig
4. Zeros @ end sig figs IF decimal in # ex: 0.0200 = 3 sig figs
5. Scientific notation can determine whether end zeros are sig figs ex: $10/35$

6.
$$\begin{array}{r} 20.42 \square \\ 83.1 \square \square \\ + 1.322 \\ \hline 104.842 \end{array}$$

Sig Figs answer: 104.8

Dimensional Analysis

$$5\text{cm} \cdot \frac{1\text{in.}}{2.54\text{cm}} = 1.968\text{in.}$$