PROFICIENCY TEST 3	Calculations of Liquid Injections *(continued)*

18. Order: digoxin (Lanoxin) 0.125 mg IV 10 AM
Supply: ampule labeled 0.25 mg/2 mL

19. Order: nalbuphine HCl (Nubain) 12 mg IM × 1 dose
Supply: vial 10 mg/mL

20. Order: add 10 mEq KCl to IV
Supply: vial 40 mEq/20 mL (use 10 mL syringe)

PROFICIENCY TEST 4	Mental Drill in Liquids-for-Injection Problems

Name: _Ragin Baker_

As you develop proficiency in solving problems, you will be able to calculate many answers without written work. This drill combines your knowledge of equivalents and dosages. Solve these problems mentally and write only the amount to give. If necessary, round to the nearest tenths. See Appendix A for answers.

Order	Supply	Give
1. 0.5 g IM	250 mg/mL	2 mL
2. 10 mEq IV	40 mEq/20 mL	5 mL
3. 0.5 mg IM	0.25 mg/mL	2 mL
4. 100 mg IM	0.2 g/2 mL	1 mL
5. 50 mg IM	100 mg/1 mL	0.5 mL
6. 0.25 mg IM	0.5 mg/2 mL	1 mL
7. 0.3 mg subcutaneous	0.4 mg/mL	0.75 mL
8. 1 mg subcutaneous	1:1000 solution	1 mL
9. 1 g IV	5% solution	20 mL
10. 0.1 g IM	200 mg/5 mL	2.5 mL
11. 400,000 units IM	500,000 units/mL	0.8 mL
12. 0.5 mg IM	0.5 mg/2 mL	2 mL
13. 1 g IV	50% solution	2 mL
14. 75 mg IM	100 mg/2 mL	1.5 mL
15. 15 mg IM	1:100 solution	1.5 mL
16. 35 mg IM	100 mg/mL	0.35 mL
17. 0.6 mg subcutaneous	0.4 mg per mL	1.5 mL
18. 0.15 g IM	0.2 g/2 mL	1.5 mL

PROFICIENCY TEST 3 — Calculation of Oral Doses

Name: _Ragin Baker_

For each question, determine the amount to be given. Answers are given in Appendix A.

1. Order: potassium chloride 20 mEq po in juice bid
   Supply: liquid in a bottle labeled 30 mEq/15 mL
   $\dfrac{15mL}{30mEq} = 20mEq \quad \dfrac{300}{30} = \boxed{10mL}$

2. Order: syrup of tetracycline (Sumycin) hydrochloride 80 mg po q6h
   Supply: liquid in a dropper bottle labeled 125 mg/5 mL
   $\dfrac{5mL}{125mg} = 80mg = \boxed{3.2mL}$

3. Order: propranolol (Inderal) 0.02 g po bid
   Supply: scored tablets labeled 10 mg
   $0.02.0. \quad \dfrac{20mg}{10mg} = \boxed{2\ tablets}$

4. Order: ampicillin sodium 0.5 g po q6h
   Supply: capsules of 250 mg
   $0.500g \quad \dfrac{500mg}{250mg} = \boxed{2\ tablets}$

5. Order: digoxin (Lanoxin) 0.5 mg po every day
   Supply: scored tablets of 0.25 mg
   $\dfrac{0.5mg}{0.25mg} = \boxed{2\ tablets}$

6. Order: prednisone (Deltasone) 40 mg po every day
   Supply: liquid in a bottle labeled 5 mg/5 mL
   $\dfrac{5mL}{5mg} = 40mg = \boxed{40mL}$

7. Order: hydrochlorothiazide (Hydrodiuril) 75 mg po every day
   Supply: scored tablets 50 mg
   $\dfrac{75mg}{50mg} = \boxed{1.5\ tablets}$

8. Order: furosemide (Lasix) 40 mg po every day
   Supply: scored tablets of 80 mg
   $\dfrac{40mg}{80mg} = \boxed{0.5\ tablets}$

9. Order: digoxin (Lanoxin) 0.125 mg po
   Supply: liquid in a dropper bottle labeled 500 mcg/10 mL
   $0.125. \quad \dfrac{10mL}{500mcg} = 125mcg = \boxed{2.5mL}$

10. Order: phenytoin (Dilantin) susp 75 mg po tid
    Supply: liquid in a bottle labeled 50 mg/10 mL
    $\dfrac{10mL}{50mg} = 75mg = \boxed{15mL}$

11. Order: diazepam (Valium) 5 mg po q4h prn
    Supply: scored tablets 2 mg
    $\dfrac{5mg}{2mg} = \boxed{2.5\ tablets}$

12. Order: levothyroxine (Synthroid) 0.15 mg po every day
    Supply: scored tablets 300 mcg
    $0.150. \quad \dfrac{150mcg}{300mcg} = \boxed{0.5\ tablets}$

13. Order: disulfiram (Antabuse) 375 mg po today
    Supply: scored tablets 250 mg
    $\dfrac{375mg}{250mg} = \boxed{1.5\ tablets}$

14. Order: ibuprofen (Advil) 0.6 g po q4h prn
    Supply: film-coated tablets 300 mg
    $0.600. \quad \dfrac{600mg}{300mg} = \boxed{2\ tablets}$

15. Order: chlorpheniramine maleate (Chlor-Trimeton) syr 1.5 mg po bid
    Supply: liquid in a bottle 1 mg/8 mL
    $\dfrac{8mL}{1mg} = 1.5mg \quad \dfrac{12}{1} = \boxed{12mL}$

16. Order: diphenhydramine maleate (Benadryl) syrup 25 mg po q4h while awake
    Supply: liquid labeled 12.5 mg/5 mL
    $\dfrac{5mL}{12.5mg} = 25mg \quad \dfrac{125}{12.5} = \boxed{10mL}$

17. Order: simethicone (Mylicon) liq 60 mg po in 1/2 glass H₂O
    Supply: liquid in a dropper bottle labeled 40 mg/0.6 mL
    $\dfrac{0.6mL}{40mg} = 60mg \quad \dfrac{36}{40} = \boxed{0.9mL}$

18. Order: chlorothiazide (Diuril) oral susp 0.5 g via NGT po every day
    Supply: liquid labeled 250 mg/5 mL
    $0.500 \quad \dfrac{5mL}{250mg} = 500mg \quad \dfrac{2,500}{250} = \boxed{10mL}$

19. Order: meperidine HCl (Demerol) syrup 15 mg po q4h prn
    Supply: liquid labeled 50 mg/5 mL
    $\dfrac{5mL}{50mg} = 15mg \quad \dfrac{75}{50} = \boxed{1.5mL}$

20. Order: hydroxyzine (Vistaril) susp 50 mg q6h po
    Supply: liquid labeled 25 mg/5 mL
    $\dfrac{5mL}{25mg} = 50mg \quad \dfrac{250}{25} = \boxed{10mL}$