

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