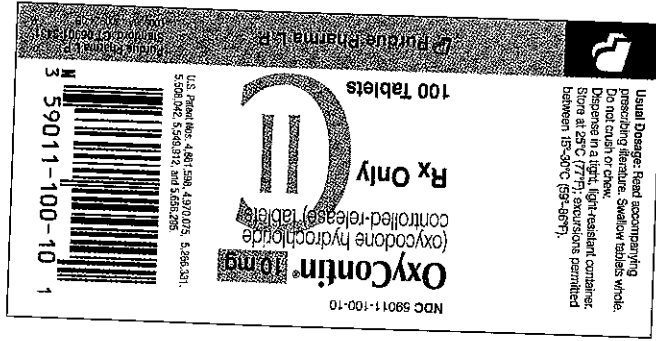


Workspace

2. Use the label in ● Figure 4.1 to determine the number of grams of OxyContin in 1 tablet of the drug.



● Figure 4.1
Drug label for OxyContin.
(Reprinted with permission of Purdue Pharma.)

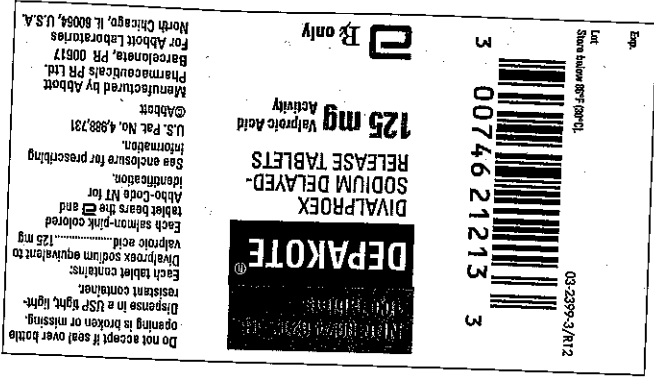
- The prescriber ordered *methorexate 2.5 mg PO q12h*, for a patient with psoriasis. How many micrograms of this drug are administered in a day? How many liters of urine are in the bag?
- If a patient drank $1\frac{1}{2}$ quarts of water, how many pints of water did the patient drink?

Exercises

Reinforce your understanding in class or at home.

- 400 mg = _____ g
- 0.003 g = _____ mg
- 0.07 g = _____ L
- 2,500 mL = _____ mL
- 1.7 L = _____ mL
- 4.3 L = _____ mL
- 600 mcg = _____ mg
- $4\frac{1}{2}$ qt = _____ pt
- 4 T = _____ g
- 5 T = _____ oz
- 32 oz = _____ pt

13. Using the drug label in ● Figure 4.2, determine the number of micrograms of Depakote in one tablet.



● Figure 4.2
Drug label for Depakote.
(Reproduced with the permission of Abbott Laboratories.)

14. The physician ordered a loading dose of *digoxin 520 mcg PO stat*. How many milligrams are in this dose?

15. According to the physician's order sheet in ● Figure 4.3, what is the dose in grams of the chlorpromazine?

FORM 01 109 12065 - 0889

PHYSICIAN'S ORDERS

DATE	TIME	DRUG	STRENGTH	ROUTE	OTHER
7/3/2010	4 PM	Chlorpromazine	50 mg	PO	t.i.d.

PLEASE INDICATE BEEPER # →

PATIENT CERTIFICATION

18/24/30 Buddhas
Aezha

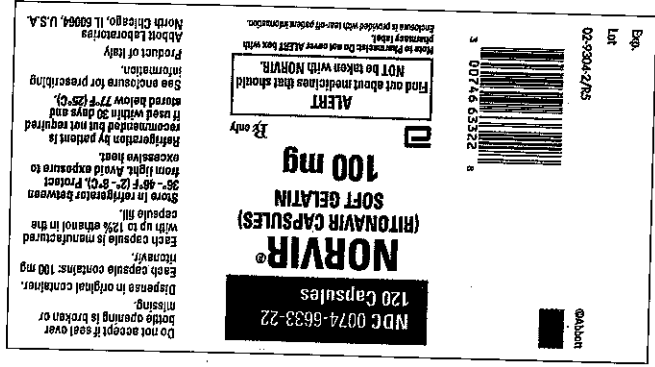
7/3/10

28945 Abdul Danish
2 Ober St
Boulder, Co
43012
Mae Ling MD

CHART COPY

● Figure 4.3
Physician's order sheet.

- A patient is drinking $\frac{1}{2}$ pint of orange juice every two hours. At this rate, how many quarts of orange juice will the patient drink in eight hours?
- Use the label in ● Figure 4.4 to determine the number of grams in one capsule of Norvir.



● Figure 4.4
Drug label for Norvir.
(Reproduced with the permission of Abbott Laboratories.)

18. An infant weighs 3,400 grams. How much does the infant weigh in kilograms?

19. 2.1 cm = _____ mm

20. 5 ft = _____ in

Additional Exercises

Now, test yourself!

- 6.5 mg = _____ mcg
- 0.05 g = _____ mg
- 0.04 g = _____ mg
- 4.75 L = _____ mL
- 15 mm = _____ cm
- 1 pt = _____ cups

Workspace

Workspace

15. According to the physician's order sheet in ● Figure 4.3, what is the dose in grams of the chlorpromazine?

PHYSICIAN'S ORDERS

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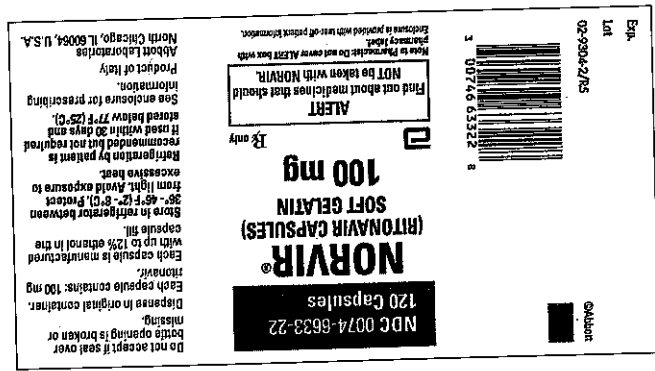
DATE	TIME	ORDER	PATIENT CERTIFICATION
7/3/2010	4 PM	Chlorpromazine 50 mg PO t.i.d.	12/24/30 Buddhist Aetna
			28945 Abdul De ruish 2 Ocher St. Boulder, Co 43612
			7/3/10 Mae Ling MD

PLEASE INDICATE BEEPER # →

● Figure 4.3
Physician's order sheet.

16. A patient is drinking $\frac{1}{2}$ pint of orange juice every two hours. At this rate, how many quarts of orange juice will the patient drink in eight hours?

17. Use the label in ● Figure 4.4 to determine the number of grams in one capsule of Norvir.



● Figure 4.4
Drug label for Norvir.
(Reproduced with the permission of Abbott Laboratories.)

18. An infant weighs 3,400 grams. How much does the infant weigh in kilograms?

19. 2.1 cm = _____ mm

20. 5 ft = _____ in

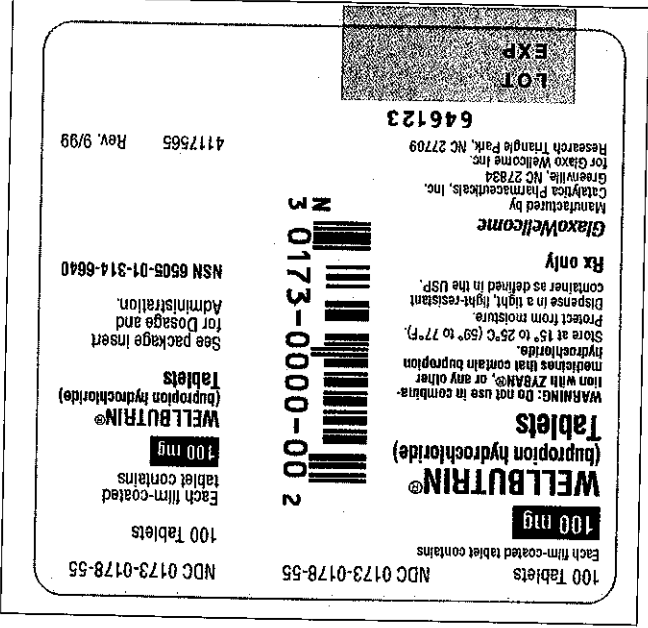
Additional Exercises

Now, test yourself!

- 1. 6.5 mg = _____ mcg
- 2. 0.05 g = _____ mg
- 3. 0.04 g = _____ mg
- 4. 4.75 L = _____ mL
- 5. 15 mm = _____ cm
- 6. 1 pt = _____ cups

7. 120 mL = _____ cc
 8. 100,000 mcg = _____ mg
 9. 2 qt = _____ pt
 10. 6 T = _____ t
 11. 8 pt = _____ qt
 12. 0.26 kg = _____ g

13. The label in ● Figure 4.5 indicates the quantity of Wellbutrin in one tablet. Change milligrams to grams.



● Figure 4.5
 Drug label for Wellbutrin.
 (Reproduced with permission of GlaxoSmithKline.)

14. The physician ordered *ProBanthine* 30 mg PO *ac* hs. What is this dose in PO grams?

15. According to the physician's order sheet in ● Figure 4.6, what is the dose of Timentin in milligrams?

FORM 01 108 12085 - 0389

PHYSICIAN'S ORDERS

CHART COPY

DATE	TIME	
7/3/2010	4 PM	Timentin (ticarcillin disodium/clavulanate potassium) 3.1 g IVPB q4h for 10 days
PATIENT CERTIFICATION		
18/24/30	Budthast	Aetna
7/3/10		
PHYSICIAN'S ORDERS		
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 Boulder, Co
 43612
 Mae Ling MD

PLEASE INDICATE BEEPER # →

● Figure 4.6

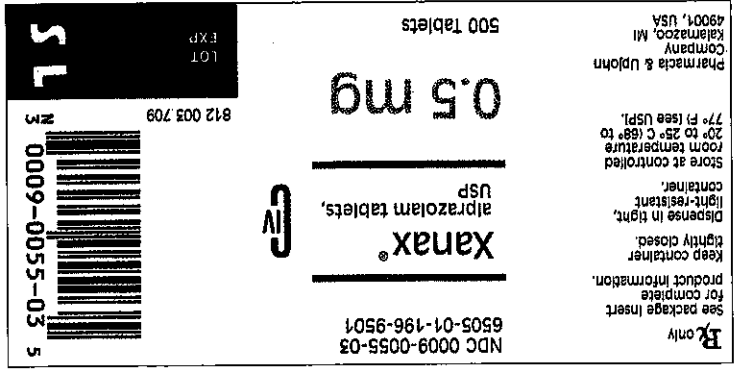
Physician's order sheet.

16. The prescriber ordered the following:

Orange juice $\frac{1}{2}$ pint PO q2h.

How many ounces of orange juice should be given q2h?

17. A patient is receiving 1 tablet of Xanax. Read the label in ● Figure 4.7. How many grams of Xanax is the patient receiving?



● Figure 4.7
 Drug label for Xanax.
 (Reg. Trademark of Pfizer Inc. Reproduced with permission.)

18. The label in ● Figure 4.8 indicates the amount of Zantac in each tablet. Convert milligrams to grams.



● Figure 4.8
 Drug label for Zantac.
 (Reproduced with permission of GlaxoSmithKline.)

19. An infant weighs 2.8 kg. How much does the infant weigh in grams?

20. Read the order on the physician's order sheet in ● Figure 4.9. Convert the dose to grams.

FORM 01 108 12085 - 0389

PHYSICIAN'S ORDERS

CHART COPY

DATE	TIME	
8/4/2010	8 AM	Cimetidine 400 mg PO b.i.d.
PATIENT CERTIFICATION		
01/24/08	R.C.	Medicare
01/24/08		
PHYSICIAN'S ORDERS		
CHART COPY		

PLEASE INDICATE BEEPER # →

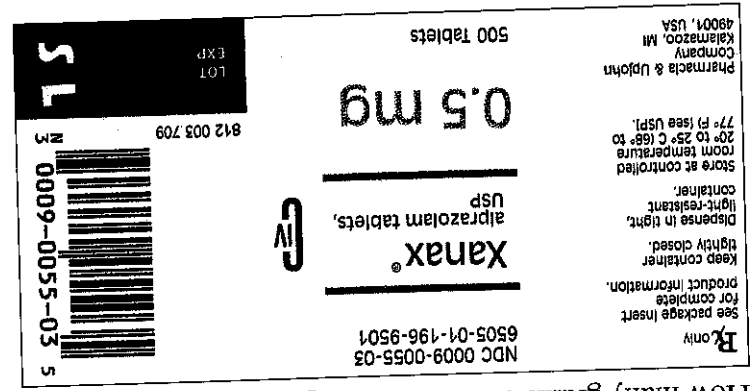
01/24/08
 Frank Kezman
 3 Elm St.
 Belpre, NY
 11720

● Figure 4.9

Physician's order sheet.

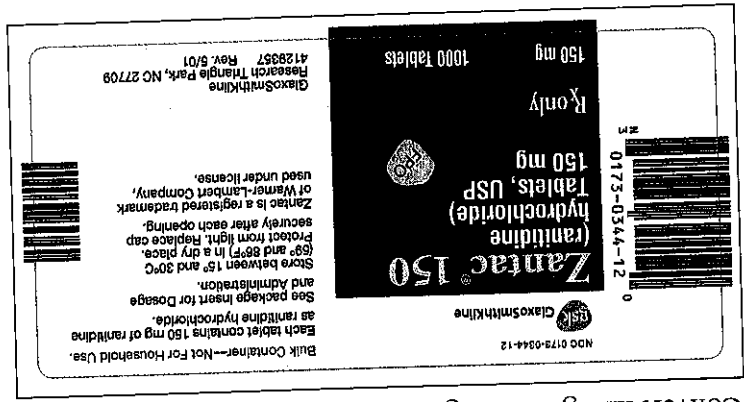
Workspace

17. A patient is receiving 1 tablet of Xanax. Read the label in ● Figure 4.7. How many grams of Xanax is the patient receiving?



● Figure 4.7 Drug label for Xanax.

18. The label in ● Figure 4.8 indicates the amount of Zantac in each tablet. Convert milligrams to grams.



● Figure 4.8 Drug label for Zantac.

19. An infant weighs 2.8 kg. How much does the infant weigh in grams?
 20. Read the order on the physician's order sheet in ● Figure 4.9. Convert the dose to grams.

CHART COPY

DATE	TIME	8/4/2010	8AM	Cimetidine 400 mg PO b.i.d.					
PATIENT CERTIFICATION									
PLEASE INDICATE BEEPER # →									

12/24/16
 R.C.
 Medicare

612408
 Frank Kleiman
 3 Elm St.
 Balhpage, NY
 11720

● Figure 4.9 Physician's order sheet.

Cumulative Review Exercises

Review your mastery of previous chapters.

1. 7.8 g = _____ mg
2. 0.25 mg = _____ mcg
3. 4.5 L = _____ mL
4. 12 T = _____ oz
5. 1,200 mL = _____ L
6. 7.6 kg = _____ g
7. Convert 750 mL to liters.
8. How many teaspoons are contained in 5 T?
9. The order reads Carafate 1 g PO q.i.d. Convert this dose to milligrams.
10. The patient must receive 250 mg of Cloxacillin PO q6h. Change to grams.
11. Change 0.65 mg to micrograms.
12. The physician ordered 2 T of Mylanta PO q2h. How many teaspoons of this antacid would you prepare?
13. The order is Colace 150 mg PO t.i.d. the label reads 150 mg/15 mL. How many milliliters would you prepare?
14. Change 250 mL to liters.
15. Change 0.032 g to milligrams.

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www.prenhall.com/giangrasso
 Animated examples, interactive practice questions with animated solutions, and challenge tests for this chapter can be found on the Pearson Dosage Calculation Tutor that accompanies this text. Additional, unique, interactive resources and activities can be found on the companion Web site.

Converting from One System of Measurement to Another

Chapter



Learning Outcomes

After completing this chapter, you will be able to

$$1 \text{ kilogram (kg)} \approx 2.2 \text{ pounds (lb)}$$

1. State the equivalent units of weight between the metric and household systems.
2. State the equivalent units of volume between the metric and household systems.
3. State the equivalent units of length between the metric and household systems.
4. Convert a quantity from one system of measurement to its equivalent in another system of measurement.

When calculating drug dosages, you will sometimes need to convert a quantity expressed in one system of measurement to an equivalent quantity expressed in a different system of measurement. For example, you might need to convert a quantity measured in ounces to the same quantity measured in milliliters. This chapter will show you how to accomplish such conversions.