

REVIEW QUESTIONS

Chapter 2

1. Determine the number of significant digits in each of the following numbers:

a) 503 _____ b) 63,000 _____

c) 0.0051 _____ d) 0.03002 _____

e) 4.100 _____ f) 0.0810 _____

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

a) 93.643 _____ b) 0.02857 _____

c) 12153 _____ d) 158.35 _____

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

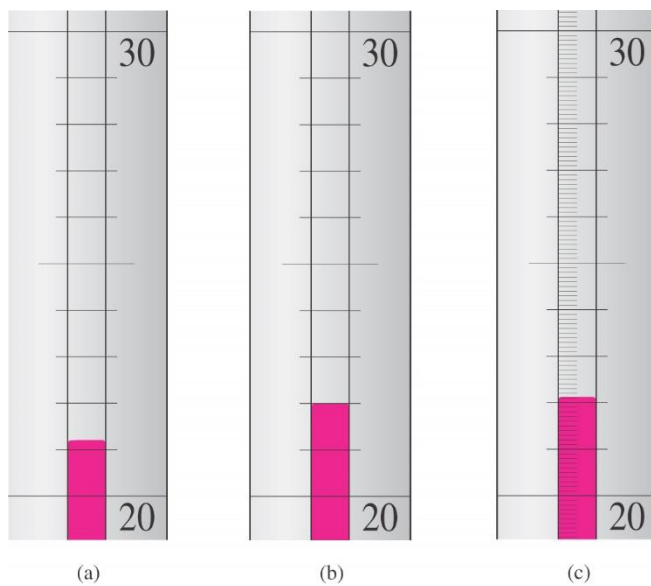
a) $(0.0394)(12.85) =$

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

c) $12.62 + 1.5 + 0.25 =$

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

4. Record each of the following measurements to the correct number of digits:



5. Convert each of the following units:

a) 1.78 kg to μg

b) 0.85 g to mg

c) 1.65 lbs to g (1 lb = 454 g)

d) 65 °C to K

e) 425 F to °C

6. There are 2 bottles of milk of magnesia on the shelf at the pharmacy. One contains 9.5 oz and the other has 300 cm^3 . Which has larger volume?

7. The density of ether is 0.714 g/mL . What is the mass of 1.45 L of ether?

8. The doctor orders Ampicillin 300 mg/kg/day for your patient and has ordered the medication to be given 3 times a day. How many mg per dose would you administer to a 59 lb patient?

9. A patient is receiving antibiotic IV at the rate of 50 mL/hr . The IV solution contains 1.5 g of antibiotic per liter. How many mg of antibiotic are given to this patient per hour?

10. The recommended pediatric dosage for Velosef is 20 mg/kg/day, to be administered 3 times/day.

a) What is the daily dose in mg for a child weighing 36 lb?

b) The stock vial of Velosef is labeled as 208 mg/mL. How many mL of this medication are given in a dose?

11. The following nutrition information is listed on a box of crackers:

Serving size: 0.5 oz (6 crackers)

Fat: 4 g per serving

Sodium: 140 mg per serving

a) If the box has a net weight of 8.0 oz, how many crackers are in a box?

b) How many grams of sodium are used to prepare 50 boxes of crackers?