DOSAGE CALCULATION PRACTICE PROBLEMS
SHOW YOUR WORK

1) Order: NegGram Caplet (nalidixic acid) 0.5 g po qid
   Available: NegGram 1 GM per scored tablet.
   
   How many NegGram tables should you administer?

2) A client’s intake was the following:
   3/4 cup of coffee
   1 can of ginger ale (1 can = 12 oz)
   1/2 glass of cranberry juice

   How many milliliters will you record on the intake and output (I&O) sheet?

3) Order: Calciferol (ergocalciferol) 22,000 units po qd 8am.
   Available: Calciferon oral solution 8000 units per 1 mL.

   How many mL of Calciferol equals the prescribed dose?

4) Order: Alprazolam (xanax) 0.75 mg po tid
   Available: Alprazolam 0.5 mg scored tablet
   Literature states the maximum dosage is 4 mg per day.
   
   a. How many tablets should you administer per dose?

   b. Does the DAILY dosage exceed 4 mg per day?
5) Order: Lanoxin (digoxin) tablets 0.375 mg po STAT.
   Available: Lanoxin 125 micrograms, 250 micrograms, and 500 micrograms per scored tablet. Which Lanoxin tablet will you use to prepare the prescribed dose?
   How many tablets of Lanoxin (________ micrograms/tab) should your patient receive?

6) Order: Choledyl (oxtriphylline) elixir 3.1 mg/kg po q 6 h.
   Available: Choledyl elixir 100 mg/5 mL.
   Patient's weight: 121 lbs.
   How many mL of Choledyl should the patient receive?

7) Order: Ultram (tramadol) 400 mg po over 24-hr period in 4 equally divided doses.
   Available: Ultram 50 mg per tablet
   a. How many mg of Ultram should you administer for each dose?
   b. How many tablets of Ultram (50 mg) should you administer for each dose?
   c. At what frequency should you administer each dose?
   d. If the first dose was given at 1200, identify in military time when the patient will receive the second, third, and fourth dose:
8) The physician's order is Synthroid 250 mcg PO qd. 
Available: Synthroid 0.125 mg tablets 
How many tablets will you give? How many times per day?

9) Order: Morphine 10 mg PO q 6 h. 
Available: 15 mg/tsp 
How many tsp(s) will you give?

How many cc's will you give?

10) Order: Zidovudine 150 mg po qid. 
Available: Zidovudine 1.5 gr tablets 
How many tablets will you give?

11) Order: Demerol 25 mg IM q 4 h as needed for pain 
Available: Demerol, 200 mg/1cc 
How many ml(s) will you give?

12) Order: 100 cc of NS to infuse over 30 minutes. Tubing: 15 gtt/ml. 
How many drops per minute will you count?
13) Order: 250 cc D5LR to infuse over 1 hour. Tubing: 10 gtt/ml. How many drops per minute will you count?

14) Order: 1000 cc D5LR to infuse over 8 hours. Tubing: 15 gtt/ml. How many cc's will you infuse per hour? How many drops per minute will you count?

15) Order: 500 cc NS to run in over 12 hours. Your administration set is labeled 15 gtt's/cc. How many drops per minute will that be?

16) Order: Penicillin G 800,000 U IM.
   Available: Penicillin G in powder form (1,200,000 u total after adding 4cc NS). Each reconstituted cc contains 300,000 u. How many cc(s) will you administer?

17) Order: Cefaclor 0.45 grams.
   Available: Cefaclor 180 mg/5 ml.
   How many cc(s) will you administer?
18) Order: Clonidine hydrochloride gr 1/800. 
Available: Clonidine hydrochloride tablets, USP 0.1 mg. How many tablet(s) will you give?

19) Order: Codeine gr ii 
Available: Codeine 30 mg/tablet
How many tablet(s) will you give?

20) Order: Nitrostat gr 1/400 prn for angina by the sublingual route. 
Available: 1 tablet = 0.3 mg
How many tablet(s) will you administer? 
By what route?

21) Order: Seconal gr iss. 
Available: 100 mg capsules. 
How many capsules will you give?

22) Order: Demerol 35 mg IM q 4h prn pain 
Available: Demerol 50 mg/cc 
How many ml(s) will you give?
23) Order: NS 125 ml/h IV. Tubing set: 20 gtt/mL. How many drops will you count per minute?

24) Order: 1200 mL NS IV in 6 hours. Tubing drop factor: 15 gtt/mL. How many gtts/min?

25) You are infusing 500 mL D5W at 30 gtt/min. Your tubing drop factor is 20 gtt/mL. How long will it take the 500 mL to infuse?
Answers

1. 0.5 tablets
2. 630 mL
3. 2.75 = 2.8 mL
4. a. 1.5 tablets
   b. 2.25 mg = no
5. 3 125mcg tabs or 1.5 250mcg tabs
6. 8.5 mL
7. a. 100mg
   b. 2 tabs
   c. every 6 hours
   d. 1800, 2400, 0600
8. 2 tablets, 1 time daily
9. 0.7 tsp, 3.5 mL
10. 2 tablets
11. 0.13 mL or 0.1 mL
12. 50 gtt/min
13. 42 gtt/min
14. 31 gtt/min
15. 10 gtt/min
16. 2.7 mL
17. 12.5 mL
18. 1 tablet
19. 4 tablets
20. 0.5 tablets, under the tongue
21. 1 capsule
22. 0.7 mL
23. 42 gtt/min
24. 50 gtt/min
25. 333 min. or 5 hr. 33 min.