Dosage Calculations Module Mastery Problem Answers

MASTERY PROBLEM 1
The doctor orders Zantac 75mg po q 6h for infection. The stock supply is Zantac 150mg tablets. How many tablet(s) will you administer for the correct dose?

a. 0.25 tablet
b. 0.5 tablet
c. 1 tablet
d. 2 tablets

Answer = \( \frac{75 \text{ mg}}{1} \times \frac{1 \text{ tab}}{150 \text{ mg}} = 0.5 \text{ tablets} \)

MASTERY PROBLEM 2
The doctor orders Zovirax 1g. The stock supply is 200mg tablets. How many tablets will you give?

a. 1 tablet
b. 2 tablets
c. 4 tablets
d. 5 tablets

Answer = \( \frac{1 \text{ g}}{1} \times \frac{1 \text{ tab}}{200 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} = 5 \text{ tablets} \)

MASTERY PROBLEM 3
The doctor orders Amoxicillin 325 mg po tid for infection. The stock supply is Amoxicillin 250mg/mL. How many milliliters will you administer for the correct dose?

a. 1 mL
b. 0.3 mL
c. 1.3 mL
d. 2 mL

Answer = \( \frac{325 \text{ mg}}{1} \times \frac{1 \text{ mL}}{250 \text{ mg}} = 1.3 \text{ mL} \)
MASTERY PROBLEM 4
The doctor orders a drug dosed at 0.4g po tid. The stock supply for the drug is 150mg/mL. How many milliliters will you give for the correct dose?
   a. 2.7 mL
   b. 1.7 mL
   c. 2.4 mL
   d. 6.7 mL

Answer = \( \frac{0.4 \text{ g}}{1} \times \frac{1 \text{ mL}}{150 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} = 2.7 \text{ mL} \)

MASTERY PROBLEM 5
The doctor orders a drug 0.6g po tid. The stock supply of the drug is 200mg tablets. How many tablets will you administer for the correct dose?
   a. 1 tablet
   b. 6 tablets
   c. 12 tablets
   d. 3 tablets

Answer = \( \frac{0.6 \text{ g}}{1} \times \frac{1 \text{ tab}}{200 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} = 3 \text{ tablets} \)

MASTERY PROBLEM 6
The doctor orders nitroglycerin 2 grains. The dose on hand is nitroglycerin 60 mg tablets. How many tablets will you administer for the correct dose? Note: When converting grains to milligrams when Nitroglycerin is concerned, use the conversion 1 grain = 60mg.
   a. 30 tablets
   b. 2 tablets
   c. 3 tablets
   d. 1 tablet

Answer = \( \frac{2 \text{ grains}}{1} \times \frac{1 \text{ tab}}{60 \text{ mg}} \times \frac{60 \text{ mg}}{1 \text{ grain}} = 2 \text{ tablets} \)

MASTERY PROBLEM 7
The doctor orders heparin 12000 units sub Q q8h. The dose on hand is heparin 5,000 units/mL. How many milliliters will you administer for the correct dose?
   a. 4.2 mL
   b. 4.8 mL
   c. 7.2 mL
   d. 2.4 mL

Answer = \( \frac{12,000 \text{ units}}{1} \times \frac{1 \text{ mL}}{5,000 \text{ units}} = 2.4 \text{ mL} \)
MASTERY PROBLEM 8
The doctor orders Lanoxin 20mcg/kg q d. The stock supply is Lanoxin 0.125mg/mL. Patient weighs 150lbs. How many milliliters will you administer for the correct dose?

- a. 2 mL
- b. 10.9 mL
- c. 0.6 mL
- d. 0.2 mL

Answer = \( \frac{20 \text{ mcg}}{1 \text{ kg}} \times \frac{1 \text{ kg}}{2.2 \text{ lbs}} \times \frac{150 \text{ lbs}}{1} \times \frac{1 \text{ mL}}{0.125 \text{ mg}} \times \frac{1 \text{ mg}}{1000 \text{ mcg}} = 10.9 \text{ mL} \)

MASTERY PROBLEM 9
Keflex 3g/4mL is your stock supply. The doctor orders Keflex 500mg q 8h IM. How many milliliters will you give for the correct dose?

- a. 0.7 mL
- b. 0.17 mL
- c. 0.51 mL
- d. 2.1 mL

Answer = \( \frac{500 \text{ mg}}{1} \times \frac{4 \text{ mL}}{3 \text{ g}} \times \frac{1 \text{ g}}{1000 \text{ mg}} = 0.7 \text{ mL} \)

MASTERY PROBLEM 10
The doctor orders methotrexate 3.5mg/kg IV. The dose on hand is methotrexate 50mg/mL. The patient weighs 160lbs. How many milliliters will you administer for the correct dose?

- a. 24.64 mL
- b. 616 mL
- c. 5.1 mL
- d. 2.41 mL

Answer = \( \frac{3.5 \text{ mg}}{1 \text{ kg}} \times \frac{1 \text{ kg}}{2.2 \text{ lbs}} \times \frac{160 \text{ lbs}}{1} \times \frac{1 \text{ mL}}{50 \text{ mg}} = 5.09 \text{ mL} = 5.1 \text{ mL} \)