

(#5-3)

General SigFigs I

In the following questions give the correct answer using significant digits.  
Indicate number of significant digits.

1. 55.      2	2. 250.    2	3. 250    ∞	4. 2.5E2   2
5. 125.000   6	6. 0.000625   3	7. 100 people ∞	8. 100 meters
9. .0025000   5	10. 0.01    1	11. 5000.0001	12. 53

9. 250 liters of water + 0.005 L of water =      8      ∞

10. 25.00 + 0.005 = 
$$\begin{array}{r} 25.00 \\ + .005 \\ \hline 25.005 \end{array}$$
      250.

11. 25.00 - 0.005 
$$\begin{array}{r} 25.00 \\ - .005 \\ \hline 24.995 \end{array}$$
      25.00

$$\begin{array}{r} 25.00 \\ + .005 \\ \hline 25.005 \end{array}$$
      25.01

12. 135 old people + 100 young people =  
235 people ∞

13. 150.00 \* 12.0 = 
$$\begin{array}{r} 1800 \\ 1.80E3 \text{ or } 1800. \end{array}$$

14. 2000.0 / 10 = 200.00 ← 5 sig figs

15. 25 people / 5.00 = 
$$\begin{array}{r} 5.00 \\ 3 \text{ sig figs} \end{array}$$

16. 1.0E5 \* 23.0 = 2.3E6

17. 150.0 / 6 = 25.00

18. 950.0 / 1.5E2 = 
$$6.3333 \rightarrow 6.3$$

19. 100.0 / 3.00 = 
$$33.333 \rightarrow 33.3$$