

## 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

$$\text{Answer} = \frac{75 \text{ mg}}{1} \times \frac{1 \text{ tab}}{150 \text{ mg}} = \underline{0.5} \text{ tablets}$$

### 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

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

### 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

$$\text{Answer} = \frac{325 \text{ mg}}{1} \times \frac{1 \text{ mL}}{250 \text{ mg}} = \underline{1.3} \text{ mL}$$

#### 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

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

#### 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

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

#### 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

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

#### 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

$$\text{Answer} = \frac{12,000 \text{ units}}{1} \times \frac{1 \text{ mL}}{5,000 \text{ units}} = \underline{2.4} \text{ mL}$$

### 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

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

### 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

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

### 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

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