Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

SKU: 9780357768075-SOLUTIONS

Solution and Answer Guide

Tomlinson, Boose, Curren, Curren's Math for Meds: Dosages and Solutions, 9780357768082; Chapter 1: Relative Value, Addition, and Subtraction of Decimals

Table of Contents

Problems **1**

Problems 1.1 (page 3) 1

Problems 1.2 (page 4) 2

Problems 1.3 (page 5) 3

Problems 1.4 (page 6) 4

Problems 1.5 (page 7) 6

Summary Self-Test (page 8) **10**

Problems

Problems 1.1 (page 3)

Choose the greatest value in each set.

1. a) 3.5 b) 2.7 c) 4.2

   Answer: c. 4.2 has the greatest whole number and therefore the greatest value.

2. a) 6.15 b) 5.95 c) 4.54

   Answer: a. 6.15 has the greatest whole number and therefore the greatest value.

3. a) 12.02 b) 10.19 c) 11.04

   Answer: a. 12.02 has the greatest whole number and therefore the greatest value.

4. a) 2.5 b) 1.75 c) 0.75

   Answer: a. 2.5 has the greatest whole number and therefore the greatest value.

5. a) 4.3 b) 2.75 c) 5.1

   Answer: c. 5.1 has the greatest whole number and therefore the greatest value.

6. a) 6.15 b) 7.4 c) 5.95

   Answer: b. 7.4 has the greatest whole number and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

7. a) 7.25 b) 8.1 c) 9.37

   Answer: c. 9.37 has the greatest whole number and therefore the greatest value.

8. a) 4.25 b) 5.1 c) 3.75

   Answer: b. 5.1 has the greatest whole number and therefore the greatest value.

9. a) 9.4 b) 8.75 c) 7.4

   Answer: a. 9.4 has the greatest whole number and therefore the greatest value.

10. a) 5.1 b) 6.33 c) 4.2

    Answer: b. 6.33 has the greatest whole number and therefore the greatest value.

PROBLEMS 1.2 (PAGE 4)

Choose the greatest value in each set.

1. a) 0.4 b) 0.2 c) 0.5

   Answer: c. 0.5 has the greatest number in the tenths place and therefore the greatest value.

2. a) 2.73 b) 2.61 c) 2.87

   Answer: c. 2.87 has the greatest number in the tenths place and therefore the greatest value.

3. a) 0.19 b) 0.61 c) 0.34

   Answer: b. 0.61 has the greatest number in the tenths place and therefore the greatest value.

4. a) 3.5 b) 3.75 c) 3.25

   Answer: b. 3.75 has the greatest number in the tenths place and therefore the greatest value.

5. a) 0.3 b) 0.25 c) 0.4

   Answer: c. 0.4 has the greatest number in the tenths place and therefore the greatest value.

6. a) 1.35 b) 1.29 c) 1.4

   Answer: c. 1.4 has the greatest number in the tenths place and therefore the greatest value.

7. a) 2.5 b) 2.7 c) 2.35

   Answer: b. 2.7 has the greatest number in the tenths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

8. a) 4.51 b) 4.75 c) 4.8

   Answer: c. 4.8 has the greatest number in the tenths place and therefore the greatest value.

9. a) 0.8 b) 0.3 c) 0.4

   Answer: a. 0.8 has the greatest number in the tenths place and therefore the greatest value.

10 a) 2.1 b) 2.05 c) 2.25

   Answer: c. 2.25 has the greatest number in the tenths place and therefore the greatest value.

PROBLEMS 1.3 (PAGE 5)

Choose the greatest value in each set.

1. a) 0.12 b) 0.15 c) 0.17

   Answer: c. 0.17 has the greatest number in the hundredths place and therefore the greatest value.

2. a) 1.2 b) 1.24 c) 1.23
   Rewrite 1.2 as 1.20

   Answer: b. 1.24 has the greatest number in the hundredths place and therefore the greatest value.

3. a) 0.37 b) 0.3 c) 0.36
   Rewrite 0.3 as 0.30

   Answer: a. 0.37 has the greatest number in the hundredths place and therefore the greatest value.

4. a) 3.27 b) 3.25 c) 3.21

   Answer: a. 3.27 has the greatest number in the hundredths place and therefore the greatest value.

5. a) 0.16 b) 0.11 c) 0.19

   Answer: c. 0.19 has the greatest number in the hundredths place and therefore the greatest value.

6. a) 4.23 b) 4.2 c) 4.21
   Solution: Rewrite 4.2 as 4.20

   Answer: a. 4.23 has the greatest number in the hundredths place and therefore the greatest value.

7. a) 3.27 b) 3.21 c) 3.29

   Answer: c. 3.29 has the greatest number in the hundredths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

8. a) 2.75 b) 2.73 c) 2.78

   Answer: c. 2.78 has the greatest number in the hundredths place and therefore the greatest value.

9. a) 0.31 b) 0.37 c) 0.33

   Answer: b. 0.37 has the greatest number in the hundredths place and therefore the greatest value.

10. a) 0.43 b) 0.45 c) 0.44

    Answer: b. 0.45 has the greatest number in the hundredths place and therefore the greatest value.

PROBLEMS 1.4 (PAGE 6)

Choose the greatest value in each set.

1. a) 0.24 b) 0.5 c) 0.125

   Solution: Compare the numbers from left to right:
   0.24, 0.5, 0.125 all have the same whole number.

   b. 0.5 has the greatest number in the tenths place and therefore the greatest value.

2. a) 0.4 b) 0.45 c) 0.5

   Solution: Compare the numbers from left to right:
   0.4, 0.45, and 0.5 all have the same whole number.

   c. 0.5 has the greatest number in the tenths place and therefore the greatest value.

3. a) 7.5 b) 6.25 c) 4.75

   Solution: Compare the numbers from left to right.

   a. 7.5 has the greatest whole number and therefore the greatest value.

4. a) 0.3 b) 0.25 c) 0.35

   Solution:
   Rewrite each number with the same number of decimal places:
   0.3 equals 0.30
   First, compare the numbers from left to right:
   0.30, 0.25, and 0.35 all have the same whole number.
   Next, compare the tenths place:
   0.25 has the least number in the tenths place.
   0.30 and 0.35 have the same number in the tenths place.
   Finally, compare the hundredths place.

   c. 0.35 has the greatest number in the hundredths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

5. a) 1.125 b) 1.75 c) 1.5

Solution: Compare the numbers from left to right:
1.125, 1.75, 1.5 all have the same whole number.

b. 1.75 has the greatest number in the tenths place and therefore the greatest value.

6. a) 4.5 b) 4.75 c) 4.25

Solution: Compare the numbers from left to right:
4.5, 4.75, 4.25 all have the same whole number.

b. 4.75 has the greatest number in the tenths place and therefore the greatest value.

7. a) 0.1 b) 0.01 c) 0.04

Solution: Compare the numbers from left to right:
0.1, 0.01, 0.04 all have the same whole number.

a. 0.1 has the greatest number in the tenths place and therefore the greatest value.

8. a) 5.75 b) 6.25 c) 6.5

Solution:
First, compare the numbers from left to right:
5.75 has the least whole number.
6.25 and 6.5 have the same whole number.
Next, compare the tenths place.

c. 6.5 has the greatest number in the tenths place and therefore the greatest value.

9. a) 0.6 b) 0.16 c) 0.06

Solution: Compare the numbers from left to right:
0.6, 0.16, 0.06 all have the same whole number.

a. 0.6 has the greatest number in the tenths place and therefore the greatest value.

10. a) 3.55 b) 2.95 c) 3.7

Solution:
First, compare the numbers from left to right:
2.95 has the least whole number.
3.55 and 3.7 have the same whole number.
Next, compare the tenths place.

c. 3.7 has the greatest number in the tenths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

PROBLEMS 1.5 (PAGE 8)

Add decimals.

1. $0.25 + 0.55 =$

   Solution: $0.25 + 0.55 = \underline{0.8}$

   $$\begin{array}{r} {\scriptstyle 1} \\ 0.25 \\ +0.55 \\ \hline 0.80 \end{array}$$

   0.80 becomes 0.8 after dropping unnecessary zeros from the end of the decimal fraction.

2. $0.1 + 2.25 =$

   Solution: $0.1 + 2.25 = \underline{2.35}$

   $$\begin{array}{rr} 0.1 \text{ equals } 0.10 & 0.10 \\ & +2.25 \\ & \hline & 2.35 \end{array}$$

3. $1.74 + 0.76 =$

   Solution: $1.74 + 0.76 = \underline{2.5}$

   $$\begin{array}{r} {\scriptstyle 1\ 1} \\ 1.74 \\ +0.76 \\ \hline 2.50 \end{array}$$

   2.50 becomes 2.5 after dropping unnecessary zeros from the end of the decimal fraction.

4. $1.4 + 0.02 =$

   Solution: $1.4 + 0.02 = \underline{1.42}$

   $$\begin{array}{rr} 1.4 \text{ equals } 1.40 & 1.40 \\ & +0.02 \\ & \hline & 1.42 \end{array}$$

5. $2.3 + 1.45 =$

   Solution: $2.3 + 1.45 = \underline{3.75}$

   $$\begin{array}{rr} 2.3 \text{ equals } 2.30 & 2.30 \\ & +1.45 \\ & \hline & 3.75 \end{array}$$

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

6. $3.75 + 1.05 =$

Solution: $3.75 + 1.05 = \underline{4.8}$

$$\begin{array}{r} {\scriptstyle 1} \\ 3.75 \\ +\,1.05 \\ \hline 4.80 \end{array}$$

4.80 becomes 4.8 after dropping unnecessary zeros from the end of the decimal fraction.

7. $6.35 + 2.05 =$

Solution: $6.35 + 2.05 = \underline{8.4}$

$$\begin{array}{r} {\scriptstyle 1} \\ 6.35 \\ +2.05 \\ \hline 8.40 \end{array}$$

8.40 becomes 8.4 after dropping unnecessary zeroes from the end of the decimal fraction.

8. $5.57 + 4.03 =$

Solution: $5.57 + 4.03 = \underline{9.6}$

$$\begin{array}{r} {\scriptstyle 1} \\ 5.57 \\ +4.03 \\ \hline 9.60 \end{array}$$

9.60 becomes 9.6 after dropping unnecessary zeroes from the end of the decimal fraction.

9. $0.33 + 2.42 =$

Solution: $0.33 + 2.42 = \underline{2.75}$

$$\begin{array}{r} 0.33 \\ +2.42 \\ \hline 2.75 \end{array}$$

10. $1.44 + 3.06 =$

Solution: $1.44 + 3.06 = \underline{4.5}$

$$\begin{array}{r} {\scriptstyle 1} \\ 1.44 \\ +3.06 \\ \hline 4.50 \end{array}$$

4.50 becomes 4.5 after dropping unnecessary zeroes from the end of the decimal fraction.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

Subtract decimals.

11. 1.25 – 1.125 =

Solution: 1.25 – 1.125 = 0.125

1.25 equals 1.250

$$\begin{array}{r} {\scriptstyle 4\ 10} \\ 1.2\not{5}\not{0} \\ -1.125 \\ \hline 0.125 \end{array}$$

12. 3.25 – 0.65 =

Solution: 3.25 – 0.65 = 2.6

$$\begin{array}{r} {\scriptstyle 2\ 12} \\ \not{3}.\not{2}5 \\ -0.65 \\ \hline 2.60 \end{array}$$

2.60 becomes 2.6 after dropping unnecessary zeroes from the end of the decimal fraction.

13. 2.3 – 1.45 =

Solution: 2.3 – 1.45 = 0.85

2.3 equals 2.30

$$\begin{array}{r} {\scriptstyle 1\ 13\ 10} \\ \not{2}.\not{3}\not{0} \\ -1.45 \\ \hline 0.85 \end{array}$$

14. 0.02 – 0.01 =

Solution: 0.02 – 0.01 = 0.01

$$\begin{array}{r} 0.02 \\ -0.01 \\ \hline 0.01 \end{array}$$

15. 5.5 – 2.5 =

Solution: 5.5 – 2.5 = 3

$$\begin{array}{r} 5.5 \\ -2.5 \\ \hline 3.0 \end{array}$$

3.0 becomes 3 after dropping unnecessary zeroes from the end of the decimal fraction.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

16. 7.33 – 4.03 =

Solution: 7.33 – 4.03 = 3.3

$$\begin{array}{r} 7.33 \\ -\underline{4.03} \\ 3.30 \end{array}$$

3.30 becomes 3.3 after dropping unnecessary zeroes from the end of the decimal fraction.

17. 4.25 – 1.75 =

Solution: 4.25 – 1.75 = 2.5

$$\begin{array}{r} {\scriptstyle 3\ \ 12} \\ \cancel{4}.\cancel{2}5 \\ -1.75 \\ \hline 2.50 \end{array}$$

2.50 becomes 2.5 after dropping unnecessary zeroes from the end of the decimal fraction.

18. 0.07 – 0.035 =

Solution: 0.07 – 0.035 = 0.035

0.07 equals 0.070

$$\begin{array}{r} {\scriptstyle 6\ \ 10} \\ 0.0\cancel{7}\cancel{0} \\ -0.035 \\ \hline 0.035 \end{array}$$

19. 0.235 – 0.12 =

Solution: 0.235 – 0.12 = 0.115

0.12 equals 0.120

$$\begin{array}{r} 0.235 \\ -\underline{0.120} \\ 0.115 \end{array}$$

20. 5.75 – 0.95 =

Solution: 5.75 – 0.95 = 4.8

$$\begin{array}{r} {\scriptstyle 4\ \ 17} \\ \cancel{5}.\cancel{7}5 \\ -0.95 \\ \hline 4.80 \end{array}$$

4.80 becomes 4.8 after dropping unnecessary zeroes from the end of the decimal fraction.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

Summary Self-Test (page 9)

Choose the decimals with the greatest value.

1. a) 2.45 b) 2.57 c) 2.19

   Solution: Compare the numbers from left to right:
   2.45, 2.57, and 2.19 all have the same whole number.

   b. 2.57 has the greatest number in the tenths place and therefore the greatest value.

2. a) 3.07 b) 3.17 c) 3.71

   Solution: Compare the numbers from left to right:
   3.07, 3.17, and 3.71 all have the same whole number.

   c. 3.71 has the greatest number in the tenths place and therefore the greatest value.

3. a) 0.12 b) 0.02 c) 0.01

   Solution: Compare the numbers from left to right:
   0.12, 0.02, and 0.01 all have the same whole number.

   a. 0.12 has the greatest number in the tenths place and therefore the greatest value.

4. a) 5.31 b) 5.35 c) 6.01

   Solution: Compare the numbers from left to right.

   c. 6.01 has the greatest whole number and therefore the greatest value.

5. a) 4.5 b) 4.51 c) 4.15

   Solution:
   Rewrite each number with the same number of decimal places:
   4.5 equals 4.50
   First, compare the numbers from left to right:
   4.50, 4.51, and 4.15 all have the same whole number.
   Next, compare the tenths place:
   4.15 has the least number in the tenths place.
   4.50 and 4.51 have the same number in the tenths place.
   Finally, compare the hundredths place.

   b. 4.51 has the greatest number in the hundredths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

6. a) 0.015 b) 0.15 c) 0.1

Solution:
Rewrite each number with the same number of decimal places:
0.15 equals 0.150
0.1 equals 0.100
First, comparing the numbers from left to right:
0.015, 0.150, and 0.100 all have the same whole number.
Next, compare the tenths place:
0.015 has the least number in the tenths place.
0.150 and 0.100 have the same number in the tenths place.
Finally, compare the hundredths place.

b. 0.150 or 0.15 has the greatest number in the hundredths place and therefore the greatest value.

7. a) 1.3 b) 1.25 c) 1.35

Solution:
Rewrite each number with the same number of decimal places:
1.3 equals 1.30
First, compare the numbers from left to right:
1.30, 1.25, 1.35 all have the same whole number.
Next, compare the tenths place:
1.25 has the least number in the tenths place.
1.30 and 1.35 have the same number in the tenths place.
Finally, compare the hundredths place.

c. 1.35 has the greatest number in the hundredths place and therefore the greatest value.

8. a) 0.1 b) 0.2 c) 0.25

Solution:
Rewrite each number with the same number of decimal places:
0.1 equals 0.10
0.2 equals 0.20
First, compare the numbers from left to right:
0.10, 0.20, and 0.25 all have the same whole number.
Next, compare the tenths place:
0.10 has the least number in the tenths place.
0.20 and 0.25 have the same number in the tenths place.
Finally, compare the hundredths place.

c. 0.25 has the greatest number in the hundredths place and therefore the greatest value.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

9. a) 0.125 b) 0.1 c) 0.05

Solution:
Rewrite each number with the same number of decimal places:
0.1 equals 0.100
0.05 equals 0.050
First, compare the numbers from left to right:
0.125, 0.100, and 0.050 all have the same whole number.
Next, compare the tenths place:
0.050 has the least number in the tenths place.
0.125 and 0.100 have the same number in the tenths place.
Finally, compare the hundredths place.

a. 0.125 has the greatest number in the hundredths place and therefore the greatest value.

10. a) 13.7 b) 13.5 c) 13.25

Solution: Compare the numbers from left to right:
13.7, 13.5, and 13.25 all have the same whole number.

a. 13.7 has the greatest number in the tenths place and therefore the greatest value.

Use critical thinking to choose the best answer.

11. If you have medication tablets whose strength is 0.1 mg and you must give 0.3 mg, you will need

a) 1 tab b) less than 1 tab c) more than 1 tab

Answer: c. Because the dosage ordered is greater than the dosage on hand, you will need more than 1 tablet.

12. If you have tablets with a strength of 0.25 mg and you must give 0.125 mg, you will need

a) 1 tab b) less than 1 tab c) more than 1 tab

Answer: b. Because the dosage on hand is greater than the dosage ordered, you will need less than 1 tablet.

13. If you have an order to give a dosage of 7.5 mg and the tablets have a strength of 3.75 mg, you will need

a) 1 tab b) less than 1 tab c) more than 1 tab

Answer: c. Because the dosage ordered is greater than the dosage on hand, you will need more than 1 tablet.

14. If the order is to give 0.5 mg and the tablet strength is 0.5 mg, you will give

a) 1 tab b) less than 1 tab c) more than 1 tab

Answer: a. Because the dosage ordered is equal to the dosage on hand you will need 1 tablet.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

15. The order is to give 0.5 mg and the tablets have a strength of 0.25 mg. You must give

    a) 1 tab b) less than 1 tab c) more than 1 tab

    Answer: c. Because the dosage ordered is greater than the dosage on hand, you will need more than 1 tablet.

Add the decimals manually.

16. 1.31 + 0.4 = _____

    Solution: 1.31 + 0.4 = 1.71

    0.4 equals 0.40

    $$\begin{array}{r} 1.31 \\ +0.40 \\ \hline 1.71 \end{array}$$

17. 0.15 + 0.25 = _____

    Solution: 0.15 + 0.25 = 0.4

    $$\begin{array}{r} {\scriptstyle 1} \\ 0.15 \\ +0.25 \\ \hline 0.40 \end{array}$$

    0.40 becomes 0.4 after dropping unnecessary zeros from the end of the decimal fraction.

18. 2.5 + 0.75 = _____

    Solution: 2.5 + 0.75 = 3.25

    2.5 equals 2.50

    $$\begin{array}{r} 2.50 \\ +0.75 \\ \hline 3.25 \end{array}$$

19. 3.2 + 2.17 = _____

    Solution: 3.2 + 2.17 = 5.37

    3.2 equals 3.20

    $$\begin{array}{r} 3.20 \\ +2.17 \\ \hline 5.37 \end{array}$$

20. 1.3 + 1.04 = _____

    Solution: 1.3 + 1.04 = 2.34

    1.3 equals 1.30

    $$\begin{array}{r} 1.30 \\ +1.04 \\ \hline 2.34 \end{array}$$

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

21. $4.7 + 3.03 =$ _____

Solution: $4.7 + 3.03 = \underline{7.73}$

4.7 equals 4.70

$$\begin{array}{r} 4.70 \\ +3.03 \\ \hline 7.73 \end{array}$$

22. $0.5 + 0.5 =$ _____

Solution: $0.5 + 0.5 = \underline{1}$

$$\begin{array}{r} 0.5 \\ +0.5 \\ \hline 1.0 \end{array}$$

1.0 becomes 1 after dropping unnecessary zeros from the end of the decimal fraction.

23. $5.4 + 2.6 =$ _____

Solution: $5.4 + 2.6 = \underline{8}$

$$\begin{array}{r} 5.4 \\ +2.6 \\ \hline 8.0 \end{array}$$

8.0 becomes 8 after dropping unnecessary zeros from the end of the decimal fraction.

Use critical thinking to answer the following.

24. You have just given 2 tab with a dosage strength of 3.5 mg each. What was the total dosage administered?

Solution: Add: $3.5 \text{ mg} + 3.5 \text{ mg} = \underline{7 \text{ mg}}$

$$\begin{array}{r} {\scriptstyle 1} \\ 3.5 \text{ mg} \\ +3.5 \text{ mg} \\ \hline 7.0 \text{ mg} \end{array}$$

7.0 becomes 7 mg after dropping unnecessary zeros from the end of the decimal fraction.

25. You are to give your client 1 tab labeled 0.5 mg and one labeled 0.25 mg. What is the total dosage of these two tablets?

Solution: Add: $0.5 \text{ mg} + 0.25 \text{ mg} = \underline{0.75 \text{ mg}}$

0.5 equals 0.50

$$\begin{array}{r} 0.50 \text{ mg} \\ +0.25 \text{ mg} \\ \hline 0.75 \text{ mg} \end{array}$$

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

26. If you give 2 tab labeled 0.02 mg each, what total dosage will you administer?

Solution: Add: $0.02 \text{ mg} + 0.02 \text{ mg} = \underline{0.04 \text{ mg}}$

$$\begin{array}{r} 0.02 \text{ mg} \\ +0.02 \text{ mg} \\ \hline 0.04 \text{ mg} \end{array}$$

27. You are to give 1 tab labeled 0.8 mg and 2 tab labeled 0.4 mg each. What is the total dosage?

Solution: Add: $0.8 \text{ mg} + 0.4 \text{ mg} + 0.4 \text{ mg} = \underline{1.6 \text{ mg}}$

$$\begin{array}{r} {\scriptstyle 1} \\ 0.8 \text{ mg} \\ 0.4 \text{ mg} \\ +0.4 \text{ mg} \\ \hline 1.6 \text{ mg} \end{array}$$

28. You have two tablets: one is labeled 0.15 mg and the other 0.3 mg. What is the total dosage of these two tablets?

Solution: Add: $0.15 \text{ mg} + 0.3 \text{ mg} = \underline{0.45 \text{ mg}}$

0.3 equals 0.30

$$\begin{array}{r} 0.15 \text{ mg} \\ +0.30 \text{ mg} \\ \hline 0.45 \text{ mg} \end{array}$$

Subtract the decimals manually.

29. $4.32 - 3.1 =$ _____

Solution: $4.32 - 3.1 = \underline{1.22}$

3.1 equals 3.10

$$\begin{array}{r} 4.32 \\ -3.10 \\ \hline 1.22 \end{array}$$

30. $2.1 - 1.91 =$ _____

Solution: $2.1 - 1.91 = \underline{0.19}$

2.1 equals 2.10

$$\begin{array}{r} {\scriptstyle 1\ \ 10\ \ 10} \\ 2.\not{1}\not{0} \\ -1.91 \\ \hline 0.19 \end{array}$$

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

31. $3.73 - 1.93 =$ _____

Solution: 3.73 – 1.93 = 1.8

$$\begin{array}{r} {}^{2}\cancel{3}.{}^{17}\cancel{7}3 \\ -\ 1.9\ 3 \\ \hline 1.8\ 0 \end{array}$$

1.80 becomes 1.8 after dropping unnecessary zeros from the end of the decimal fraction.

32. $5.75 - 4.05 =$ _____

Solution: 5.75 – 4.05 = 1.7

$$\begin{array}{r} 5.75 \\ -4.05 \\ \hline 1.70 \end{array}$$

1.70 becomes 1.7 after dropping unnecessary zeros from the end of the decimal fraction.

33. $1.3 - 0.02 =$ _____

Solution: 1.3 – 0.02 = 1.28

1.3 equals 1.30

$$\begin{array}{r} {}^{2}1.{}^{10}\cancel{3}\cancel{0} \\ -\ 0.\ 0\ 2 \\ \hline 1.2\ 8 \end{array}$$

34. $0.2 - 0.07 =$ _____

Solution: 0.2 – 0.07 = 0.13

0.2 equals 0.20

$$\begin{array}{r} {}^{1}0.{}^{10}\cancel{2}\cancel{0} \\ -\ 0.\ 0\ 7 \\ \hline 0.1\ 3 \end{array}$$

35. $3.95 - 0.35 =$ _____

Solution: 3.95 – 0.35 = 3.6

$$\begin{array}{r} 3.95 \\ -0.35 \\ \hline 3.60 \end{array}$$

3.60 becomes 3.6 after dropping unnecessary zeros from the end of the decimal fraction.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

36. $1.9 - 0.08 =$ _____

Solution: $1.9 - 0.08 = \underline{1.82}$

1.9 equals 1.90

$$\begin{array}{r} {\scriptstyle 8\ 10} \\ 1.\not{9}\not{0} \\ -\ 0.\ 0\ 8 \\ \hline 1.\ 8\ 2 \end{array}$$

Use critical thinking to answer the following.

37. Your client is to receive a dosage of 7.5 mg and you have only 1 tab labeled 3.75 mg. How many more milligrams must you give?

Solution: Subtract: $7.5\text{ mg} - 3.75\text{ mg} = \underline{3.75\text{ mg}}$

7.5 equals 7.50

$$\begin{array}{r} {\scriptstyle 6\ \ 14\ 10} \\ \not{7}.\not{5}\not{0}\text{ mg} \\ -\ 3.7\ 5\text{ mg} \\ \hline 3.7\ 5\text{ mg} \end{array}$$

38. You have a tablet labeled 0.02 mg and your client is to receive 0.06 mg. How many more milligrams must you give?

Solution: Subtract: $0.06\text{ mg} - 0.02\text{ mg} = \underline{0.04\text{ mg}}$

$$\begin{array}{r} 0.06\text{ mg} \\ -0.02\text{ mg} \\ \hline 0.04\text{ mg} \end{array}$$

39. The tablet available is labeled 0.5 mg, but you must give a dosage of 1.5 mg. How many more milligrams will you need to obtain the correct dosage?

Solution: Subtract: $1.5\text{ mg} - 0.5\text{ mg} = \underline{1\text{ mg}}$

$$\begin{array}{r} 1.5\text{ mg} \\ -0.5\text{ mg} \\ \hline 1.0\text{ mg} \end{array}$$

1.0 mg becomes 1 after dropping unnecessary zeros from the end of the decimal fraction.

40. Your client is to receive a dosage of 1.2 mg and you have 1 tab labeled 0.6 mg. What additional dosage in milligrams will you need?

Solution: Subtract: $1.2\text{ mg} - 0.6\text{ mg} = \underline{0.6\text{ mg}}$

$$\begin{array}{r} {\scriptstyle 0\ \ 12} \\ \not{1}.\not{2}\text{ mg} \\ -0.\ 6\text{ mg} \\ \hline 0.\ 6\text{ mg} \end{array}$$

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

41. You must give your client a dosage of 2.2 mg, but you have only 2 tab labeled 0.55 mg each. What additional dosage in milligrams will you need?

Solution: Subtract: 2.2 mg – 0.55 mg – 0.55 mg = 1.1 mg

First, subtract: 2.2 mg – 0.55 mg = 1.65 mg

2.2 equals 2.20

$$\begin{array}{r} {\scriptstyle 1\ \ 11\ 10} \\ \not{2}.\not{2}\not{0} \\ -\ 0.\ 5\ 5 \\ \hline 1.\ 6\ 5 \end{array}$$

Then: 1.65 mg – 0.55 mg = 1.1 mg

$$\begin{array}{r} 1.65\text{ mg} \\ -0.55\text{ mg} \\ \hline 1\ .10\text{ mg} \end{array}$$

1.10 becomes 1.1 mg after dropping unnecessary zeros from the end of the decimal fraction.

Determine how many tablets will be needed to give the following dosages.

42. Tablets are labeled 0.01 mg. You must give 0.02 mg.

Solution:
How many 0.01 mg tablets equal 0.02 mg?
Add: 0.01 mg + 0.01 mg = 0.02 mg
Therefore 2 tablets are needed.

43. Tablets are labeled 2.5 mg. You must give 5 mg.

Solution:
How many 2.5 mg tablets equal 5 mg?
Add: 2.5 + 2.5 = 5.0 mg
Therefore 2 tablets are needed.

44. Tablets are labeled 0.25 mg. Give 0.125 mg.

Solution:
How many 0.25 mg tablets equal 0.125 mg?
Because 0.25 mg is greater than 0.125 mg:
Subtract: 0.25 – 0.125 = 0.125

0.25 equals 0.250

$$\begin{array}{r} {\scriptstyle \ \ 4\ 10} \\ 0.2\not{5}\not{0}\text{ mg} \\ -0.1\ 2\ 5\text{ mg} \\ \hline 0.1\ 2\ 5\text{ mg} \end{array}$$

Because ½ of 0.25 mg = 0.125 mg, give ½ tablet.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

45. Tablets are 0.5 mg. Give 1.5 mg.

Solution:
How many 0.5 mg tablets equal 1.5 mg?
Add: $0.5 \text{ mg} + 0.5 \text{ mg} + 0.5 \text{ mg} = 1.5 \text{ mg}$
Therefore 3 tablets are needed.

46. A dosage of 1.8 mg is ordered. Tablets are 0.6 mg.

Solution:
How many 0.6 mg tablets equal 1.8 mg?
Add: $0.6 \text{ mg} + 0.6 \text{ mg} + 0.6 \text{ mg} = 1.8 \text{ mg}$
Therefore 3 tablets are needed.

47. Tablets available are 0.04 mg. You are to give 0.02 mg.

Solution:
How many 0.04 mg tablets equal 0.02 mg?
Because 0.04 mg is greater than 0.02 mg:
Subtract: $0.04 - 0.02 = 0.02$

$$\begin{array}{r} 0.04 \text{ mg} \\ -0.02 \text{ mg} \\ \hline 0.02 \text{ mg} \end{array}$$

Because ½ of 0.04 mg = 0.02 mg, give ½ tablet.

48. The dosage ordered is 3.5 mg. The tablets available are 1.75 mg.

Solution:
How many 1.75 mg tablets equal 3.5 mg?
Add: $1.75 + 1.75 = 3.5 \text{ mg}$
Therefore 2 tablets are needed.

49. Prepare a dosage of 3.2 mg using tablets with a strength of 1.6 mg.

Solution:
How many 1.6 mg tablets equal 3.2 mg?
Add: $1.6 + 1.6 = 3.2 \text{ mg}$
Therefore 2 tablets are needed.

50. You have tablets labeled 0.25 mg and a dosage of 0.375 mg is ordered.

Solution:
How many 0.25 mg tablets equal 0.375 mg?
You will need more than 1 tablet.
Because $1 \text{ tablet} = 0.25 \text{ mg}$, how many more tablets are needed?
Subtract: $0.375 \text{ mg} - 0.25 \text{ mg} = 0.125 \text{ mg}$

Because $0.125 \text{ mg} + 0.125 \text{ mg} = 0.25 \text{ mg}$, you will need an additional ½ tablet.
Therefore 1½ tablets are needed.

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

Instructor Manual

Tomlinson, Boose, Curren, Curren's Math for Meds: Dosages and Solutions, 978-0-357-76808-2; Chapter 1: Relative Value, Addition, and Subtraction of Decimals

TABLE OF CONTENTS

Purpose and Perspective of the Chapter **2**

Chapter Objectives **2**

What's New in This Chapter **2**

Chapter Outline **2**

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

Purpose and Perspective of the Chapter

The purpose of this chapter is to provide a refresher on the relative value, addition, and subtraction of simple decimal fractions. First, the student is reminded how to identify the relative value of decimals, as compared to the US monetary system of dollars and cents. Then the addition and subtraction of decimal numbers is reviewed. All of these calculations are important for students to understand in order to be able to complete clinical drug dosage calculations.

Chapter Objectives

The following objectives are addressed in this chapter:

1. identify the relative value of decimals.

2. add decimals.

3. subtract decimals.

What's New in This Chapter

The following elements are improvements in this chapter from the previous edition:

- *A section on clinical relevance has been added.*

[return to top]

Chapter Outline

The following outline organizes activities (including any existing discussion questions in PowerPoints or other supplements) and assessments by chapter (and therefore by topic), so that you can see how all the content relates to the topics covered in the text.

I. Relative Value of Decimals (LO 1, PPT Slide 3-13)
   a. Examples 1-3
      - Look at the whole number to determine greater value.
   b. Problems 1.1

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

- Problems 1-10. (Choose the number with the greatest value in the set of three numbers. Answers are provided).

c. Examples 4-8
- Looking for leading zeros and numbers with tenths as having the greater value.

d. Problems 1.2
- Problems 1-10. (Choose the number with the greatest value in the set of three numbers. Answers are provided).

e. Examples 9-12
- Looking for trailing zeros and numbers with hundredths as having the greater value.

f. Problems 1.3
- Problems 1-10. (Choose the number with the greatest value in the set of three numbers. Answers are provided).

g. Example 13-16
- Looking for leading zeros and numbers with tenths as having the greater value.

h. Problems 1.4
- Problems 1-10. (Choose the number with the greatest value in the set of three numbers. Answers are provided).

II. Addition and Subtraction of Decimals (LO 2 and 3, PPT Slide 14-22)

a. Example 1
- Adding two numbers with decimals

b. Example 2
- Adding two numbers with decimals

c. Example 3
- Subtracting two numbers with decimals

d. Example 4
- Subtracting two numbers with decimals

e. Problems 1.5
- Problems 1-10 (Add two numbers with decimals. A calculator may be used. Answers are provided.)
- Problems 11-20 (Subtract two numbers with decimals. A calculator may be used. Answers are provided.)

III. Summary

a. **Summary Self-Test Activity: 75 minutes total.** A summary self-test is included with 50 questions including choosing the decimal number with

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual

the greatest value, adding and subtracting decimals and using critical thinking to choose the best answer. A calculator may be used unless stated. Questions 1-10 include choosing the decimal with the greatest value in the set of three numbers. Questions 11-15 including using critical thinking in order to answer multiple choice questions about choosing which decimal number has the greater value. Questions 16-23 include adding decimal numbers manually without a calculator. Questions 24-28 include using critical thinking to add decimal numbers. Questions 29-36 include subtraction of decimal numbers. Questions 37-41 include using critical thinking to subtract decimals. Questions 42-50 use addition, subtraction, and the knowledge of greatest value in order to solve clinical dosage calculations. Answers to summary self-test are included.

[return to top]

© 2025 Cengage Learning, Inc. All Rights Reserved. May not be scanned, copied or duplicated, or posted to a publicly accessible website, in whole or in part.

Currens Math for Meds - Dosages and Solutions 12th edition Tomlinson Solutions Manual