

**Multiple Choice Questions**

1.  $1,000 \times 22.7 =$

- A. 227
- B. 2,270
- C. 22,700**
- D. 227,000

Multiply as you would whole numbers. Then add the total number of decimal places in the factors (the numbers being multiplied). Starting at the right of the product (answer), count off the same number of places and place the decimal point. If the product is a whole number, delete the decimal point and trailing zeros.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

Chapter 02 - Decimals

2.  $6.5 \div 100 =$

A. 0.65

**B.** 0.065

C. 0.0065

D. 0.00065

1. Move the decimal place of both the dividend and the divisor so that the divisor is a whole number; in this case, 65 and 1,000.

2. Divide as you would with whole numbers.

3. Place the decimal point in the quotient directly above the decimal point in the dividend:

0.065

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*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*

3.  $950.03 \div 10 =$

**A.** 95.003

B. 9.5003

C. 0.95003

D. 0.095003

1. Move the decimal place of both the dividend and the divisor so that the divisor is a whole number, in this case, 95,003 and 1,000.

2. Divide as you would with whole numbers.

3. Place the decimal point in the quotient directly above the decimal point in the dividend:

95.003

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*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*

Chapter 02 - Decimals

4.  $800.12 \times 1,000 =$   
A. 8.0012  
B. 8,001.2  
C. 80,012  
**D.** 800,120

Multiply as you would whole numbers. Then add the total number of decimal places in the factors (the numbers being multiplied). Starting at the right of the product (answer), count off the same number of places and place the decimal point. If the answer is a whole number, delete the decimal point and trailing zeros.

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

5. 0.85 rounded to the nearest tenth is \_\_\_\_\_.  
A. 0.8  
**B.** 0.9  
C. 1.0  
D. 0.86

If the number to the right of the target place value is 5 or more, round the number in the target place up one unit.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.2 Apply the rules for rounding decimals.*

*Topic: Rounding Decimals*

Chapter 02 - Decimals

6. 4.499 rounded to the nearest hundredth is \_\_\_\_\_.

- A. 4
- B. 4.49
- C. 4.5**
- D. 5

If the number to the right of the target place value is 5 or more, round the number in the target place up one unit.

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*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.2 Apply the rules for rounding decimals.*  
*Topic: Rounding Decimals*

7. 89.3233 rounded to the nearest thousandth is \_\_\_\_\_.

- A. 89.32
- B. 89.33
- C. 89.323**
- D. 89.32414

If the number to the right of the target place value is 4 or less, do not change the number in the target place value.

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*Blooms: Understand*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.2 Apply the rules for rounding decimals.*  
*Topic: Rounding Decimals*

Chapter 02 - Decimals

8. 6.35 rounded to the nearest tenth is \_\_\_\_\_.
- A. 6.38
  - B. 6.39
  - C. 6.4**
  - D. 6.3

If the number to the right of the target place value is 5 or more, round the number in the target place up one unit.

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*Blooms: Understand*  
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*Difficulty: 2 Medium*  
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*Topic: Rounding Decimals*

9. 10.6477 rounded to the nearest tenth is \_\_\_\_\_.
- A. 10.6**
  - B. 10.64
  - C. 10.65
  - D. 11.0

If the number to the right of the target place value is 4 or less, do not change the number in the target place value.

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*Accessibility: Keyboard Navigation*  
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*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.2 Apply the rules for rounding decimals.*  
*Topic: Rounding Decimals*

Chapter 02 - Decimals

10.  $0.085 + 0.73 =$

- A. 8.15
- B. 0.00815
- C. 0.0815
- D. 0.815**

Line up the decimal points and add as you would whole numbers.

$$\begin{array}{r} 0.085 \\ + 0.730 \\ \hline 0.815 \end{array}$$

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*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

11. Each position in a decimal number has a \_\_\_\_\_ value.

- A. monetary
- B. place**
- C. fraction
- D. whole

Each position in a decimal number has a place value.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

12. \_\_\_\_\_ should be used as a placeholder to the left of the decimal point when there is no whole number.

- A. A 1
- B. A 5
- C. Nothing
- D. A zero**

Using a zero as a placeholder to the right of a decimal point when there is no whole number makes the decimal point more noticeable.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*  
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*ASHP: 35.2.d Explain how calculations, use of zeros and decimals, abbreviations, illegible handwriting, missing information, drug product characteristics, preparation, labeling, work environment, and personnel impact medication errors.*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 1 Easy*  
*Learning Outcome: 2.1 Write decimals and compare their value.*  
*Topic: Writing and Comparing Decimals*

13. When comparing the value of decimals, the correct sequence is

- A. whole number, hundredths, tenths, thousandths.
- B. ignore the whole number; compare tenths, hundredths, thousandths.
- C. whole number, tenths, hundredths, thousandths.**
- D. thousandths, hundredths, tenths, whole number.

Always start with the whole number and move to the right, comparing the tenths, hundredths, thousandths, etc.

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*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.1 Write decimals and compare their value.*  
*Topic: Writing and Comparing Decimals*

14. Adding a zero to the last nonzero number after the decimal point
- A. increases the whole number only.
  - B. increases the value of the number.
  - C. decreases the value of the whole number only.
  - D. does not change the value of the number.**

Adding a zero to the last nonzero number after the decimal point does not change the value of the number.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

15. When performing a calculation containing decimals, the answer is rounded when
- A. it contains more than three numbers after the decimal point.
  - B. it contains more decimal places than needed.**
  - C. it contains more than two numbers after the decimal point.
  - D. an answer is never rounded.

An answer is rounded when it contains more decimal places than needed.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.2 Apply the rules for rounding decimals.*

*Topic: Rounding Decimals*

16. When rounding decimals, if the number to the right of the target place value is 4 or less,
- A. the number in the target place value should be rounded up by one number.
  - B. the number in the target place value should be rounded down by one number.
  - C.** the number in the target place value should not be changed.
  - D. the number in the target place value should be rounded up by two numbers.

When rounding, if the number to the right of a target place value is 4 or less, the target value should not be changed.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*  
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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.2 Apply the rules for rounding decimals.*  
*Topic: Rounding Decimals*

17. 4.99875 rounded to the nearest hundredth is \_\_\_\_\_.
- A.** 5
  - B. 4.1
  - C. 4.99
  - D. 5.91

If the number to the right of the target place value is greater than 5, the target number is rounded up. Since the number in the target place value is 9, it becomes 10. The 1 is carried to the tenth place and the 9 becomes 10 and the 1 is carried to the ones place with 0 in the tenths place. Because the tenths place is now 0, drop the decimal point and the zero.

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*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.2 Apply the rules for rounding decimals.*  
*Topic: Rounding Decimals*

18. In the conversion of fractions to decimals, the fraction should be thought of as a(n) \_\_\_\_\_ problem.

- A. multiplication
- B. division**
- C. addition
- D. subtraction

When converting fractions to decimals, think of the fractions as division problems.

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

19. When converting decimals to fractions or mixed numbers, the number to the left of the decimal point is

- A. the numerator of the fraction.
- B. the whole number.**
- C. the denominator of the fraction.
- D. not considered part of the fraction or mixed number.

When converting decimals to fractions or mixed numbers, the number to the left of the decimal point is the whole number.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

20. When adding or subtracting decimals, the decimal points
- A. are aligned.
  - B. should not be taken into consideration.
  - C. are moved to the right in both numbers.
  - D. are moved to the right in the smallest number.

Decimal points are aligned when adding or subtracting decimals.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

21. A bottle of liquid medication contains 100 mL. Patients were administered doses in the amounts of: 5.75 mL, 4.2 mL, 6.25 mL, 7.45 mL, and 5.5 mL. How much medication remains in the bottle?
- A. 29.15 mL
  - B. 74 mL
  - C. 70.85 mL
  - D. 29 mL

The sum of the doses:  $5.75 \text{ mL} + 4.20 \text{ mL} + 6.25 \text{ mL} + 7.45 \text{ mL} = 29.15 \text{ mL}$  Remainder of medication in the bottle:  $100.00 \text{ mL} - 29.15 = 70.85 \text{ mL}$

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

22. A patient should receive 15 g of a medication. You have one tablet containing 3.5 g and another containing 6.25 g. How much more medication do you need to administer the correct dose?

- A. 9.75 g
- B. 9 g
- C. 5 g
- D. 5.25 g**

The sum of the medication available:  $3.50 \text{ g} + 6.25 \text{ g} = 9.75 \text{ g}$ . The amount of medication needed:  $15.00 \text{ g} - 9.75 \text{ g} = 5.25 \text{ g}$

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

23. To determine the position of the decimal point when multiplying decimals, you should

- A. count the places to the right of the decimal point in the number you are multiplying by.
- B. count the total number of places to the left of the decimal point in both numbers.
- C. count the places to the left of the decimal point in the number you are multiplying by.
- D. count the total number of places to the right of the decimal point in both numbers.**

Count the total number of decimal places to the right of the decimal in both numbers when multiplying decimals.

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*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

24. When dividing decimals, the \_\_\_\_\_ must be converted to a whole number.
- A.** divisor
  - B. dividend
  - C. quotient
  - D. answer

The divisor must be converted to a whole number.

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*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*

25. A patient is to receive  $\frac{1}{2}$  tablet four times daily. The available tablets are 5 mg. How many milligrams of medication will the patient receive per day?
- A. 2.5 mg
  - B. 5 mg
  - C.** 10 mg
  - D. 4 mg

$$\frac{1}{2} \text{ of a 5 mg tablet} = 2.5 \text{ mg} \times 4 \text{ times daily} = 10 \text{ mg}$$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

26. Mr. Jones is to receive 2.25 mL of a liquid medication every 4 hours. How much medication will he receive during  $3\frac{1}{2}$  days?

- A. 13.5 mL
- B. 47.25 mL**
- C. 40.5 mL
- D. 50 mL

The patient will receive 6 doses per day  $\left(\frac{24\text{ hours}}{4\text{ hours}} = 6\right)$ . The amount of medication per day:  $2.25\text{ mL} \times 6 = 13.5\text{ mL}$  per day. The amount of medication over  $3\frac{1}{2}$  days:  $3\frac{1}{2} = 3.5 \times 13.5 = 47.25\text{ mL}$ .

ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.

ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.

Blooms: Apply

CAAHEP: II.C.1 Demonstrate knowledge of basic math computations

CAAHEP: II.C.2 Apply mathematical computations to solve equations

Difficulty: 3 Hard

Learning Outcome: 2.6 Multiply decimals.

Topic: Multiplying Decimals

27. Mr. Anderson received a total of 45.25 g of a medication over 5 days. He received 4 doses per day. How much medication per dose did he receive? (round to nearest hundredth)

- A. 2.26 g**
- B. 2.30 g
- C. 9.15 g
- D. 9.20 g

Method 1: The amount of medication per day:  $45.25\text{ g} \div 5\text{ days} = 9.05\text{ g}$  per day. The amount of medication per dose:  $9.05\text{ g per day} \div 4\text{ doses per day} = 2.2625 = 2.26\text{ g}$  per dose.

Method 2: Total number of doses received:  $5\text{ days} \times 4\text{ doses per day} = 20\text{ doses}$ . Amount of medication per dose:  $45.25\text{ g} \div 20\text{ doses} = 2.2625 = 2.26\text{ g}$  per dose.

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ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.

Blooms: Apply

CAAHEP: II.C.1 Demonstrate knowledge of basic math computations

CAAHEP: II.C.2 Apply mathematical computations to solve equations

Difficulty: 3 Hard

Learning Outcome: 2.7 Divide decimals.

Topic: Dividing Decimals

Chapter 02 - Decimals

28. Write the fraction  $6\frac{125}{1,000}$  in decimal form.
- A. 61.25
  - B. 0.6125
  - C. 6.125**
  - D. 612.5

$125 \div 1,000 = 0.125$ , so the decimal is 6.125

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*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

29. Mr. Adams had \$54.60 before he paid for two prescriptions at \$13.25 for each prescription. How much money does he have left?
- A. \$26.50
  - B. \$28.10**
  - C. \$1.60
  - D. Nothing; he is short 25 cents

He is purchasing two prescriptions:  $\$13.25 \times 2 = \$26.50$  for the two prescriptions. The amount he has left after the purchase:  $\$54.60 - 26.50 = \$28.10$ .

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*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 3 Hard*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Adding and Subtracting Decimals*

*Topic: Multiplying Decimals*

30. Determine the answer rounded to the nearest hundredth and convert to a fraction reduced to simplest form:  $5.45 \times 15.67 =$  \_\_\_\_\_.

- A.  $85 \frac{4}{10}$
- B.  $85 \frac{40}{100}$
- C.  $85 \frac{41}{100}$
- D.**  $85 \frac{2}{5}$

$$5.45 \times 15.67 = 85.4015 = 85.40 \text{ to nearest hundredth}$$

$$85.40 = 85 \frac{40}{100} = 85 \frac{4}{10} = 85 \frac{2}{5}$$

ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.

ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.

Blooms: Apply

CAAHEP: II.C.1 Demonstrate knowledge of basic math computations

CAAHEP: II.C.2 Apply mathematical computations to solve equations

Difficulty: 2 Medium

Learning Outcome: 2.4 Convert decimals into fractions.

Learning Outcome: 2.6 Multiply decimals.

Topic: Converting Decimals into Fractions

Topic: Multiplying Decimals

31. A bottle contains 30 ounces of medication. If each dose equals 0.3 ounce, how many doses of medication does the bottle contain?

- A. 30
- B.** 100
- C. 150
- D. 300

$$30 \text{ oz} \div 0.3 = 300 \div 3 = 100$$

ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.

ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.

Blooms: Apply

CAAHEP: II.C.1 Demonstrate knowledge of basic math computations

CAAHEP: II.C.2 Apply mathematical computations to solve equations

Difficulty: 2 Medium

Learning Outcome: 2.7 Divide decimals.

Topic: Dividing Decimals

## Fill in the Blank Questions

Chapter 02 - Decimals

32.

Convert  $\frac{20}{10}$  to a decimal: \_\_\_\_\_

2

In this case, there are no decimal points, so this is a simple division problem:  $20 \div 10 = 2$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

33.

Convert  $\frac{67}{100}$  to a decimal: \_\_\_\_\_

0.67

Divide 67 by 100 as you would whole numbers, adding a decimal point and zeros as necessary to carry out the long division. Because there is no whole number, place a zero to the left of the decimal point in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

Chapter 02 - Decimals

34.

Convert  $5 \frac{36}{1,000}$  to a decimal: \_\_\_\_\_

**5.036**

$$5 \frac{36}{1,000} = \frac{5,036}{1,000} = 5,036 \div 1,000 = 5.036$$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

35. Place the symbol  $>$ ,  $<$ , or  $=$  between the following pair of decimals to make it a true statement:  $80.8$  \_\_\_\_\_  $80.9$

$<$

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

Chapter 02 - Decimals

36. Place the symbol  $>$ ,  $<$ , or  $=$  between the following pair of decimals to make it a true statement:  $0.0030$  \_\_\_\_\_  $0.0300$

$<$

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*  
*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Understand*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.1 Write decimals and compare their value.*  
*Topic: Writing and Comparing Decimals*

37.

Place the symbol  $>$ ,  $<$ , or  $=$  between the following pair of decimals to make it a true statement:  
 $144.440$  \_\_\_\_\_  $14.444$

$\geq$

144 is larger than 14.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*  
*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Understand*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.1 Write decimals and compare their value.*  
*Topic: Writing and Comparing Decimals*

## Chapter 02 - Decimals

38.

0.99 rounded to the nearest tenth is \_\_\_\_\_.

### 1

If the number to the right of the target place value is 5 or more, round the number in the target place up one unit. Since the answer is a whole number, drop the decimal point and trailing zero.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.2 Apply the rules for rounding decimals.*

*Topic: Rounding Decimals*

39.

6.555 rounded to the nearest hundredth is \_\_\_\_\_.

### 6.56

If the number to the right of the target place value is 5 or more, round the number in the target place up one unit.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.2 Apply the rules for rounding decimals.*

*Topic: Rounding Decimals*

Chapter 02 - Decimals

40.

Convert 1.03 to a mixed number: \_\_\_\_\_.

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**1 3/100**

0.03 is in the hundredths place value so the mixed number is  $1\frac{3}{100}$ .

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

41. Convert 0.567 to a fraction: \_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**567/1,000**

The last number to the right of the decimal point is in the thousandths place value.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

Chapter 02 - Decimals

42.

$$3.033 + 41.99 = \underline{\hspace{2cm}}$$

**45.023**

Decimals are added like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 1 Easy*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

43. Sherri made two purchases at the hospital gift shop for \$11.06 and \$3.40. What is the total amount of money she spent at the gift shop?

**\$14.46**

Money is treated as decimals and added like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

Chapter 02 - Decimals

44.

$$5.803 + 0.001 + 10.02 = \underline{\hspace{2cm}}$$

**15.824**

Decimals are added like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

45.

$$6.777 + 8 + 31.82 = \underline{\hspace{2cm}}$$

**46.597**

Decimals are added like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

## Chapter 02 - Decimals

46.

$$9.003 - 5.77 = \underline{\hspace{2cm}}$$

### **3.233**

Decimals are subtracted like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

47.

$$13.821 + 0.356 + 12.27 = \underline{\hspace{2cm}}$$

### **26.447**

Decimals are added like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

Chapter 02 - Decimals

48.

$$17.008 - 2.32 = \underline{\hspace{2cm}}$$

**14.688**

Decimals are subtracted like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

49.

$$35.025 - 2.502 = \underline{\hspace{2cm}}$$

**32.523**

Decimals are subtracted like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

Chapter 02 - Decimals

50.

The difference between 928.763 and 439.763 is \_\_\_\_\_.

**489**

Decimals are subtracted like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

51.

The difference between 1,862.301 and 1,200.065 is \_\_\_\_\_.

**662.236**

Decimals are subtracted like whole numbers. Decimal points are lined up and included in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

**Worksheet Questions**

52.

## Chapter 02 - Decimals

A bottle of liquid medicine contains 100 milliliters (mL). The following amounts are given to patients from the bottle: 1.0 mL, 2.75 mL, 3.1 mL, and 1.75 mL. The amount that should be left in the bottle is \_\_\_\_\_.

**91.4** mL

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 3 Hard*

*Learning Outcome: 2.5 Add and subtract decimals.*

*Topic: Adding and Subtracting Decimals*

### Fill in the Blank Questions

53.

$$3.076 \times 0.4 =$$

**1.2304**

Multiply without considering decimal points; then count the total number of decimal places and place the decimal point in the answer, counting an equivalent number of places from the right and adding zeros as necessary.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

## Chapter 02 - Decimals

54.

$$0.0401 \times 0.0202 =$$

**0.00081002**

Multiply without considering decimal points; then count the total number of decimal places and place the decimal point in the answer, counting an equivalent number of places from the right and adding zeros as necessary.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

55.

$$0.005 \times 4.03 =$$

**0.02015**

Multiply without considering decimal points; then count the total number of decimal places and place the decimal point in the answer, counting an equivalent number of places from the right and adding zeros as necessary.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

## Worksheet Questions

Chapter 02 - Decimals

56.

A patient is given 6.5 milliliters (mL) of liquid medication 3 times a day for 4 days. She received \_\_\_\_\_ of the medication during the 4 days.

**78** mL

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 3 Hard*

*Learning Outcome: 2.6 Multiply decimals.*

*Topic: Multiplying Decimals*

**Fill in the Blank Questions**

57.

$$0.6 \div 0.02 =$$

**30**

$$0.6 \div 2.02 = 60 \div 2$$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*

Chapter 02 - Decimals

58.

$33.3 \div 11 = \underline{\hspace{2cm}}$  (round to the nearest hundredth)

**3.03**

$33.3 \div 11 = 3.027 = 3.03$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.7 Divide decimals.*  
*Topic: Dividing Decimals*

59.

$104.56 \div 100 =$

**1.0456**

$104.56 \div 100 = 1.0456$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 1 Easy*  
*Learning Outcome: 2.7 Divide decimals.*  
*Topic: Dividing Decimals*

Chapter 02 - Decimals

60.

$$4.56 + 15.8 - 12.45 = \underline{\hspace{2cm}}$$

**7.91**

$$4.56 + 15.8 = 20.36 - 12.45 = 8.22$$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

61.

$$65.998 - 25.245 + 18.75 = \underline{\hspace{2cm}} \text{ (round answer to nearest hundredth)}$$

**59.50**

$$65.998 - 25.241 = 40.753 + 18.75 = 59.503 = 59.50$$

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*  
*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*  
*Blooms: Apply*  
*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*  
*CAAHEP: II.C.2 Apply mathematical computations to solve equations*  
*Difficulty: 2 Medium*  
*Learning Outcome: 2.5 Add and subtract decimals.*  
*Topic: Adding and Subtracting Decimals*

## Chapter 02 - Decimals

62.

The correct way to write the number one hundred one and sixteen one-thousands is: \_\_\_\_\_.

### **101.016**

101 is the whole-number part, so it is written to the left of the decimal point. Use a zero as a placeholder in the tenths place to write the decimal fraction portion of the number.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

63.

The correct way to write the number four hundred twenty-three thousandths is: \_\_\_\_\_.

### **0.423**

This number has no whole-number part, so a zero is written to the left of the decimal point. Then write the decimal fraction to the right of the decimal point.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*ASHP: 35.2.d Explain how calculations, use of zeros and decimals, abbreviations, illegible handwriting, missing information, drug product characteristics, preparation, labeling, work environment, and personnel impact medication errors.*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

## Chapter 02 - Decimals

64.

The correct way to write the number sixty and three ten-thousandths is: \_\_\_\_\_.

### **60.0003**

60 is the whole-number part, so it is written to the left of the decimal point. Use zeros as placeholders to write the 3 in the ten-thousandths place to the right of the decimal point.

*ABHES: 6.b Demonstrate accurate occupational math and metric conversions for proper medication administration*

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Understand*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 1 Easy*

*Learning Outcome: 2.1 Write decimals and compare their value.*

*Topic: Writing and Comparing Decimals*

65.

Convert the fraction  $\frac{9}{16}$  to a decimal: \_\_\_\_\_

### **0.5625**

Divide 9 by 16 as you would whole numbers, adding a decimal point and zeros as necessary to carry out the long division. Because there is no whole number, place a zero to the left of the decimal point in the answer.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

## Chapter 02 - Decimals

66.

Convert the mixed number  $5\frac{3}{8}$  to a decimal: \_\_\_\_\_

### **5.375**

Place the whole-number part to the left of the decimal. Then divide 3 by 8 as you would whole numbers, adding a decimal point and zeros as necessary to carry out the long division.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

67.

Convert the mixed number  $30\frac{11}{12}$  to a decimal, rounding to the nearest hundredth: \_\_\_\_\_

### **30.92**

Place the whole-number part to the left of the decimal. Then divide 11 by 12 as you would whole numbers, adding a decimal point and zeros as necessary to carry out the long division:  $11 \div 12 = 0.9167 = 0.92$ . Place the decimal fraction to the right of the decimal point.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

Chapter 02 - Decimals

68.

Convert the mixed number  $15\frac{13}{52}$  to a decimal: \_\_\_\_\_

**152.25**

Place the whole-number part to the left of the decimal. Then divide 13 by 52 as you would whole numbers, adding a decimal point and zeros as necessary to carry out the long division.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.3 Convert fractions into decimals.*

*Topic: Converting Fractions into Decimals*

Chapter 02 - Decimals

69.

Convert 3.125 to a mixed number, reducing the fraction to lowest terms:\_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**3 1/8**

Write the whole-number part of the decimal. Then write the decimal fraction in fraction form:  $\frac{125}{1,000}$  . Reduce the fraction to lowest terms.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

Chapter 02 - Decimals

70.

Convert 100.6 to a mixed number, reducing the fraction to lowest terms: \_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**100 3/5**

Write the whole-number part of the decimal. Then write the decimal fraction in fraction form:  $\frac{125}{1,000}$ . Reduce the fraction to lowest terms.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

Chapter 02 - Decimals

71.

Convert 0.065 to a fraction, reducing the fraction to lowest terms: \_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**13/200**

Write the decimal fraction in fraction form:  $\frac{65}{1,000}$ . Reduce the fraction to lowest terms.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

Chapter 02 - Decimals

72.

Convert 0.43 to a fraction, reducing the fraction to lowest terms: \_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

**43/100**

Write the decimal fraction in fraction form:  $\frac{43}{100}$ . This fraction is already in its lowest terms.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

Chapter 02 - Decimals

73.

Convert 0.24 to a fraction, reducing the fraction to lowest terms: \_\_\_\_\_

**If the answer results in a mixed number be sure to include a space between the whole number and the fraction. Example: 1 1/4 (read as one and one-fourth).**

6/25

Write the decimal fraction in fraction form:  $\frac{24}{100}$ . Reduce the fraction to lowest terms.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.4 Convert decimals into fractions.*

*Topic: Converting Decimals into Fractions*

74.

$0.27 \div 0.03 =$

9

Move the decimal place of both the dividend and the divisor so that the divisor is a whole number, then divide as you would with whole numbers. Place the decimal point in the quotient directly above the decimal point in the dividend. Since this quotient is a whole number, drop the decimal point.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*

## Chapter 02 - Decimals

75.

$$1.625 \div 0.5 =$$

### 3.25

Move the decimal place of both the dividend and the divisor so that the divisor is a whole number, then divide as you would with whole numbers. Place the decimal point in the quotient directly above the decimal point in the dividend.

*ASHP: 12.1.a Explain the use of Roman numerals, Arabic numbers, fractions, decimals, and apothecary symbols.*

*ASHP: 28.3.a Correctly solve mathematical problems using Roman numerals, Arabic numbers, fractions, apothecary symbols, and decimals.*

*Blooms: Apply*

*CAAHEP: II.C.1 Demonstrate knowledge of basic math computations*

*CAAHEP: II.C.2 Apply mathematical computations to solve equations*

*Difficulty: 2 Medium*

*Learning Outcome: 2.7 Divide decimals.*

*Topic: Dividing Decimals*