



## PRACTICE PROBLEMS

*Notes*

Convert the following measures to the equivalent units indicated.

26. 500 mL = \_\_\_\_\_ L    34. 600 mg = \_\_\_\_\_ g

27. 4 kg = \_\_\_\_\_ g    35. 0.736 mg = \_\_\_\_\_ mcg

28. 1.4 L = \_\_\_\_\_ mL    36. 1,600 mL = \_\_\_\_\_ L

29. 45 mL =  $\bar{3}$  \_\_\_\_\_    37. 0.015 L = \_\_\_\_\_ mL

30. 4.5 mg = \_\_\_\_\_ mcg    38. 0.18 g = \_\_\_\_\_ mg

31.  $\bar{3}$  3 $\frac{1}{2}$  = \_\_\_\_\_ mL    39. 25 mcg = \_\_\_\_\_ mg

32. 6.5 L = \_\_\_\_\_ mL    40. 5.2 g = \_\_\_\_\_ kg

33. 60 g = \_\_\_\_\_ kg

Answers on p. 589

## CONVERTING BETWEEN SYSTEMS

The methods presented previously can be used to change a measure in one system to its equivalent in another or the conversion factor method can be used. This method requires that you consider the size of units. To convert from a larger unit to a smaller unit of measure, you multiply by the conversion factor as shown in Example 1. To convert from a smaller to a larger unit of measure, you must divide by the conversion factor.

**Example 1:**

(apothecary) (metric)

$$\text{gr } \frac{1}{100} = \text{_____ mg}$$

(large) (small)

### ➔ Solution Using Conversion Factor Method

Equivalent: gr 1 = 60 mg

Conversion factor is 60.

A grain is larger than a milligram.

Multiply 1/100 by 60 to obtain 60/100.

Because the final answer is a metric measure, 60/100 is changed to a decimal by dividing 100 into 60. The fraction could also be reduced first to its lowest term (3/5) then changed to a decimal by dividing 5 into 3.

**Answer:** 0.6 mg

## CHAPTER 8

### Answers to Practice Problems

- |                |                                                           |               |                                     |
|----------------|-----------------------------------------------------------|---------------|-------------------------------------|
| 1. 0.6 L       | 18. 4 mL                                                  | 34. 0.6 g     | 51. 330 mg                          |
| 2. 16 mg       | 19. 0.001 L                                               | 35. 736 mcg   | 52. 4000 mL                         |
| 3. 4000 g      | 20. 0.008 g                                               | 36. 1.6 L     | 53. 158.4 lb or $158\frac{2}{5}$ lb |
| 4. 0.003 mg    | 21. 500 mg                                                | 37. 15 mL     | 54. 0.48 mg                         |
| 5. 0.0003 g    | 22. 0.3 kg                                                | 38. 180 mg    | 55. 2400 mL                         |
| 6. 10 g        | 23. 0.025 g                                               | 39. 0.025 mg  | 56. 700 mL                          |
| 7. 1900 mL     | 24. 65,000 g                                              | 40. 0.0052 kg | 57. 550 mL                          |
| 8. 0.0005 kg   | 25. 6 mcg                                                 | 41. 27.27 kg  | 58. 900 mL                          |
| 9. 70 mcg      | 26. 0.5 L                                                 | 42. gr 1/4    | 59. 81 mL/hr                        |
| 10. 0.65 L     | 27. 4000 g                                                | 43. 150 mL    | 60. 31 mL/hr                        |
| 11. 40 mg      | 28. 1400 mL                                               | 44. 300 mg    | 61. 42 mL/hr                        |
| 12. 0.00012 kg | 29. $\bar{3} 1\frac{1}{2}$ , $\bar{3}$ iss, $\bar{3}$ iss | 45. 210 mL    | 62. 52 mL/hr                        |
| 13. 0.18 g     | 30. 4500 mcg                                              | 46. 1/4 qt    | 63. 875 mL                          |
| 14. 1.7 L      | 31. 105 mL                                                | 47. 3 tbs     | 64. 0.875 L                         |
| 15. 15,000 g   | 32. 6500 mL                                               | 48. 3 g       | 65. 125 mL                          |
| 16. 3500 mg    | 33. 0.06 kg                                               | 49. 90 mg     |                                     |
| 17. 160 g      |                                                           | 50. 4 tsp     |                                     |

Notes**PRACTICE PROBLEMS**

Calculate the following problems using one of the formulas presented in this chapter.

1. Order: 0.4 mg p.o.

Available: Tablets labeled 0.2 mg. \_\_\_\_\_

2. Order: 0.75 g p.o.

Available: Capsules labeled 250 mg. \_\_\_\_\_

3. Order: 90 mg p.o.

Available: Tablets labeled 60 mg. \_\_\_\_\_

4. Order: 7.5 mg p.o.

Available: Tablets labeled 2.5 mg. \_\_\_\_\_

5. Order: 0.05 mg p.o.

Available: Tablets labeled 25 mcg. \_\_\_\_\_

6. Order: 0.4 mg p.o.

Available: Tablets labeled 200 mcg. \_\_\_\_\_

7. Order: 1,000 mg p.o.

Available: Tablets labeled 500 mg. \_\_\_\_\_

8. Order: 0.6 g p.o.

Available: Capsules labeled 600 mg. \_\_\_\_\_

9. Order: 1.25 mg p.o.

Available: Tablets labeled 625 mcg. \_\_\_\_\_

Calculate the following in milliliters; round to the nearest tenth where indicated.

10. Order: 10 mg subcut.

Available: 15 mg per mL. \_\_\_\_\_

11. Order: 400 mg p.o.

Available: Oral solution labeled 200 mg/5 mL. \_\_\_\_\_

12. Order: 15 mEq p.o.

Available: Oral solution labeled 20 mEq/10 mL. \_\_\_\_\_

13. Order: 125 mg p.o.

Available: Oral solution labeled 250 mg/5 mL. \_\_\_\_\_

14. Order: 0.025 mg p.o.

Available: Oral solution labeled  
0.05 mg/5 mL. \_\_\_\_\_

15. Order: 375 mg p.o.

Available: Oral solution labeled  
125 mg/5 mL.

*Notes*

Answers on pp. 603-605



## CHAPTER REVIEW

Calculate the following dosages using the medication label or information provided. Label answers correctly: tabs, caps, mL. Answers expressed in milliliters should be rounded to the nearest tenth where indicated.

1. Order: Phenobarbital gr  $\frac{1}{2}$  p.o. t.i.d.

Available: Phenobarbital tablets  
labeled 30 mg.

2. Order: Gantrisin 500 mg p.o. q.i.d.

Available:

NDC 0004-0009-01 ITEM 73314

Roche

**GANTRISIN<sup>®</sup>**  
(sulfisoxazole)

**0.5 g**

Each tablet contains  
0.5 g sulfisoxazole.

CAUTION: Federal law prohibits  
dispensing without prescription.

**100 Tablets**

USUAL DOSAGE: For dosage recommendations and other important  
prescribing information, read accompanying insert.  
ROCHE LABORATORIES  
a division of Hoffmann-La Roche Inc., Nutley, NJ 07110

3 0004-0009-01 9

Dispense in tight, light-resistant  
containers as defined in USP<sup>N</sup>. **0293**  
STORE AT 59° TO 86° F (15° TO 30° C).  
LOT EXPIRES

3. Order: Indocin 50 mg p.o. t.i.d.

Available:

**Indocin<sup>®</sup> 25 mg**  
(Indomethacin)

Dist. by:  
**MERCK & CO., INC.**  
West Point, PA 19486, USA

NDC 0006-0025-68  
6505-00-926-2154

USUAL ADULT DOSAGE:  
1 or 2 capsules 2 or 3 times a day.  
See accompanying circular.  
This is a bulk package and not  
intended for dispensing.  
Dispense in a well-closed container.  
Rx only

**100 Capsules**

MSD  
25  
INDOCIN

89-5200-9000  
2 101

9155218  
100/No. 3316

Notes

4. Order: Hydrochlorothiazide 50 mg p.o. b.i.d.

Available: \_\_\_\_\_

Each tablet contains: Hydrochlorothiazide ----- 50 mg  Each tablet bears the  and the trademark ORETIC for product identification. ©Abbott Abbott Laboratories North Chicago, IL60064, U.S.A.	NDC 0074-6985-01 100 Tablets  <b>ORETIC</b> <sup>®</sup>  HYDROCHLORO-THIAZIDE TABLETS, USP  <b>50 mg</b>  Caution: Federal (U.S.A.) law prohibits dispensing without prescription.	Dispense in a USP tight container  See enclosure for prescribing information  <b>SPECIMEN</b>  Exp. Lot 02 6227-3/R19
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5. Order: Aspirin gr 10 p.o. q4h p.r.n. for pain.

Available: \_\_\_\_\_

SN 0007-9090-2700 72  1  Store below 30°C (86°F). Protect from moisture.  *Do not use if the printed seal under lid is broken or missing.  <b>WARNER CHILCOTT LABORATORIES</b> Div of Warner-Lambert Co Morris Plains, NJ 07950 USA  0606G018	N 0047-0606-32  <h1>Aspirin Tablets, USP</h1> <h2>Analgesic/Antipyretic</h2> For relief of minor aches and pains and reduction of fever.  <b>WARNING:</b> Children and teenagers should not use this medicine for chicken pox or flu symptoms before a doctor is consulted about Reye syndrome, a rare but serious illness.  <b>Ingredients:</b> Aspirin. Also contains corn starch; microcrystalline cellulose.  1000 Tablets 5 grains (325 mg) each  	6505-00-153-8750  <b>Adult Dose</b> —Adults and children over 12 years of age, 1 or 2 tablets every 4 hours as necessary, up to 12 tablets a day.  <b>Caution</b> —If pain persists for more than 10 days or redness is present, or in conditions affecting children under 12 years of age, consult a physician immediately.  <b>Warnings</b> —Keep this and all medicines out of children's reach. In case of accidental overdose, contact a physician immediately.  As with any drug, if pregnant or nursing a baby, seek the advice of a health professional before using this product.  Exp date and lot
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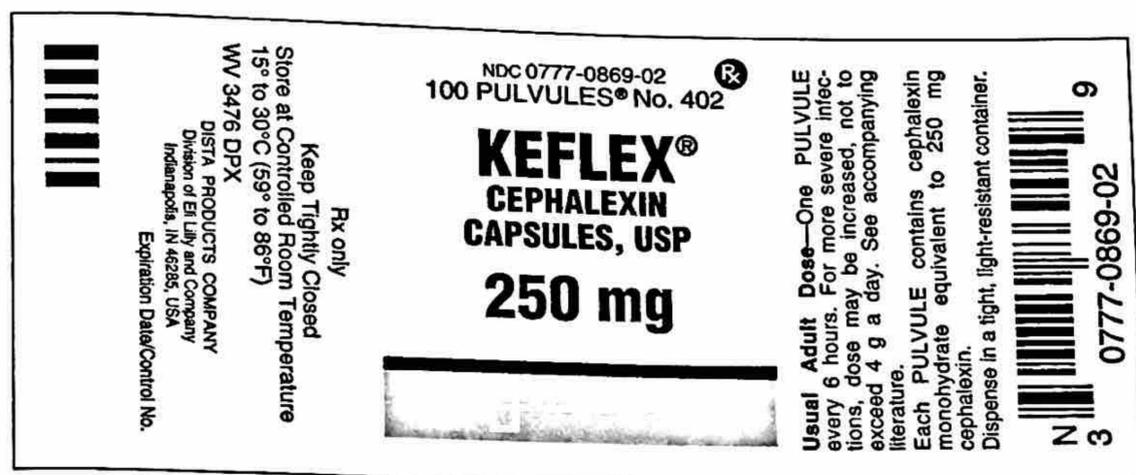
6. Order: Digoxin 0.375 mg p.o. daily.

Available: Scored tablets. (can be broken in half).

100 Tablets <b>LANOXIN</b> <sup>®</sup> (digoxin) Tablets 250 mcg (0.25 mg) Store at 15° to 25°C (59° to 77°F) in a dry place. Glaxo Wellcome Inc. 542538 LOT EXP	100 Tablets NDC 0173-0249-55 <b>LANOXIN</b> <sup>®</sup> (digoxin) Tablets Each scored tablet contains 250 mcg (0.25 mg) For indications, dosage, precautions, etc., see accompanying package insert. CAUTION: Federal law prohibits dispensing without prescription. Glaxo Wellcome Inc. Research Triangle Park, NC 27709 Made in U.S.A. Rev. 5/97	 N 0173-0249-55 5
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

7. Order: Keflex 0.25 g p.o. q6h.

Available:



NDC 0777-0869-02  
100 PULVULES® No. 402

**KEFLEX®**  
CEPHALEXIN  
CAPSULES, USP  
**250 mg**

Usual Adult Dose—One PULVULE every 6 hours. For more severe infections, dose may be increased, not to exceed 4 g a day. See accompanying literature.

Each PULVULE contains cephalixin monohydrate equivalent to 250 mg cephalixin.

Dispense in a tight, light-resistant container.

Keep Tightly Closed  
Store at Controlled Room Temperature  
15° to 30°C (59° to 86°F)  
WV 3476 DPX

Rx only

EXPIRATION DATE CONTROL NO.

Division of Eli Lilly and Company  
Indianapolis, IN 46205, USA

DISTR. PRODUCTS COMPANY

0777-0869-02

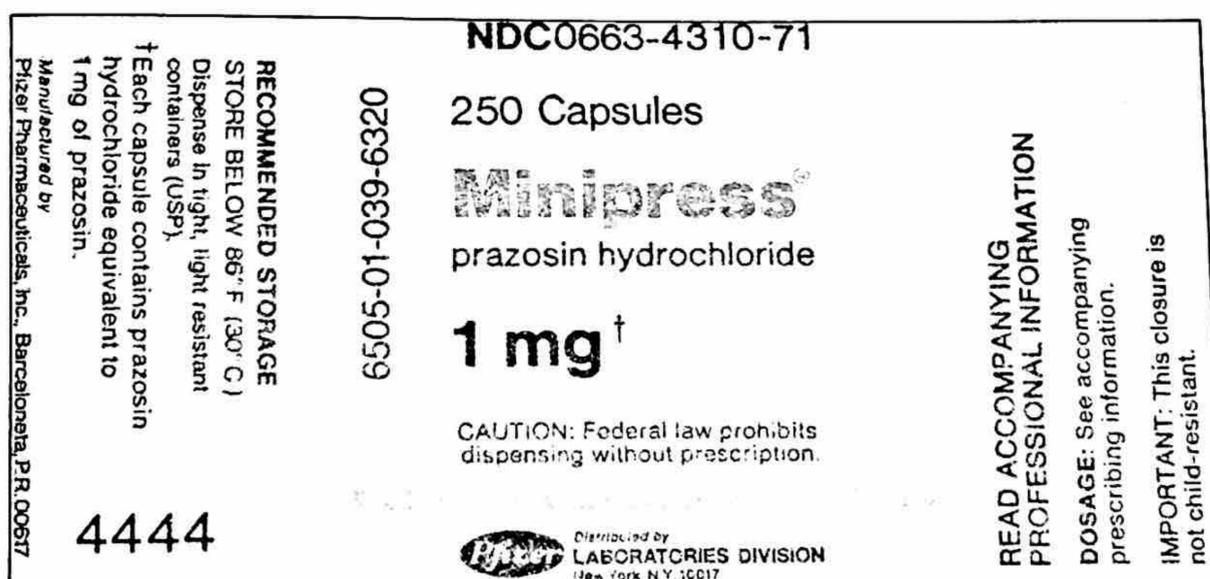
*Notes*

8. Order: Seconal 100 mg p.o. at bedtime.

Available: Seconal capsules labeled 100 mg.

9. Order: Minipress 2 mg p.o. b.i.d. × 2 days.

Available:



NDC 0663-4310-71

250 Capsules

**Minipress®**  
prazosin hydrochloride

**1 mg<sup>†</sup>**

CAUTION: Federal law prohibits dispensing without prescription.

RECOMMENDED STORAGE  
STORE BELOW 86°F (30°C)  
Dispense in tight, light resistant containers (USP).

† Each capsule contains prazosin hydrochloride equivalent to 1 mg of prazosin.

Manufactured by  
Pfizer Pharmaceuticals, Inc., Barcelona, P.R. 00617

6505-01-039-6320

4444

Distributed by  
LABORATORIES DIVISION  
New York, N.Y. 10017

READ ACCOMPANYING  
PROFESSIONAL INFORMATION

DOSAGE: See accompanying prescribing information.

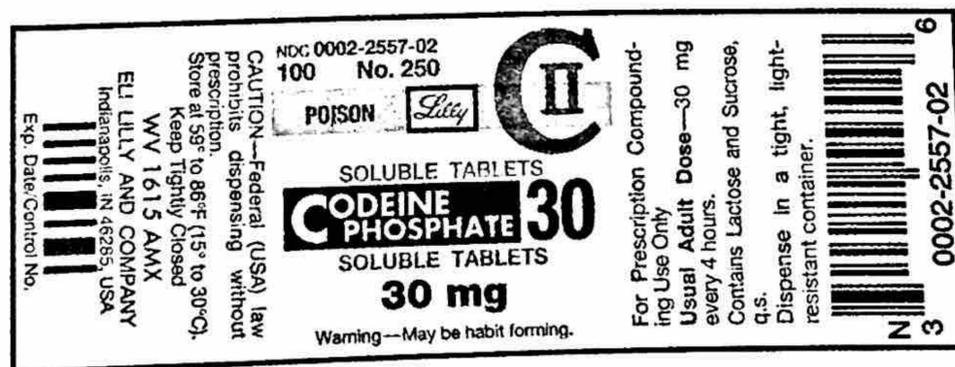
IMPORTANT: This closure is not child-resistant.

10. Order: Motrin 0.8 g p.o. q8h p.r.n. for pain.

Available: Tablets labeled 400 mg.

11. Order: Codeine gr <sup>3</sup>/<sub>4</sub> p.o. q4h p.r.n. for pain.

Available: Scored tablets. (can be broken in half).



NDC 0002-2557-02  
100 No. 250

POISON

**CODEINE PHOSPHATE 30**  
SOLUBLE TABLETS

Warning—May be habit forming.

For Prescription Compound-  
ing Use Only

Usual Adult Dose—30 mg every 4 hours.

Contains Lactose and Sucrose, q.s.

Dispense in a tight, light-resistant container.

CAUTION—Federal (USA) law prohibits dispensing without prescription.

Keep Tightly Closed  
Store at 59° to 86°F (15° to 30°C).

WV 1615 AMX

Eli Lilly and Company  
Indianapolis, IN 46205, USA

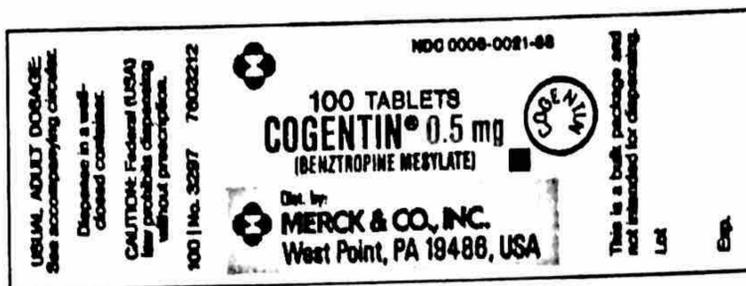
Exp. Date/Control No.

0002-2557-02

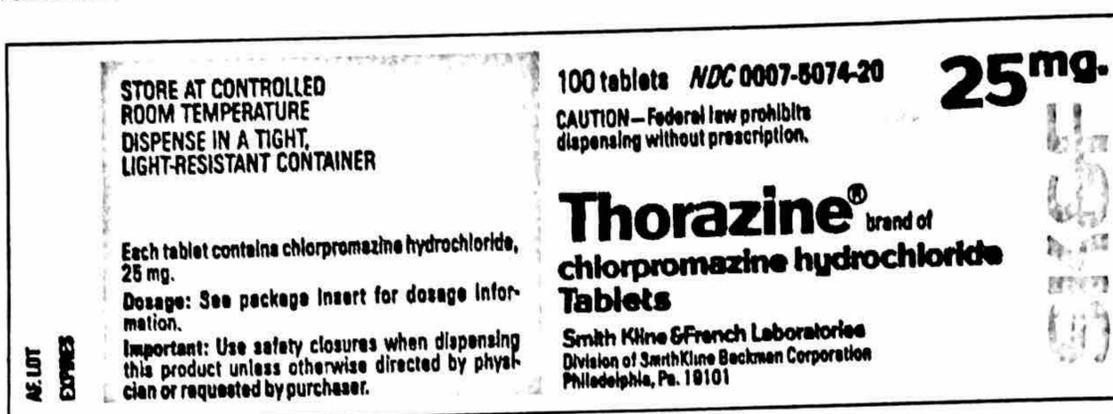
**Notes**

12. Order: Cephradine 0.5 g p.o. q6h.  
Available: Cephradine 250-mg caps.

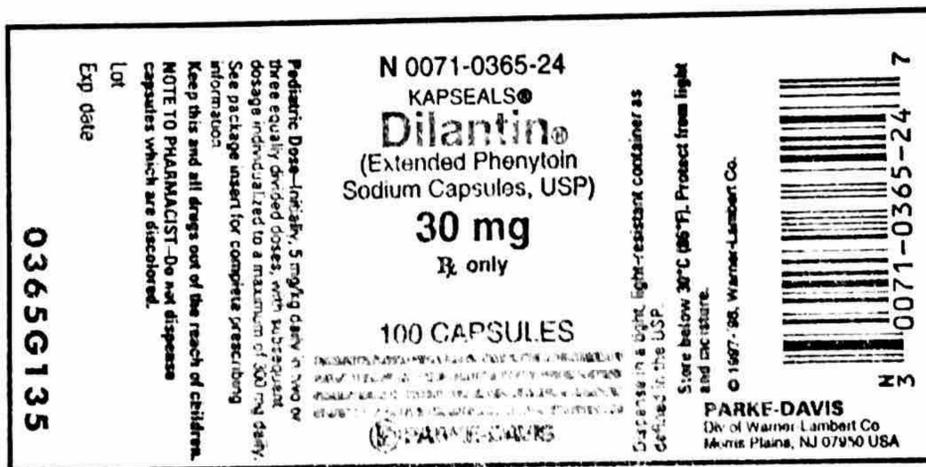
13. Order: Cogentin 0.5 mg p.o. at bedtime.  
Available:



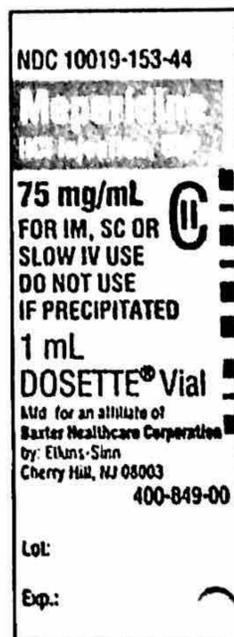
14. Order: Thorazine 75 mg p.o. b.i.d.  
Available:



15. Order: Dilantin 60 mg p.o. b.i.d.  
Available:



16. Order: Meperidine hydrochloride 50 mg I.M. q4h p.r.n. for pain.  
Available:



17. Order: Solu-Medrol 60 mg IV daily.

Available:

*Notes*

Single-Dose Vial For IV or IM use  
See package insert for complete product information.  
Each 2 mL (when mixed) contains: methylprednisolone sodium succinate equiv. to methylprednisolone, 125 mg.  
Lyophilized in container  
The Upjohn Company  
Kalamazoo, MI 49001, USA

**Solu-Medrol®**  
Sterile Powder  
methylprednisolone sodium succinate for injection, USP  
125mg

NDC 0009-0190-00  
2 mL Act. 9-Vial®

18. Order: Amikacin 90 mg IM q12h.

Available:

NDC 0015-3020-20 2 mL vial  
EQUIVALENT TO 500 mg AMIKACIN per 2 mL  
**AMIKIN®**  
Amikacin Sulfate Injection, USP  
FOR I.M. OR I.V. USE  
CAUTION: Federal law prohibits dispensing without prescription.

0.66% sodium bisulfite added as an antioxidant; buffered with 2.5% sodium citrate, adjusted to pH 4.5 with H<sub>2</sub>SO<sub>4</sub>. • Store at controlled room temperature 15°-30°C (59°-86°F).  
READ CIRCULAR  
APOTHECON®  
A Bristol-Myers Squibb Company  
Princeton, NJ 08540 USA  
3020200RL-3

Cont: Exp. Date:

19. Order: Amoxicillin 300 mg p.o. q8h.

Available:

**AMOXIL®**  
125mg/5mL  
NDC 0029-6008-23

**AMOXIL®**  
AMOXICILLIN FOR ORAL SUSPENSION  
100mL (when reconstituted)

Directions for mixing: Tap bottle until all powder flows freely. Add approximately 1/3 total amount of water for reconstitution. shake vigorously to wet powder. Add remaining water; again shake vigorously. Each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 125 mg amoxicillin.  
Usual Adult Dosage: 250 to 500 mg every 8 hours.  
Usual Child Dosage: 20 to 40 mg/kg/day in divided doses every 8 hours, depending on age, weight and infection severity. See accompanying prescribing information.

Keep tightly closed. Shake well before using. Refrigeration preferable but not required. Discard suspension after 14 days.

LOT: 9405793-F  
EXP:

Rx only  
NDC 0029-61-125-3652  
Net contents: Equivalent to 2.5 grams amoxicillin. Store dry powder at room temperature.  
SmithKline Beecham Pharmaceuticals  
Philadelphia, PA 19101

3 0029-6008-23 1

20. Order: Amoxicillin 0.5 g via nasogastric tube q6h.

Available:

**AMOXIL®**  
250mg/5mL  
NDC 0029-6009-23

**AMOXIL®**  
AMOXICILLIN FOR ORAL SUSPENSION  
100mL (when reconstituted)

Directions for mixing: Tap bottle until all powder flows freely. Add approximately 1/3 total amount of water for reconstitution. shake vigorously to wet powder. Add remaining water; again shake vigorously. Each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 250 mg amoxicillin.  
Usual Adult Dosage: 250 to 500 mg every 8 hours.  
Usual Child Dosage: 20 to 40 mg/kg/day in divided doses every 8 hours, depending on age, weight and infection severity. See accompanying prescribing information.

Keep tightly closed. Shake well before using. Refrigeration preferable but not required. Discard suspension after 14 days.

LOT: 9405803-E  
EXP:

Net contents: Equivalent to 5.0 grams amoxicillin. Store dry powder at room temperature.  
Caution: Federal law prohibits dispensing without prescription.  
SmithKline Beecham Pharmaceuticals  
Philadelphia, PA 19101

3 0029-6009-23 8

Notes

21. Order: Phenobarbital elixir 45 mg p.o. b.i.d.  
 Available: Phenobarbital elixir 20 mg/5 mL. \_\_\_\_\_

22. Order: Heparin 3000 units subcut b.i.d.  
 Available: \_\_\_\_\_

NDC 63323-262-01 926201  
**HEPARIN SODIUM**  
 INJECTION, USP  
**5,000 USP Units/mL**  
 (Derived from Porcine Intestinal Mucosa)  
 For IV or SC Use Rx only  
**1 mL Multiple Dose Vial**  
 Usual Dosage: See insert.  
 American Pharmaceutical Partners, Inc.  
 Los Angeles, CA 90024  
 401810A  
 LOT  
 EXP

23. Order: Procaine penicillin 600,000 units IM q12h.  
 Available: \_\_\_\_\_

NDC 0002-7185-01  
 10 ml VIAL No. 554  
  
**STERILE PENICILLIN G PROCAINE**  
**SUSPENSION, USP**  
 300,000 Units per ml  
 Multiple Dose  
**DURACILLIN® A.S.**  
 REFERENCE: See below 8°C (46°F) CAUTION: Federal (U.S.A.) law prohibits dispensing without prescription. For information, see insert. Usual Adult Dose—1 ml intramuscularly once or twice a day. See literature. Each ml contains 300,000 units (crystalline Penicillin G procaine, sodium citrate 4%, lactin 1%, powder 0.1%, with methylparaben, 0.5%, propylparaben 0.2%, benzyl alcohol 1% as preservatives. Water for injection, q.s., 1 ml. **SHAKE WELL.**  
 10 1000 400  
 401810A  
 Indianapolis, IN 46285, U.S.A.  
 Exp. Date/Control No.

24. Order: Gentamicin 70 mg IV q8h.  
 Available: \_\_\_\_\_

**SCHERING**  
**20 ml Multiple Dose Vial** Sterile  
 For use in preparation of large volume parenterals  
**Garamycin® Injectable**  
 brand of gentamicin sulfate injection, USP  
**40 mg/ml** For Parenteral Administration  
 20 ml = 800 mg  
 Caution: Federal law prohibits dispensing without prescription.  
 Schering Pharmaceutical Corporation (PR), Manila, Puerto Rico 00701  
 An Affiliate of Schering Corporation, Kenilworth, N.J. 07033  
 Usual Adult Dose: See package insert. Each ml of aqueous solution contains: gentamicin sulfate, USP equivalent to 40 mg gentamicin, 1.8 mg methylparaben and 0.2 mg propylparaben as preservatives, 3.2 mg sodium bisulfite, and 0.1 mg edetate disodium. Store between 2° and 30°C (36° and 86°F). GARAMYCIN Injectable should not be physically premixed with other drugs.

25. Order: Add potassium chloride 20 mEq to each IV bag.  
 Available: \_\_\_\_\_

**40 mEq Potassium Chloride**  
 for Inj. Concentrate, USP (2 mEq/mL)  
**CONCENTRATE**  
 MUST BE DILUTED BEFORE USE  
 20 mL Single-dose For I.V. use. NDC 0074-6853-05  
**KCl** Each mL contains potassium chloride, 2 mEq (149 mg). May contain HCl for pH adjustment. Sterile, nonpyrogenic. 4 mOsmol/mL (calc). Usual dosage: See insert. Discard unused portion. Caution: Federal (USA) law prohibits dispensing without prescription.  
 ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS, USA

26. Order: Depo-Medrol 60 mg IM every Monday  $\times$  2 weeks.

Available:

*Notes*

NDC 0009-0306-01 1 ml	For IM, intrasynovial and soft tissue injection only. Not for IV use.
<b>Depo-Medrol®</b> Sterile Aqueous Suspension sterile methylprednisolone acetate suspension, USP	See package insert for complete product information.
<b>80 mg per ml</b>	Shake well immediately before using. 812 312 201 The Upjohn Company Kalamazoo, MI 49001, USA

27. Order: Vistaril 100 mg IM stat.

Available: Vistaril 50 mg/mL.

28. Order: Morphine sulfate 6 mg subcut q4h p.r.n. for pain.

Available:

LOT EXP.		LIGHT SENSITIVE: Keep covered in carton until time of use. To open—Cut seal along dotted line.
25 DOSETTE® Vials Each contains 1 mL	<b>MORPHINE CII</b>	NDC 0641-0180-25
<b>MORPHINE</b> SULFATE INJECTION, USP	Each mL contains morphine sulfate 10 mg, monobasic sodium phosphate monohydrate 10 mg, dibasic sodium phosphate, anhydrous 2.8 mg, sodium formaldehyde sulfoxylate 3 mg and phenol 2.5 mg in Water for Injection. pH 2.5-6.5; sulfuric acid added, if needed, for pH adjustment. Sealed under nitrogen. NOTE: Do not use if color is darker than pale yellow, if it is discolored in any other way or if it contains a precipitate. Caution: Federal law prohibits dispensing without prescription. Code: 0180-25 8-50180h	
<b>10 mg/mL</b>	WARNING: May be habit forming.	NDC 3-0641-0180-25-8
FOR SC, IM OR SLOW IV USE NOT FOR EPIDURAL OR INTRATHECAL USE PROTECT FROM LIGHT — Store at 15°-30°C (59°-86°F). Avoid freezing. USUAL DOSAGE: See package insert.		
ELKINS-SINN, INC. Cherry Hill, NJ 08003-4099 A subsidiary of A. H. Robins Company		

29. Order: Atropine 0.3 mg IM stat.

Available: Atropine 0.4 mg/mL.

30. Order: Stadol 1 mg IM q4h p.r.n. for pain.

Available:

LOT EXP.		206 0915 5449 20 1 mL
<b>BRISTOL LABORATORIES</b> A Bristol Myers Squibb Co. Product, New York, NY 10543, U.S.A. HEAD OFFICE: 100 EAST WASHINGTON ST., P.O. BOX 100, SPRING HOUSE, PA 15146 U.S. Patent Nos. 3,879,637; 4,139,554; 5,444,808; 5,444,809	<b>Stadol®</b> BUTORPHANOL TARTRATE INJECTION, USP (For IM/IV Use) Store at Room Temp.	
	<b>2 mg (2 mg per mL)</b>	
	SINGLE DOSE VIAL Caution: Federal law prohibits dispensing without prescription.	

31. Order: Ativan 1 mg IM stat.

Available: Ativan 4 mg/mL.

**Notes**

32. Order: Kanamycin 250 mg IM q6h.

Available:

NDC 0015-3502-20  
 EQUIVALENT TO  
 500 mg KANAMYCIN per 2 mL  
**KANTREX®**  
 Kanamycin Sulfate  
 Injection, USP  
 FOR I.M. OR I.V. USE  
 CAUTION: Federal law prohibits  
 dispensing without prescription.

0.05% sodium bisulfite added as  
 an antioxidant, buffered with 2.2%  
 sodium citrate. • Adjusted to pH  
 4.5 with H<sub>2</sub>SO<sub>4</sub>. • Kantrex  
 Injection should not be physically  
 mixed with other antibacterial  
 agents.  
**READ ACCOMPANYING CIRCULAR**  
 Distributed by APOTHECON®  
 A Bristol-Myers Squibb Co.  
 Princeton, NJ 08540  
 Made in USA 3502200RL-1

MAXIMUM DAILY DOSE: 1.5 g



Cont: \_\_\_\_\_  
 Exp. Date: \_\_\_\_\_

33. Order: Robinul 0.4 mg IM stat on call to OR.

Available:

To open—Cut seal along dotted line

NDC 0031-7890-95

Twenty-Five 2 ml Single Dose Vials

**Robinul® Injectable**

Brand of  
**Glycopyrrolate Injection, USP**  
 0.4 mg/2 ml  
 (0.2 mg/ml)

Water for Injection, USP q.s./Benzyl  
 Alcohol, NF (preservative) 0.9%  
 pH adjusted, when necessary, with hydro-  
 chloric acid and/or sodium hydroxide.  
 For I.M. or I.V. administration.

For dosage and other directions for  
 use, consult accompanying product  
 literature.  
 Store at Controlled Room Tempera-  
 ture, Between 15° C and 30° C (59° F  
 and 86° F).  
 CAUTION: Federal law prohibits dis-  
 pensing without prescription.

MANUFACTURED FOR PHARMACEUTICAL DIVISION  
 A. H. ROBINS COMPANY, RICHMOND, VA. 23220  
 by ELKINS-SINN, INC., CHERRY HILL, N.J. 08034  
 a subsidiary of A. H. Robins Company 10-81

**AH-ROBINS**

Exp. \_\_\_\_\_  
 Lot \_\_\_\_\_

34. Order: Aminophylline 80 mg IV q6h.

Available:

20 ml DOSETTE® AMPUL

**AMINOPHYLLINE**  
 INJECTION, USP

**500 mg/20 ml**  
 (25 mg/ml)

Anhydrous Theophylline 19.7 mg/ml  
 FOR SLOW INTRAVENOUS USE

A-1320E

35. Order: Lithium citrate oral solution 300 mg t.i.d.

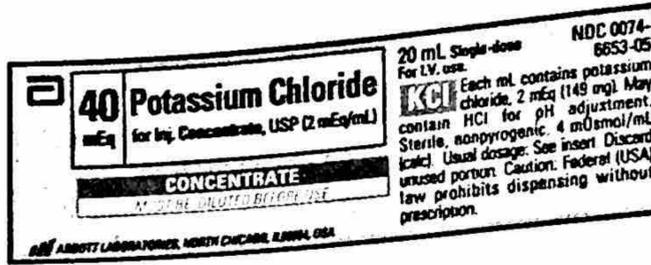
Available: Lithium citrate 300 mg/5 mL.



# Notes

39. Order: Potassium chloride 10 mEq IV  $\times$  2 L.

Available:



40. Order: Augmentin 0.875 g p.o. q12h.

Available:



## Answers to Chapter Review

**Note** For Chapter Review Problems, only answers are shown. If needed, review setup of problems in Practice Problems 1-15.

- |                                     |             |                       |                                     |
|-------------------------------------|-------------|-----------------------|-------------------------------------|
| 1. 1 tab                            | 15. 2 caps  | 31. 0.3 mL            | 47. 2 tabs                          |
| 2. 1 tab                            | 16. 0.7 mL  | 32. 1 mL              | 48. 6 mL                            |
| 3. 2 caps                           | 17. 1 mL    | 33. 2 mL              | 49. 12 mL                           |
| 4. 1 tab                            | 18. 0.4 mL  | 34. 3.2 mL            | 50. 2.5 mL                          |
| 5. 2 tabs                           | 19. 12 mL   | 35. 5 mL              | 51. 1 tab                           |
| 6. $1\frac{1}{2}$ tabs or 1.5 tabs  | 20. 10 mL   | 36. 1 tab             | 52. 2 tabs                          |
| 7. 1 cap                            | 21. 11.3 mL | 37. 1 tab             | 53. $1\frac{1}{2}$ tabs or 1.5 tabs |
| 8. 1 cap                            | 22. 0.6 mL  | 38. 2 caps (pulvules) | 54. 28 mL                           |
| 9. 2 caps                           | 23. 2 mL    | 39. 5 mL              | 55. 0.5 mL                          |
| 10. 2 tabs                          | 24. 1.8 mL  | 40. 1 tab             | 56. 3 tabs                          |
| 11. $1\frac{1}{2}$ tabs or 1.5 tabs | 25. 10 mL   | 41. 2 tabs            | 57. 2 tabs or 2 film tabs           |
| 12. 2 caps                          | 26. 0.8 mL  | 42. 1.3 mL            | 58. 1 tab                           |
| 13. 1 tab                           | 27. 2 mL    | 43. 2 mL              | 59. 0.8 mL                          |
| 14. 3 tabs                          | 28. 0.6 mL  | 44. 3 mL              | 60. 2 tabs                          |
|                                     | 29. 0.8 mL  | 45. 2 tabs            |                                     |
|                                     | 30. 0.5 mL  | 46. 2 tabs            |                                     |

## CHAPTER 16

## Answers to Practice Problems

**Note** The following problems could be set up without placing 1 under a value; placing a 1 under the value as shown in the setup for problems 1-20 doesn't alter the value of the number.

- |                                                                |                                                                                          |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1. $gr\ x = \frac{gr\ 1}{60\ mg} \times \frac{15\ mg}{1}$      | 11. $x\ mL = \frac{1.5\ mL}{0.4\ g} \times \frac{0.3\ g}{1}$                             |
| 2. $x\ mg = \frac{60\ mg}{gr\ 1} \times \frac{gr\ 1/4}{1}$     | 12. $x\ mL = \frac{1\ mL}{15\ mg} \times \frac{60\ mg}{gr\ 1} \times \frac{gr\ 1/4}{1}$  |
| 3. $x\ mg = \frac{1\ mg}{1000\ mg} \times \frac{400\ mg}{1}$   | 13. $x\ cap = \frac{1\ cap}{500\ mg} \times \frac{1000\ mg}{1\ g} \times \frac{1\ g}{1}$ |
| 4. $x\ mL = \frac{15\ mL}{1\ tbs} \times \frac{2\ tbs}{1}$     | 14. $x\ mL = \frac{5\ mL}{400\ mg} \times \frac{400\ mg}{1}$                             |
| 5. $x\ mg = \frac{1000\ mg}{1\ g} \times \frac{0.007\ g}{1}$   | 15. $x\ mL = \frac{1\ mL}{25\ mg} \times \frac{150\ mg}{1}$                              |
| 6. $x\ mL = \frac{1000\ mL}{1\ L} \times \frac{0.5\ L}{1}$     | 16. $x\ tab = \frac{1\ tab}{125\ mg} \times \frac{250\ mg}{1}$                           |
| 7. $x\ g = \frac{1\ g}{1000\ mg} \times \frac{529\ mg}{1}$     | 17. $x\ tab = \frac{1\ tab}{0.25\ mg} \times \frac{0.125\ mg}{1}$                        |
| 8. $x\ L = \frac{1\ L}{1000\ mL} \times \frac{1,600\ mL}{1}$   | 18. $x\ mL = \frac{5\ mL}{125\ mg} \times \frac{300\ mg}{1}$                             |
| 9. $x\ lb = \frac{1\ lb}{2.2\ kg} \times \frac{46.4\ kg}{1}$   | 19. $x\ mL = \frac{5\ mL}{125\ mg} \times \frac{1000\ mg}{1\ g} \times \frac{1\ g}{1}$   |
| 10. $x\ inch = \frac{1\ inch}{2.5\ cm} \times \frac{5\ cm}{1}$ | 20. $x\ mL = \frac{1\ mL}{150\ mg} \times \frac{1000\ mg}{1\ g} \times \frac{0.3\ g}{1}$ |

**Note** Placing a 1 under the value doesn't alter the value of the number.

### Answers to Chapter Review

1.  $x \text{ tab} = \frac{1 \text{ tab}}{12.5 \text{ mg}} \times \frac{25 \text{ mg}}{1}$   
 $x = \frac{25}{12.5}$   
 $x = 2 \text{ tabs}$
2.  $x \text{ mL} = \frac{15 \text{ mL}}{\frac{30 \text{ mEq}}{3}} \times \frac{20 \text{ mEq}}{1}$   
 $x = \frac{15 \times 2}{3}$   
 $x = \frac{30}{3}$   
 $x = 10 \text{ mL}$
3.  $x \text{ mL} = \frac{1 \text{ mL}}{15 \text{ mg}} \times \frac{20 \text{ mg}}{1}$   
 $x = \frac{20}{15}$   
 $x = 1.3 \text{ mL}$
4.  $x \text{ mL} = \frac{1 \text{ mL}}{225 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{0.5 \text{ g}}{1}$   
 $x = \frac{1 \times 1000}{225} \times 0.5 = \frac{500}{225}$   
 $x = 2.2 \text{ mL}$
5.  $x \text{ tab} = \frac{1 \text{ tab}}{25 \text{ mg}} \times \frac{18.75 \text{ mg}}{1}$   
 $x = \frac{18.75}{25}$   
 $x = 0.75 = \frac{3}{4} \text{ tab (state as } \frac{3}{4} \text{ tab; tablets scored in fourths)}$
6.  $x \text{ mL} = \frac{1 \text{ mL}}{100 \text{ mg}} \times \frac{80 \text{ mg}}{1}$   
 $x = \frac{80}{100}$   
 $x = 0.8 \text{ mL}$
7.  $x \text{ mL} = \frac{1 \text{ mL}}{10,000 \text{ units}} \times \frac{6500 \text{ units}}{1}$   
 $x = \frac{6500}{10,000}$   
 $x = 0.65 \text{ mL}$
8.  $x \text{ mL} = \frac{4 \text{ mL}}{0.6 \text{ g}} \times \frac{1 \text{ g}}{1000 \text{ mg}} \times \frac{300 \text{ mg}}{1}$   
 $x = \frac{4 \times 300}{0.6 \times 1000} = \frac{1200}{600}$   
 $x = 2 \text{ mL}$
9.  $x \text{ tab} = \frac{1 \text{ tab}}{\frac{150 \text{ mg}}{1}} \times \frac{300 \text{ mg}}{1}$   
 $x = \frac{2}{1}$   
 $x = 2 \text{ tabs}$
10.  $x \text{ mL} = \frac{1 \text{ mL}}{62.5 \text{ mg}} \times \frac{175 \text{ mg}}{1}$   
 $x = \frac{175}{62.5}$   
 $x = 2.8 \text{ mL}$
11.  $x \text{ tab} = \frac{1 \text{ tab}}{400 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{0.4 \text{ g}}{1}$   
 $x = \frac{1000 \times 0.4}{400}$   
 $x = \frac{400}{400}$   
 $x = 1 \text{ tab}$
12.  $x \text{ tab} = \frac{1 \text{ tab}}{\frac{250 \text{ mg}}{1}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{0.5 \text{ g}}{1}$   
 $x = \frac{4 \times 0.5}{1}$   
 $x = \frac{2}{1}$   
 $x = 2 \text{ tab}$
13.  $x \text{ tab} = \frac{1 \text{ tab}}{0.5 \text{ mg}} \times \frac{0.5 \text{ mg}}{1}$   
 $x = \frac{0.5}{0.5}$   
 $x = 1 \text{ tab}$