PROFICIENCY TEST 3: Calculation of Oral Doses

Name: Ngoc Trinh (Jade)

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

Order: potassium chloride 20 mEq po in juice bid
Supply: liquid in a bottle labeled 30 mEq/15 mL

$\frac{20 \times 15}{30} = 10$ mL

Order: syrup of tetracycline hydrochloride 80 mg po q6h
Supply: liquid in a dropper bottle labeled 125 mg/5 mL

$\frac{80 \times 5}{125} = 3.2$ mL

Order: propranolol 0.02 g po bid
Supply: scored tablets labeled 10 mg

0.02 g = 20 mg

$\frac{20}{10} = 2$ mg

Order: ampicillin sodium 0.5 g po q6h
Supply: capsules of 250 mg

0.5 g = 500 mg

$\frac{500 \text{ mg}}{250 \text{ mg}} = 2$ mg

Order: digoxin 0.5 mg po every day
Supply: scored tablets of 0.25 mg

$\frac{0.5}{0.25} = 2$ mg

Order: prednisone 20 mg po every day
Supply: liquid in a bottle labeled 5 mg/5 mL

$\frac{20 \times 5}{5} = 20$ mL

Order: hydrochlorothiazide 75 mg po every day
Supply: scored tablets 50 mg

$\frac{75}{50} = 1.5$ mg

Order: furosemide 40 mg po every day
Supply: scored tablets of 80 mg

$\frac{40}{80} = 0.5$ mg

Order: digoxin 0.25 mg po daily
Supply: liquid in a dropper bottle labeled 500 mcg/10 mL

0.25 mg = 250 mcg

$\frac{250 \times 10}{500} = 5$ mcg

Order: phenytoin susp 75 mg po tid
Supply: liquid in a bottle labeled 50 mg/10 mL

$\frac{75 \times 10}{50} = 15$ mg

Order: diazepam 5 mg po q4h prn
Supply: scored tablets 2 mg

$\frac{5}{2} = 2.5$ mg

Order: levothyroxine 0.15 mg po every day
Supply: scored tablets 300 mcg

0.15 mg = 150 mcg

$\frac{150}{300} = 0.5$ mcg

Order: disulfiram 375 mg po today
Supply: scored tablets 250 mg

$\frac{375}{250} = 1.5$ mg

Order: ibuprofen 0.4 g po q4h prn
Supply: film-coated tablets 200 mg

0.4 g = 400 mg

$\frac{400}{200} = 2$ mg

Order: chlorpheniramine maleate syr 1.5 mg po bid
Supply: liquid in a bottle 1 mg/8 mL

$$\frac{1.5 \times 8}{1} = 12 \text{ mL}$$

Order: diphenhydramine maleate syrup 25 mg po q4h while awake
Supply: liquid labeled 12.5 mg/5 mL

$$\frac{25 \times 5}{12.5} = 10 \text{ mL}$$

Order: simethicone liquid 60 mg po in ½ glass water q6h prn
Supply: liquid in a dropper bottle labeled 40 mg/0.4 mL

$$\frac{60 \times 0.4}{40} = 0.6 \text{ mL}$$

Order: chlorothiazide oral susp 0.5 g via NGT every day
Supply: liquid labeled 250 mg/5 mL

0.5 g = 500 mg

$$\frac{500 \times 5}{250} = 10 \text{ mL}$$

Order: meperidine HCl syrup 15 mg po q4h prn
Supply: liquid labeled 50 mg/5 mL

$$\frac{15 \times 5}{50} = 1.5 \text{ mL}$$

Order: hydroxyzine susp 50 mg po q6h prn
Supply: liquid labeled 25 mg/5 mL

$$\frac{50 \times 5}{25} = 10 \text{ mL}$$

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

Name: _____

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 IM
2. 10 mEq IV	40 mEq/20 mL	5 mL IV
3. 0.5 mg IM	0.25 mg/mL	2 mL IM
4. 100 mg IM	0.2 g/2 mL	1 mL IM
5. 50 mg IM	100 mg/1 mL	0.5 mL IM
6. 0.25 mg IM	0.5 mg/2 mL	1 mL IM
7. 0.3 mg subcutaneous	0.4 mg/mL (round to the nearest tenths)	0.8 mL SQ
8. 1 mg subcutaneous	1:1000 solution	1 mL SQ
9. 1 g IV	10% solution	10 mL IV
10. 0.1 g IM	200 mg/5 mL	2.5 mL IM
11. 400,000 units IM	500,000 units/mL	0.8 IM
12. 0.5 mg IM	0.5 mg/2 mL	2 mL IM
13. 1 g IV	50% solution	2 mL IV
14. 75 mg IM	100 mg/2 mL	1.5 mL IM
15. 15 mg IM	1:100 solution	1.5 mL IM
16. 50 mg IM	100 mg/mL	0.5 mL IM
17. 0.2 mg subcutaneous	0.4 mg/mL	0.5 mL SQ
18. 0.15 g IM	0.3 g/2 mL	1 mL IM