

Cabrillo College ADN Program
Fall 2009

Preparation for Drug Dosage Calculation Test

The following problems are examples of the problems you will find on your drug dosage calculation test.

Goal:

- Pass the drug dosage calculations with 100% accuracy

Student assignment: You are responsible

- Basic knowledge of algebra and chemistry (you were taught Dimensional Analysis); both led to drug dosage calculation.
- Purchase - Morris, D.G. Calculate with Confidence. Mosby, St. Louis current edition.
- Read Chapters 1 – 13. Read chapters 10 – 13 regardless of proficiency in math. These chapters cover basic math/algebra and specific information important to medication administration.
- Select one of the three drug dosage calculation method 1) Chapter 12 Ratio-Proportion Method, 2) Chapter 15 Formula Method or 3) Chapter 16 Dimensional Analysis Method. Learn one method use it all the time then learn the others so you can check your answer.
- Do all practice problems.
- *Calculate to the nearest 10th unless specified, label and circle answers. These practice problems will be used to assist our (you and I) discovering any area you may be having a weakness in.
- Try the disk that comes with the textbook and/or go on line for more information and practice problems these are available with purchase of the book.
- *Seek assistance early if you have difficulty with math (i.e. anxiety, difficulty with algebra etc.). Make an appointment with the Academic Skills Specialist at 479-6253.
- Only using of accepted terminology and abbreviations; a list of current accepted abbreviations will be provided.

Memorize the following conversions, most problems are from this short list

1 oz = 30 mL = 30 cc = 8 dram = 2 tablespoon (T) = 6 teaspoon (t)
1 gram (G, Gm, gm) = 1,000 mg = 1,000,000 mcg (mµg)
1,000 gram = 1 kg
1kg= 2.2 pounds (#, lbs)
60 mg = 1 gr
1L (liter) = 1,000 mL= 1 quart (qt) = 2 pints (pt)

Student Name _____

1. Convert the following: 14 grams to milligrams _____ to micrograms _____?

2. The physician ordered Nardil gr $\frac{1}{4}$ daily PO. Available is Nardil 15 mg/ tablet. How many tablets will the patient receive?

3. A physician ordered Dilantin 300mg daily PO liquid. The medication comes in a bottle labeled 100 mg / 5 mL.
 - a. How many mL administered per dose?

 - b. How many teaspoons administered each dose?

4. Write a schedule for four times a day starting at 0800. (During waking hours only.)

5. Write a schedule for Q8H starting at 0900. (Around the clock for 24 hours)

6. The physician orders Lasix 40 mg twice a day PO. Available is 20 mg/ tablet. How many tablets will the patient receive each dose?

7. The nurse understands the abbreviation gr ii is written in the apothecary measurement. The nurse explains this means _____

8. Convert 1000 CC to _____ mL to _____ ounces to _____ L
(Round ounces to nearest hundredth)

9. The physician's order is to give 0.1 g (G, Gram, gram, gm) Aldactone PO daily. Aldactone is available in scored tablets labeled 50 mg. How many tablets administered each dose?
10. A physician has ordered Heparin 3000 units SQ daily. The Heparin is available in a 25 mL vial. The vial label concentration is 10,000 units/ mL. How many mL of Heparin is administered daily?
11. The physician orders Morphine Sulfate 1.5 mg IM Q4H for severe pain. Morphine sulfate is available in a pre-filled syringe labeled 2 mg/2mL. How many mL are administered?
12. The physician wrote a new order for Aldomet 0.5 g PO daily. The Aldomet comes in 500 mg tablets. How many tablets will be administered?
13. The physician ordered Gantrisin 0.4g PO twice a day. Gantrisin liquid is available in 500 mg /1.3 ml solution. The nurses will have administered how many mL in 24 hours. (Round answer to nearest hundredth)
14. Convert 45 gallons to liters = _____.
15. A physician ordered 75 mg of Demerol IM for severe pain Q4H PRN. Available is a 25 mL vial. The label reads 100 mg/ mL. How many ml is administered for each dose? (Use a TB syringe to measure to the hundredth.)
16. Miltown is available in 400 mg tablets. A physician ordered 0.6 g. How many scored tablets each dose?

17. The weight of the patient is 154 pounds. The physician ordered Ethambutol 15mg/ kg/ 24hours. The label reads 200 mg/ tablet. How many tablets per 24 hours?

18. Scopolamine gr 1/150 IM ordered given on call. The label on the vial indicates 0.4 mg/ 1mL. How many mL per dose?

19. Write in Arabic (regular) numbers one million, two hundred thousand and ten

20. A patient is to receive 90 mg of Phenobarbital. The label: Phenobarbital gr 1 ½ each tablet. How many tablets administered?

Convert the following:

21. $\frac{2}{1000}$ to a decimal number _____

22. gr iv = _____ mg

23. 2 oz = _____ mL = _____ CC = _____ t = _____ T

24. 100 kg = _____ lbs

25. 10,000 mcg (μg) = _____ mg = _____ Gm