Fluid Dosage Calculations

1. Dilaudid 3 mg IM is ordered for your patient. The only available dosage strength is 4 mg/mL. What amount will you give?
   a. 1.3 mL
   b. 0.75 mL
   c. 1.5 mL
   d. 0.5 mL

2. Thorazine 45 mg IM is ordered for your patient. The available concentration on your unit is 25 mg/mL. What amount will you give?
   a. 0.5 mL
   b. 1 mL
   c. 1.2 mL
   d. 1.8 mL

3. 20 mg of Phenergan is ordered; available solution contains 25 mg/mL. How much will you administer?
   a. 1.25 mL
   b. 0.8 mL
   c. 0.5 mL
   d. 1 mL

4. 15 mg of Torecan is ordered; available solution contains 10 mg/2mL. How much will you give?
   a. 1.5 mL
   b. 3 mL
   c. 0.75 mL
   d. 2 mL

5. Lasix 20 mg is ordered IV stat; available solution contains 10 mg/cc. How many mL will you give?
   a. 0.5 mL
   b. 1 mL
   c. 2 mL
   d. 1.5 mL
6. Protamine Sulfate 25 mg is ordered IV; the vial is labeled 5 mg/2mL. How many mL will you give?
   a. 10 mL  
   b. 5 mL  
   c. 0.5 mL  
   d. 15 mL

7. A solution contains furosemide (frusemide) 10 mg/mL. How many milligrams of frusemide are in 2 mL of solution?
   a. 5 mg  
   b. 10 mg  
   c. 20 mg  
   d. 200 mg

8. A solution contains morphine hydrochloride 2 mg/mL. How many milligrams of morphine hydrochloride are in 3 mL of solution?
   a. 0.67 mg  
   b. 1.5 mg  
   c. 60 mg  
   d. 6 mg

9. A solution contains morphine hydrochloride 40 mg/mL. How many milligrams of morphine hydrochloride are in 2 mL of solution?
   a. 20 mg  
   b. 80 mg  
   c. 0.5 mg  
   d. 400 mg

10. A suspension contains phenytoin 125 mg/5mL. How many milligrams of phenytoin are in 20 mL of the suspension?
    a. 2500 mg  
    b. 500 mg  
    c. 250 mg  
    d. 6.25 mg
11. A solution contains fluoxetine 20 mg/5mL. How many milligrams of fluoxetine are in 10 mL of solution?
   a. 200 mg  
   b. 2 mg  
   c. 20 mg  
   d. 40 mg

12. A suspension contains erythromycin 250 mg/5mL. How many milligrams of erythromycin are in 10 mL of suspension?
   a. 500 mg  
   b. 25 mg  
   c. 2.5 mg  
   d. 2500 mg

13. A syrup contains chlorpromazine 25 mg/5mL. How many milligrams of chlorpromazine are in 10 mL of syrup?
   a. 250 mg  
   b. 50 mg  
   c. 2.5 mg  
   d. 125 mg

14. A mixture contains penicillin 250 mg/5mL. How many milligrams of penicillin are in 15 mL of mixture?
   a. 16.7 mg  
   b. 750 mg  
   c. 3750 mg  
   d. 1250 mg

15. A patient is ordered 750 mg of erythromycin, orally. What is the volume (mL) required if the suspension in stock has a strength of 250 mg/5mL?
   a. 3 mL  
   b. 0.35 mL  
   c. 50 mL  
   d. 15 mL

16. Flucloxacillin 375 mg is ordered. Stock on hand contains syrup with 125 mg/5mL. What volume of syrup should the patient be given?
   a. 15 mL  
   b. 3 mL  
   c. 30 mL  
   d. 25 mL
17. A patient is prescribed 40 mg of furosemide to be administered orally. On hand is solution that has 10 mg/mL. What dosage should the patient be given?
   a. 0.25 mL  
   b. 20 mL  
   c. 40 mL  
   d. 4 mL

18. A patient is prescribed 150 mg of phenytoin to be administered orally. On hand is suspension that has 125 mg/5mL. What dosage should the patient be given?
   a. 6 mL  
   b. 1.2 mL  
   c. 0.8 mL  
   d. 2.5 mL

19. A patient is prescribed 1000 mg of penicillin to be administered orally. On hand is a mixture that has 250 mg/5mL. What dosage should the patient be given?
   a. 20 mL  
   b. 4 mL  
   c. 0.25 mL  
   d. 50 mL

20. A patient is prescribed 800 mg of erythromycin to be administered orally. On hand is a mixture that has 125 mg/5mL. What dosage should the patient be given?
   a. 6.4 mL  
   b. 32 mL  
   c. 20 mL  
   d. 16 mL

21. A patient is prescribed 100 mg of amoxicillin trihydrate. On hand is 80 mL bottle of amoxicillin oral suspension 125 mg/5mL. What dosage should the patient be given?
   a. 7 mL  
   b. 1.4 mL  
   c. 4 mL  
   d. 0.7 mL
22. A patient is prescribed 4 mg perphenazine to be administered orally. On hand is a concentrate that has 3.2 mg/mL. What dosage should the patient be given?
   a. 1.5 mL  
   b. 0.67 mL  
   c. 4 mL  
   d. 1.25 mL

23. The order is for sulfamethoxazole/trimethoprim suspension 100 mg. On hand is a mixture that has 40 mg/mL. What dosage should the patient be given?
   a. 4.8 mL  
   b. 2.5 mL  
   c. 5 mL  
   d. 2 mL

24. A patient is prescribed fluoxetine hydrochloride solution 45 mg. On hand is a 20 mg/5mL solution. What dosage should the patient be given?
   a. 4 mL  
   b. 2.25 mL  
   c. 11.25 mL  
   d. 50 mL

25. The order is for phenobarbital elixir 15 mg. On hand is phenobarbital 5 mg/mL. What dosage should the patient be given?
   a. 3 mL  
   b. 6.4 mL  
   c. 0.3 mL  
   d. 16 mL
**Answer Key to Infusion: Quiz 2**

Q01  b  3 mg ÷ 4 mg/mL = 0.75 mL
Q02  d  45 mg ÷ 25 mg/mL = 1.8 mL
Q03  b  20 mg ÷ 25 mg/mL = 0.8 mL
Q04  b  10 mg/2 mL ÷ 2 = 5 mg/mL; 15 mg ÷ 5 mg/mL = 3 mL
Q05  c  20 mg ÷ 10 mg/cc = 2 cc or 2 mL
Q06  a  5 mg/2 mL ÷ 2 = 2.5 mg/mL; 25 mg ÷ 2.5 mg/mL = 10 mL
Q07  c  10 mg/mL x 2 mL = 20 mg
Q08  d  2 mg/mL x 3 mL = 6 mg
Q09  b  40 mg/mL x 2 mL = 80 mg
Q10  b  125 mg/5 mL ÷ 5 = 25 mg/mL x 20 mL = 500 mg
Q11  d  20 mg/5 mL ÷ 5 = 4 mg/mL x 10 mL = 40 mg
Q12  a  250 mg/5 mL ÷ 5 = 50 mg/mL x 10 mL = 500 mg
Q13  b  25 mg/5 mL ÷ 5 = 5 mg/mL x 10 mL = 50 mg
Q14  b  250 mg/5 mL ÷ 5 = 50 mg/mL x 15 mL = 750 mg
Q15  d  250 mg/5 mL ÷ 5 = 50 mg/mL; 750 ÷ 50 = 15 mL required for 750 mg of medication
Q16  a  125 mg/5 mL ÷ 5 = 25 mg/mL; 375 mg ÷ 25 = 15 mL of syrup required to administer 375 mg of flucloxacillin
Q17  d  40 mg ÷ 10 mg/mL = 4 mL
Q18  a  125 mg/5 mL ÷ 5 = 25 mg/mL; 150 mg ÷ 25 mg/mL = 6 mL
Q19  a  250 mg/5 mL ÷ 5 = 50 mg/mL; 1000 mg ÷ 50 mg/mL = 20 mL
Q20  b  125 mg/5 mL ÷ 5 = 25 mg/mL; 800 mg ÷ 25 mg/mL = 32 mL
Q21  c  125 mg/5 mL ÷ 5 = 25 mg/mL; 100 mg ÷ 25 mg/mL = 4 mL
Q22  d  4 mg ÷ 3.2 mg/mL = 1.25 mL
Q23  b  100 mg ÷ 40 mg/mL = 2.5 mL
Q24  c  20 mg/5 mL ÷ 5 = 4 mg/mL; 45 mg ÷ 4 mg/mL = 11.25 mL
Q25  a  15 mg ÷ 5 mg/mL = 3 mL