

REVIEW QUESTIONS

Chapter 1

- Convert the following quantities. Be sure to show all work with units.
 - 285 cm to m
 - 0.85 kg to g
 - 42.2 in to cm (1 in=2.54 cm)
 - 150 g to lb (1 lb=454 g)
- Calculate the density of a liquid if 50.0 mL of the liquid has a mass of 78.3 g.
- Determine the number of significant digits in each of the following numbers:
 - 503 _____
 - 63,000 _____
 - 0.0051 _____
 - 0.03002 _____
 - 4.100 _____
 - 0.0810 _____
- Express each of the following numbers in scientific notation, with 3 significant figures:
 - 2,900,000 _____
 - 0.005865 _____
 - 0.000004563 _____
 - 410870 _____

5. Perform the following operations with the correct number of significant digits:

a) $(0.0394)(12.85) =$

b) $(6.52 \times 10^5)(4.8 \times 10^4) =$

c) $\frac{42.7853}{59.6} =$

d) $12.62 + 1.5 + 0.25 =$

e) $\frac{(2.50 \times 10^4)}{(3.125 \times 10^7)} =$

f) $\frac{284 \times 0.293}{45} =$

6. Round each of the following numbers to 2 significant figures:

a) 93.643 _____

b) 0.02857 _____

c) 12153 _____

d) 158.35 _____