

Add and Subtract Decimals

✓ Show What You Know

► 2-Digit Addition and Subtraction Find the sum or difference.

1.

	Hundreds	Tens	Ones
		4	5
+		7	6

2.

	Hundreds	Tens	Ones
		8	2
-		6	5

► Money Find the value.



\$ _____



\$ _____

MATH in the



Jalil has 4 tiles. Each tile has a number printed on it. The numbers are 1, 4, 7, and 9. A decimal number is formed using the tiles and the clues. Find the number.

Clues

- The digit in the tens place is the greatest number.
- The digit in the tenths place is less than the digit in the hundredths place.
- The digit in the ones place is greater than the digit in the hundredths place.

► Visualize It

Complete the table by using words with a ✓.

3	2	.	5	6

Connect to Vocabulary

Review Words

- ✓ decimal point
- ✓ hundredths
- ✓ tens
- ✓ tenths
- ✓ ones
- place value

Preview Words

- balance
- deposit
- withdrawal

► Understand Vocabulary

Draw a line to match each word with its definition.

balance

- when money is subtracted from the balance of an account

deposit

- when money is added to the balance of an account

withdrawal

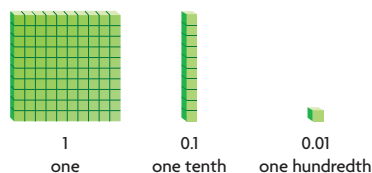
- the amount of money in an account



Name _____

Decimal Addition

I Can use base-ten blocks to model decimal addition.



Investigate

Materials ■ base-ten blocks

- A.** Use base-ten blocks to model the sum of 0.34 and 0.27.
- B.** Add the hundredths first by combining them.
Do you need to regroup the hundredths? Explain.

- C.** Add the tenths by combining them.
Do you need to regroup the tenths? Explain.

- D.** Record the sum. $0.34 + 0.27 =$ _____

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.7
- Mathematical Thinking & Reasoning MTR.2.1, MTR.4.1



Draw Conclusions

1. What if you combine the tenths first and then the hundredths?
Explain how you would regroup.

2. **MTR** If you add two decimals that are each greater than 0.5, will the sum be less than or greater than 1.0? Explain.

Go Online For more help

Make Connections

You can use a quick picture to add decimals greater than 1.

STEP 1

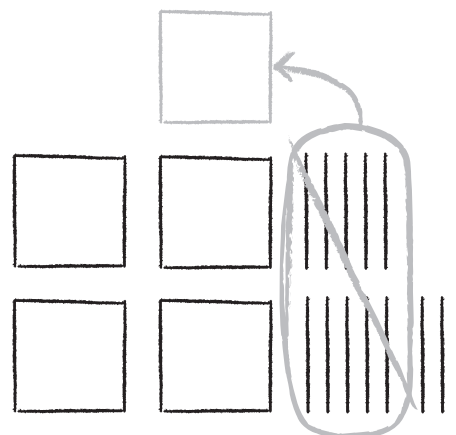
Model the sum of 2.5 and 2.8 with a quick picture.

STEP 2

Add the tenths.

- Are there more than 9 tenths? _____
If there are more than 9 tenths, regroup.

Add the ones.



STEP 3

Draw a quick picture of your answer. Then record.



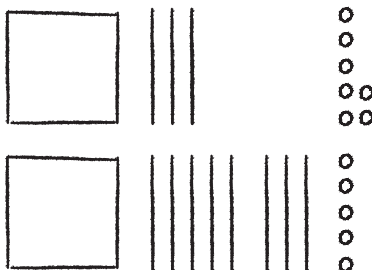
$$2.5 + 2.8 = \underline{\hspace{2cm}}$$

Share and Show

Math Board

Complete the quick picture to find the sum.

1. $1.37 + 1.85 = \underline{\hspace{2cm}}$



Math Talk

MTR 4.1

Engage in discussions on mathematical thinking.

Explain how you know where to write the decimal point in the sum.

Name _____

Add. Draw a quick picture.

2. $0.9 + 0.7 =$ _____

3. $0.65 + 0.73 =$ _____

✓ 4. $1.3 + 0.7 =$ _____

✓ 5. $2.72 + 0.51 =$ _____

Problem Solving • Applications

6. Carissa bought 0.8 pound of chicken and 2.7 pounds of turkey for lunches this week. She used a quick picture to find the amount of lunch meat. Does Carissa's work make sense? Explain.

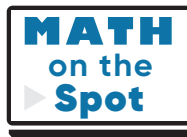


MTR
4.1

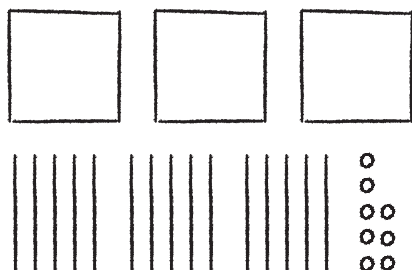
Engage in discussions on mathematical thinking.

Explain how you solved Problem 4.

7. Robyn and Jim used quick pictures to model $1.85 + 2.73$.



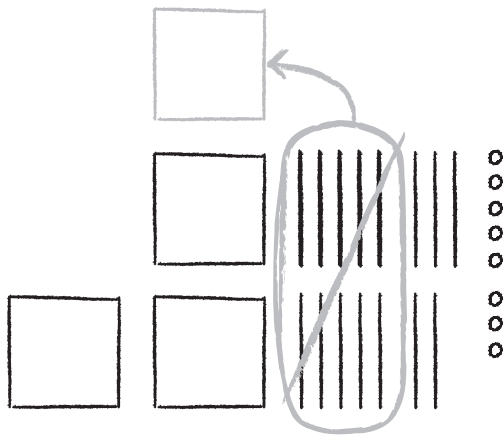
Robyn's Work



$$1.85 + 2.73 = 3.158$$

Does Robyn's work make sense?
Explain your reasoning.

Jim's Work



$$1.85 + 2.73 = 4.58$$

Does Jim's work make sense?
Explain your reasoning.

8. **MTR** Explain how you would help Robyn understand that regrouping is important when adding decimals.

9. Write a decimal addition problem that requires regrouping the hundredths. Explain how you know you will need to regroup.

Decimal Addition

Go Online

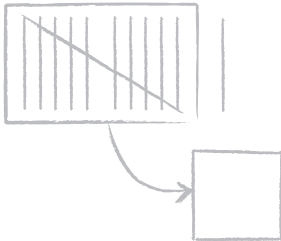
Interactive Examples

Add. Draw a quick picture.

1. $0.5 + 0.6 = \underline{1.1}$

2. $0.15 + 0.36 = \underline{\hspace{2cm}}$

3. $0.8 + 0.7 = \underline{\hspace{2cm}}$



4. $0.35 + 0.64 = \underline{\hspace{2cm}}$


5. $0.54 + 0.12 = \underline{\hspace{2cm}}$

6. $0.51 + 0.28 = \underline{\hspace{2cm}}$

Problem Solving

7. Draco bought 0.6 pound of bananas and 0.9 pound of grapes at the farmers' market. What is the total weight of the fruit?

8. Alma biked 2.65 miles in the morning and 3.19 miles in the afternoon. What total distance did she bike?

9.  Explain why drawing a quick picture is helpful when adding decimals.

Lesson Check

10. What is the sum of 2.5 and 1.9?
11. Keisha walked 0.65 hour in the morning and 0.31 hour in the evening. How many hours did she walk altogether?

Spiral Review

12. Jodi walks 35 minutes a day. If she walks for 240 days, how many minutes altogether does Jodi walk?
13. The Speeders soccer team charged \$6 to wash each car at a fundraiser car wash. The team collected a total of \$672 by the end of the day. How many cars did the team wash?

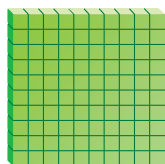
14. Celesto records the number of visitors to the snake exhibit each day for 6 days. His data are shown in the table. If admission is \$7 per person, how much money did the snake exhibit make over the 6 days?
15. Write an inequality to compare $\frac{4}{6}$ and $\frac{12}{16}$.

Visitors to the Snake Exhibit					
30	25	44	12	25	32

Name _____

Decimal Subtraction

I Can use base-ten blocks to model decimal subtraction.



1
one



0.1
one tenth



0.01
one hundredth

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.7
- Mathematical Thinking & Reasoning
MTR.1.1, MTR.4.1, MTR.5.1

Investigate

Materials ■ base-ten blocks

A. Use base-ten blocks to find $0.84 - 0.56$.
Model 0.84.

B. Subtract 0.56. Start by removing 6 hundredths.

Do you need to regroup to subtract? Explain.

C. Subtract the tenths. Remove 5 tenths.

D. Record the difference. $0.84 - 0.56 =$ _____



Draw Conclusions

1. What if you remove the tenths first and then the hundredths?
Explain how you would regroup.

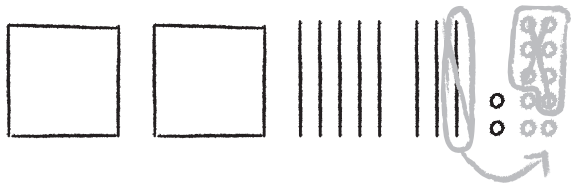
2. **MTR** If two decimals are both less than 1.0, what do you know about the difference between them? Explain.

Make Connections

You can use quick pictures to subtract decimals that need to be regrouped.

STEP 1

- Use a quick picture to model $2.82 - 1.47$.
- Subtract the hundredths.
- Are there enough hundredths to remove? _____
If there are not enough hundredths, regroup.



STEP 2

- Subtract the tenths.
- Are there enough tenths to remove? _____
If there are not enough tenths, regroup.
- Subtract the ones.



STEP 3

Draw a quick picture of your answer. Then record the answer.



$$2.82 - 1.47 = \underline{\hspace{2cm}}$$

**Math
Talk**

MTR 4.1 Engage in discussions on mathematical thinking.

Explain why you have to regroup in Step 1.

Name _____

Share and Show

Math
Board

Complete the quick picture to find the difference.

1. $0.62 - 0.18 =$ _____



Subtract. Draw a quick picture.

2. $3.41 - 1.74 =$ _____

3. $0.84 - 0.57 =$ _____

✓ 4. $4.05 - 1.61 =$ _____

✓ 5. $1.37 - 0.52 =$ _____

On Your Own

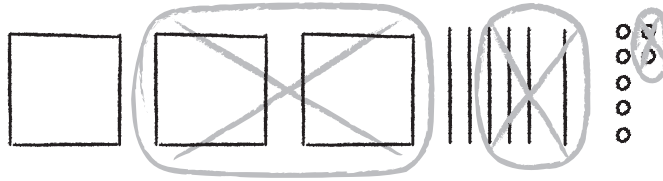
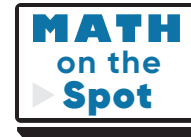
6. Write a decimal subtraction equation that requires regrouping from the tenths. Explain how you know you will need to regroup.



MTR
4.1 Engage in discussions on mathematical thinking.

Explain how you can use a quick picture to find $0.81 - 0.46$.

7. Antonio left his MathBoard on his desk during lunch. The quick picture below shows the problem he was working on when he left.



Write a word problem that can be solved using the quick picture above.

Pose a problem.

Solve your problem.

- **MTR** Describe how you can change the problem by changing the quick picture.

8. The price of a box of markers at a retail store is \$4.65. The price of a box of markers at the school bookstore is \$3.90. How much more do the markers cost at the retail store? Explain how you can use a quick picture to solve the problem.

Decimal Subtraction

Go Online

Interactive Examples

Subtract. Draw a quick picture.

1. $0.7 - 0.2 = \underline{0.5}$

2. $0.45 - 0.24 = \underline{\hspace{2cm}}$

3. $0.92 - 0.51 = \underline{\hspace{2cm}}$



4. $4.1 - 2.7 = \underline{\hspace{2cm}}$

5. $3.12 - 2.52 = \underline{\hspace{2cm}}$

6. $3.6 - 1.8 = \underline{\hspace{2cm}}$

Problem Solving



7. Yelina made a training plan to run 5.6 miles per day. So far, she has run 3.1 miles today. How much farther does she have to run to meet her goal for today?

8. Wen cut a 2.3-foot length of pipe from a pipe that was 4.1 feet long. How long is the remaining piece of pipe?

9. **WRITE** *Math* Describe a problem involving decimals that you would use a quick picture to solve. Then solve the problem.

Lesson Check

10. Ushi wants to jog 3.25 miles on the treadmill. She has jogged 1.63 miles. How much farther does she have to jog to meet her goal?
11. A new teen magazine has a readership goal of 3.5 million. Its current readership is 2.8 million. How much does its readership need to increase to meet this goal?

Spiral Review

12. What is the value of the underlined digit in 764,350?
13. Complete the equation.
- $$6 \times 794 = 6 \times \underline{\hspace{2cm}} + \underline{\hspace{2cm}} \times 90 + 6 \times 4$$
14. Complete the equation.
- $$7 \times 48 = 3 \times \underline{\hspace{2cm}} + \underline{\hspace{2cm}} \times 48$$
15. In the past two weeks, Yu earned \$513 at her part-time job. She worked a total of 54 hours. About how much did Sue earn per hour?

Name _____

Add Decimals

I Can solve real-world decimal problems using addition.**Florida's B.E.S.T.**

- Number Sense & Operations 4.NSO.2.7, 4.NSO.2.6
- Mathematical Thinking & Reasoning MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1



UNLOCK the Problem

Henry recorded the amount of rain that fell over 2 hours. In the first hour, Henry measured 2.35 centimeters of rain. In the second hour, he measured 1.82 centimeters of rain.

Henry estimated that about 4 centimeters of rain fell in 2 hours. What is the total amount of rain that fell? How can you use this estimate to decide if your answer is reasonable?

Add. $2.35 + 1.82$

- Add the hundredths first.

5 hundredths + 2 hundredths = _____ hundredths.

- Then add the tenths and ones. Regroup as needed.

3 tenths + 8 tenths = _____ tenths. Regroup.

2 ones + 1 one + 1 regrouped one = _____ ones.

- Record the sum for each place value.

$$\begin{array}{r} 2.35 \\ + 1.82 \\ \hline \end{array}$$

Draw a quick picture to check your work.**Math Talk****MTR 4.1** Engage in discussions on mathematical thinking.

Explain how you know when you need to regroup in a decimal addition problem.

So, _____ centimeters of rain fell.

Since _____ is close to the estimate, 4, the answer is reasonable.



When adding decimals, you can use equivalent decimals to help keep the numbers aligned in each place. Write additional zeros to the right of the last digit as needed, so that the addends have the same number of decimal places.

Try This! Estimate. Then find the sum.

STEP 1

Estimate the sum.

Estimate: $20.4 + 13.76$

$\downarrow \quad \downarrow$

$20 + 14 = \underline{\hspace{2cm}}$

$$20.40 + 13.76 =$$

STEP 2

Find the sum.

Add the hundredths first.
Then, add the tenths, ones, and tens.
Regroup as needed.

$$\begin{array}{r} 20.40 \\ + 13.76 \\ \hline \end{array}$$

Think: $20.4 = 20.40$

- Is your answer reasonable? Explain.

Share and Show



Estimate. Then find the sum.

1. Estimate: _____

$$\begin{array}{r} 2.5 \\ + 4.6 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 8.75 \\ + 6.43 \\ \hline \end{array}$$

- ✓ **3. Estimate:** _____

$$\begin{array}{r} 2.03 \\ + 7.89 \\ \hline \end{array}$$

- 4. Estimate:**

$$6.34 + 3.8 =$$

- ✓ 5. Estimate:

$$0.63 + 0.6 =$$

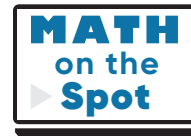


**Math
Talk**

MTR
4.1

Engage in discussions on mathematical thinking.

Explain why it is important to remember to line up the place values in each number when adding or subtracting decimals.

On Your Own

6. A city received 4.65 centimeters of rain in the first two weeks of August. During the rest of the month it rained 3.68 centimeters more than it had the first two weeks. What is the total rainfall in centimeters for the month of August?

(A) 8.33 centimeters (C) 12.98 centimeters
(B) 12.01 centimeters (D) 11.99 centimeters

- a. What do you need to find? _____
- b. What information are you given? _____

- c. How will you use addition to find the total number of centimeters of rain that fell? _____

- d. Show how you solved the problem.
- e. Fill in the bubble for the correct answer choice above.

7. Tania measured the growth of her plant each week. The first week, the plant's height measured 2.65 decimeters. During the second week, Tania's plant grew 0.38 decimeter. How tall was plant at the end of the second week?

(A) 2.27 decimeters
(B) 3.03 decimeters
(C) 3.23 decimeters
(D) 3.93 decimeters

8. Maribel had \$35.13. Then her mom gave her \$7.50 each of the two times she watched her younger brother. How much money does Maribel have now?

(A) \$41.63
(B) \$42.63
(C) \$41.63
(D) \$50.13

Problem Solving • Applications

Fill in the bubble completely to show your answer.

9. A king's crown has a ruby that is 4.9 carats and a sapphire that is 5.32 carats. What is the total number of carats on the king's crown?
- (A) 9.41 carats
(B) 9.22 carats
(C) 10.22 carats
(D) 11.12 carats
10. Vern bought 1.75 pounds of apples and 2.4 pounds of oranges. How many pounds of apples and oranges did he buy in all?
- (A) 2.15 pounds
(B) 4.15 pounds
(C) 1.99 pounds
(D) 3.75 pounds
11. Sean runs 2.62 miles. Lisa runs 3.02 miles. Shannon runs 2.78 miles. Serge runs 3.8 miles. Which two people run for a total of 5.4 miles?
- (A) Sean and Shannon (C) Lisa and Shannon
(B) Lisa and Serge (D) Sean and Serge
12. When Lupe got a puppy, it weighed three and eighty-five hundredths pounds. After a month, it weighed ninety-five hundredths more than when she got it. How much did the puppy weigh at the end of the month?
- (A) 480 pounds (C) 4.80 pounds
(B) 4.70 pounds (D) 3.70 pounds

Add Decimals

Go Online

Interactive Examples

Estimate. Then find the sum.

1. Estimate: _____

$$\begin{array}{r} 3.4 \\ + 2.7 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 5.26 \\ + 9.75 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 3.09 \\ + 8.89 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 7.30 \\ + 1.84 \\ \hline \end{array}$$

5. Estimate: _____

$$5.29 + 6.78 = \underline{\hspace{2cm}}$$

6. Estimate: _____

$$6.2 + 2.36 = \underline{\hspace{2cm}}$$

7. Estimate: _____

$$9.2 + 3.04 = \underline{\hspace{2cm}}$$

8. Estimate: _____

$$7.08 + 2.9 = \underline{\hspace{2cm}}$$

9. Estimate: _____

$$7.86 + 2.9 = \underline{\hspace{2cm}}$$

10. Estimate: _____

$$4.3 + 2.49 = \underline{\hspace{2cm}}$$

11. Find one-tenth more than the number.

a. 5.74? _____ b. 8.9? _____

12. Find one-hundredth more than the number.

a. 4.28? _____ b. 3.6? _____

Problem Solving

13. Monique's dog weighs 10.6 pounds. Her cat weighs 8.4 pounds. What is the combined total weight of Monique's pets?

14. Monique spent \$8.49 on dog food and \$7.99 on cat food. What is the total amount Monique spent on food for her pets?

Lesson Check

Fill in the bubble completely to show your answer.

15. Ulises ran 3.75 miles around the track. After resting, Ulises ran an additional 2.9 miles. What is the total distance Ulises ran?
- (A) 3.94 miles
(B) 6.65 miles
(C) 4.04 miles
(D) 5.65 miles
16. On the first day of school, Cassandra measured 1.37 meters tall. During the school year, Cassandra grew 0.06 meters. How tall was Cassandra at the end of the school year?
- (A) 1.33 meters
(B) 1.31 meters
(C) 1.43 meters
(D) 1.42 meters
17. Rufus measured the growth of a plant for his science project. At the end of the first week, the plant was 9.54 centimeters tall. During the second week, the plant grew 2.68 centimeters. How tall was Rufus's plant at the end of the second week?
- (A) 11.22 centimeters
(B) 12.12 centimeters
(C) 11.12 centimeters
(D) 12.22 centimeters
18. The distance from Sabinian's house to his uncle's house is 12.58 miles. If Sabinian travels another 9.49 miles, he will reach his grandmother's house. What is the distance from Sabinian's house to his grandmother's house?
- (A) 22.07 miles
(B) 21.97 miles
(C) 21.07 miles
(D) 22.08 miles

Spiral Review

19. Rolando worked for $\frac{2}{4}$ hour before practice and $\frac{5}{4}$ hour after practice. How many hours did Rolando work in all?
- _____
20. Write $\frac{5}{16}$ as a sum of unit fractions.
- _____

Name _____

Subtract Decimals

I Can solve real-world decimal problems using subtraction.

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.7, 4.NSO.2.6
- Mathematical Thinking & Reasoning MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1



UNLOCK the Problem



Hannah has 3.36 kilograms of apples and 2.28 kilograms of oranges. Hannah estimates she has about 1 more kilogram of apples than oranges. How many more kilograms of apples than oranges does Hannah have? How can you use this estimate to decide if your answer is reasonable?

Subtract. $3.36 - 2.28$

- Subtract the hundredths first. If there are not enough hundredths, regroup 1 tenth as 10 hundredths.

_____ hundredths $-$ 8 hundredths $=$ 8 hundredths

- Then subtract the tenths and ones. Regroup as needed.

_____ tenths $-$ 2 tenths $=$ 0 tenths

_____ ones $-$ 2 ones $=$ 1 one

- Record the difference for each place value.

- What operation will you use to solve the problem?

- Circle Hannah's estimate and check that your answer is reasonable.

3.36

$-$ 2.28

Draw a quick picture to check your work.



Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Explain how you know when to regroup in a decimal subtraction problem.

So, Hannah has _____ more kilograms of apples than oranges.

Since _____ is close to 1, the answer is reasonable.

Share and Show

Math Board

Estimate. Then find the difference.

1. Estimate: _____

$$\begin{array}{r} 5.83 \\ -2.18 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 4.45 \\ -1.86 \\ \hline \end{array}$$

✓ 3. Estimate: _____

$$\begin{array}{r} 4.03 \\ -2.25 \\ \hline \end{array}$$

Find the difference. Check your answer.

4. $\begin{array}{r} 0.70 \\ -0.43 \\ \hline \end{array}$

5. $\begin{array}{r} 13.2 \\ -8.04 \\ \hline \end{array}$

✓ 6. $\begin{array}{r} 15.8 \\ -9.67 \\ \hline \end{array}$

On Your Own

Find the difference.

7. three and seventy-two hundredths subtracted from five and eighty-one hundredths

8. one and six hundredths subtracted from eight and thirty-two hundredths

Write the unknown number for n .

9. $5.28 - 3.4 = n$

$n =$ _____

10. $n - 6.47 = 4.32$

$n =$ _____

11. $11.57 - n = 7.51$

$n =$ _____

Find the difference.

12. $8.42 - 5.14$

13. $16.46 - 13.87$

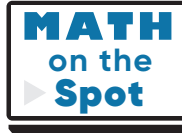
14. $34.27 - 17.51$

15. $15.83 - 11.45$

16. $12.74 - 10.54$

17. $48.21 - 13.65$

18. In the peanut butter, how many more grams of protein and fat combined are there than grams of carbohydrates? Use the label at the right.



PEANUT BUTTER	
Nutrition Facts	
Serving Size 2 Tbsp (32.0 g)	
Amount Per Serving	
Calories	190
Calories from Fat	190
% Daily Value*	
Total Fat 16g	25%
Saturated Fat 3g	18%
Polyunsaturated Fat 4.4g	
Monounsaturated Fat 7.8g	
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrates 6.2g	2%
Dietary Fiber 1.9g	8%
Sugars 2.5g	8%
Protein 8.1g	
*Based on a 2,000 calorie diet	



- a. What do you need to know?

- b. How will you use subtraction to find how many more grams of protein and fat there are than grams of carbohydrates?

- c. Show how you solved the problem.

- d. Complete each sentence.

The peanut butter has _____ grams of protein and _____ grams of fat for a total of _____ grams.

The peanut butter has _____ grams of carbohydrates.

There are _____ more grams of protein and fat than grams of carbohydrates in the peanut butter.

19. Kasen is building a block tower. Right now the tower stands 0.89 meter tall. How much higher does the tower need to be to reach a height of 1.74 meters?

20. Karin made punch for her party. She used 2.50 liters of orange juice and 1.75 liters of ginger ale. She had 2.35 liters of punch left over. How many liters of punch was used for her party?

Problem Solving • Applications

Fill in the bubble completely to show your answer.

21. Adrian made a poster for his math project. The capital letters on his poster are 4.29 centimeters high. The lowercase letters are 1.97 centimeters high. How much taller are the capital letters than the lowercase letters?

(A) 6.26 centimeters
(B) 3.72 centimeters
(C) 5.16 centimeters
(D) 2.32 centimeters

22. Mace's tomato plant was 9.6 centimeters tall when he planted it. It is 21.7 centimeters tall now. How much did the tomato plant grow?

(A) 18.3 centimeters
(B) 28.1 centimeters
(C) 12.1 centimeters
(D) 31.3 centimeters

23. Janus bought 2.07 pounds of potato salad. She ate 0.25 pound. Her brother ate 0.38 pound. How much potato salad was left?

(A) 0.63 pound
(B) 2.70 pounds
(C) 1.82 pounds
(D) 1.44 pounds



24. Allie is 158.7 centimeters tall. Her older brother is 3.55 centimeters taller than she is. Her younger brother is 9.53 centimeters shorter than her older brother. How tall is Allie's younger brother?

(A) 162.25 centimeters
(B) 147.7 centimeters
(C) 171.78 centimeters
(D) 152.72 centimeters

Subtract Decimals

Go Online

Interactive Examples

Estimate. Then find the difference.

1. Estimate: _____

$$\begin{array}{r} 4.08 \\ - 1.74 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 13.54 \\ - 6.7 \\ \hline \end{array}$$

Find the difference. Check your answer.

$$\begin{array}{r} 16.05 \\ - 1.5 \\ \hline \end{array}$$

$$\begin{array}{r} 21.4 \\ - 16.97 \\ \hline \end{array}$$

Find the unknown number for n .

5. $7.3 - n = 1.9$

$n = \underline{\hspace{2cm}}$

6. $n - 8.12 = 11.52$

$n = \underline{\hspace{2cm}}$

Find the difference.

7. $14.36 - 12.65$

8. $69.32 - 32.46$

9. Find one-tenth less than the number.

a. $6.83?$ _____ b. $7?$ _____

10. Find one-hundredth less than the number.

a. $5.57?$ _____ b. $8.9?$ _____

Problem Solving

11. Hiemo compared the labels of two brands of peanut butter. Brand X has 16.2 grams of fat. Brand Y has 12.7 grams of fat. How much more fat does Brand X contain than Brand Y?
- _____

12. Franca ran 63.6 kilometers. Philip ran 8 kilometers less than Franca. How many kilometers did Philip run?
- _____

Lesson Check

Fill in the bubble completely to show your answer.

13. Erin had \$33.65 in her savings account. She spent \$9.99 on a new scarf. How much does Erin have left in her savings account?
- (A) \$23.65
(B) \$43.64
(C) \$33.66
(D) \$23.66
14. Ivory lives 14.57 miles from the mall. Roberto lives 9.08 miles from the mall. How much farther does Ivory live from the mall than Roberto?
- (A) 5.59 miles
(B) 5.49 miles
(C) 23.65 miles
(D) 23.55 miles
15. One year it rained 59.89 inches in Port Arthur, Texas. The same year it rained 18.69 inches in Lubbock, Texas. How much more rainfall did Port Arthur receive than Lubbock?
- (A) 41.20 inches
(B) 40.60 inches
(C) 58.02 inches
(D) 78.58 inches
16. Kaitlin and Lorne both entered pumpkins in a pumpkin growing competition. Kaitlin's pumpkin weighed 54.43 pounds, and Lorne's pumpkin weighed 72.11 pounds. How much more did Lorne's pumpkin weigh than Kaitlin's pumpkin?
- (A) 28.78 pounds
(B) 28.68 pounds
(C) 22.32 pounds
(D) 17.68 pounds

Spiral Review

17. Write the next three numbers in the pattern.
- 2, 6, 18, 54, ...
- _____
18. List all of the factors of 24.
- _____

Name _____

Add and Subtract Money

I Can solve real-world money problems using addition and subtraction.

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.7
- Measurement 4.M.2.2
- Mathematical Thinking & Reasoning MTR.1.1, MTR.2.1, MTR.5.1



UNLOCK the Problem

The balance in Marsha's savings account is \$423.54. She makes a deposit of \$58.95. What is the balance in her savings account now?

The amount of money that is in an account after a deposit or withdrawal is made is called the **balance**. A **deposit** is when money is added to the balance of an account. A **withdrawal** is when money is subtracted from the balance of an account.

Math Idea

You can add and subtract decimals the same way you add and subtract whole numbers if you line up the decimal points first.

Use addition to find the balance after a deposit.

STEP 1

Line up the decimal points.
Add the hundredths.

$$\begin{array}{r} \$423.54 \\ + \$58.95 \\ \hline \end{array}$$

STEP 2

Add the tenths. Regroup as needed.

$$\begin{array}{r} \\ \$423.\overset{1}{5}4 \\ + \$58.\overset{1}{9}5 \\ \hline \end{array}$$

STEP 3

Add the ones, tens, and hundreds. Place the decimal point in the sum.

$$\begin{array}{r} \\ \$423.\overset{11}{5}4 \text{ starting balance} \\ + \$58.\overset{11}{9}5 \text{ deposit} \\ \hline \$49 \text{ new balance} \end{array}$$

So after the deposit, the balance in Marsha's savings account is _____.

Use subtraction to find the balance after a withdrawal.

Two weeks later, Marsha withdraws \$75.34. What is the balance now?

STEP 1

Subtract the hundredths.

$$\begin{array}{r} \$482.49 \\ - \$75.34 \\ \hline \end{array}$$

STEP 2

Subtract the tenths.

$$\begin{array}{r} \$482.\overset{1}{4}9 \\ - \$75.\overset{1}{3}4 \\ \hline 5 \end{array}$$

STEP 3

Subtract the ones, tens, and hundreds. Place the decimal point in the difference.

$$\begin{array}{r} \\ \$482.\overset{712}{4}9 \text{ starting balance} \\ - \$75.\overset{712}{3}4 \text{ withdrawal} \\ \hline \$15 \text{ new balance} \end{array}$$

So after the withdrawal, the balance in Marsha's savings account is _____.

Share and Show

Math
Board

- Mrs. Nolan has a checking account with a balance of \$442.37. She writes a check for \$63.92. Then she makes a deposit of \$350.00. What is the final balance in her checking account after writing the check and making the deposit?

First use subtraction to find the balance after writing the check.

Starting balance:	\$442.37
Check amount:	— <input type="text"/>
Balance after writing the check:	<input type="text"/>

Then use addition to find the final balance after making the deposit.

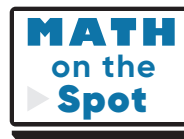
Balance after writing the check:	<input type="text"/>
Deposit amount:	+ <input type="text"/>
Final balance after making the deposit:	<input type="text"/>

So, Mrs. Nolan's final balance is .

- ✓ Mccauley has a school store account with a balance of \$16.82. He spends \$2.75 to buy a new marker. What is the balance of Mccauley's school store account?
- ✓ 3. Cereka has \$789.59 in her checking account. She makes a deposit of \$65.32. Then she writes a check for \$105.00. What is the balance of her checking account after she writes the check?

On Your Own

- Xin's checking account had a balance of \$589.33 at the beginning of the month. She made no deposits that month and the bank charged no fees. At the end of the month, her balance was \$472.58. How much had she written in checks that month? Explain.
- Marcin went shopping with \$20. He bought a shirt for \$7.89 at one store and a duffel bag for \$11.79 at another. How much money did he have left after he bought the shirt and the duffel bag?

Problem Solving • Applications

6. Mitch began the month with \$733.12 in his savings account. He deposited his earnings of \$24.00 for babysitting and \$31.00 for doing chores. That same month, he withdrew \$331.76. How much money was in his account at the end of the month?

7. Shen has \$720.67. He spends \$435.22 on a washing machine and \$102.65 on a vacuum. How much money does Shen have now?

8. Mei wants to know what her balance was at the beginning of the month. She knows her balance was \$978.45 at the end of the month. During the month, she withdrew \$332.70 and deposited \$500.00. What was her beginning balance? Explain how you got your answer.

9. Fai wants to start a lawn mowing business. He will pay his workers \$15.25 to mow a lawn. It costs \$4.77 for gas to mow one lawn. If Fai charges his customer \$32.00 to mow the lawn, how much will he have left after paying his worker and paying for the gas?

Show the Math

Demonstrate Your Thinking

Fill in the bubble completely to show your answer.

10. At the end of March, Chung had an account balance of \$185.78. Since then, she has written two checks, one for \$25.50 and another for \$18.34. How much is in her account now?
- (A) \$160.28 (C) \$178.62
(B) \$141.94 (D) \$167.44
11. Mrs. Danuta bought lunch for herself and two friends. The lunches cost \$8.25, \$6.00, and \$10.50. How much do the three lunches cost all together?
- (A) \$24.00 (C) \$38.25
(B) \$11.25 (D) \$24.75
12. Valeska bought a pair of sneakers for \$47.82 and a shirt for \$11.36. If Valeska had \$100 before her purchase, how much money does she have left now?
- (A) \$38.18
(B) \$59.18
(C) \$40.82
(D) \$35.82
13. Mrs. Tola worked for a company that gave her \$300 for travel. She spent \$114.59 for a hotel room, \$15.97 for lunch, and \$25.83 for dinner. How much money did she have left at the end of her trip?
- (A) \$227.21
(B) \$156.39
(C) \$143.61
(D) \$372.79

Add and Subtract Money

Go Online

Interactive Examples

1. Kim had \$472.15 in her checking account. She deposited \$188.50 and wrote a check for \$263.89. How much is in Kim's checking account now?

2. Luz sold her bicycle for \$88.50. She sold her bicycle helmet for \$8.75. She bought a basketball for \$35.82. How much money does Luz have now?

3. Logan's lunch cost \$14.75. Tax was \$1.03 and he left a tip of \$2.50. How much did Logan pay for his lunch?

4. Oleg buys a shirt for \$28.95 and a pair of socks for \$4.29. He gives the clerk at the store two \$20 bills. How much change should Oleg receive?

Problem Solving

5. Lachlan bought a hat and gave the salesperson at the store \$50.00. He got \$13.72 back in change. How much did Lachlan pay for the hat? Explain how you got your answer.

6. At the beginning of the month, Javier had \$671.90 in his checking account. At the end of the month, he had \$422.15. He knows he wrote 2 checks. One check was for \$118.42. How much was the other check for? Explain how you got your answer.

Lesson Check

Fill in the bubble completely to show your answer.

7. Alanso had \$515.97 in his savings account at the beginning of the month. At the end of the month he had \$648.47 in the account. If Alanso withdrew no money that month, how much money did he deposit into his savings account that month?
- (A) \$133.50 (C) \$1,153.34
(B) \$1,164.44 (D) \$132.50
8. Leslie bought a magazine for \$5.98. She paid with a \$10.00 bill. How much change did Leslie receive?
- (A) \$5.02
(B) \$4.12
(C) \$4.02
(D) \$5.12
9. Carina had \$283.20 in her checking account. She wrote checks for \$28.50 and \$35.67. How much is left in Carina's checking account?
- (A) \$219.03
(B) \$262.13
(C) \$230.03
(D) \$219.13
10. Horacio wants to buy a television for \$789.98. He has \$512.16 in savings. He can save another \$123.62 this week. How much more money does he need to buy the television?
- (A) \$143.20
(B) \$401.44
(C) \$154.20
(D) \$635.78

Spiral Review

11. Ernesto and his friends go strawberry picking. Ernesto fills 5 baskets. Each basket holds 23 strawberries. If 4 of Ernesto's friends pick the same amount as Ernesto, how many strawberries do Ernesto and his friends pick in all? Draw a diagram to solve the problem.
-
12. What is 429,352 rounded to the nearest thousand?
-
13. The area of a rectangular painting is 48 square inches. If the width of the painting is 6 inches, how tall is the painting?
-

Name _____

Solve Multistep Money Problems

I Can solve multistep real-world money problems.

Florida's B.E.S.T.

- Number Sense & Operations 4.NSO.2.7
- Measurement 4.M.2.2
- Mathematical Thinking & Reasoning MTR.2.1, MTR.7.1

UNLOCK the Problem **Real World**

Example 1 Mrs. Cleary wants to buy books for her bookstore. The new novel she wants comes in a case containing 16 books. Each book costs her \$15. How much would 3 cases of the books cost?

First, find the total number of books. Multiply, $3 \times 16 = 48$

Next, use place value and regrouping. Multiply. $48 \times \$15$

STEP 1

Multiply \$15 by 8 ones, or 8.

$$\begin{array}{r} 4 \\ \$15 \\ \times 48 \\ \hline \end{array} \quad \leftarrow 8 \times 15$$

STEP 2

Multiply 15 by 4 tens, or 40.

$$\begin{array}{r} 2 \\ \cancel{4} \\ \$15 \\ \times 48 \\ \hline 120 \\ \hline \end{array} \quad \leftarrow 40 \times 15$$

STEP 3

Add the partial products.

$$\begin{array}{r} 2 \\ \cancel{4} \\ \$15 \\ \times 48 \\ \hline 120 \\ + 600 \\ \hline \end{array}$$



So, Mrs. Cleary will pay _____ for 3 cases of the books.

Example 2 Mrs. Cleary prepaid \$219.89 for 8 cases of magazines. When the cases arrived, she paid the balance of \$364.11. How much did she pay for each case of magazines?

First, add. $\$219.89 + \$364.11 = \$584.00$

Then divide. $\$584 \div 8$

STEP 1

Divide the tens.

$$\begin{array}{r} 7 \\ 8 \overline{)584} \\ \underline{- } \\ \end{array} \quad \begin{array}{l} \text{Divide: } 58 \text{ tens} \div 8 \\ \text{Multiply: } 8 \times 7 \text{ tens} \\ \text{Subtract: } 58 \text{ tens} - 56 \text{ tens.} \end{array}$$

STEP 2

Divide the ones. Regroup 2 tens as 20 ones.

$$\begin{array}{r} \$73 \\ 8 \overline{)584} \\ \underline{-56} \\ 24 \end{array} \quad \begin{array}{l} \text{Divide: } \underline{\hspace{1cm}} \text{ ones} \div \underline{\hspace{1cm}} \\ \text{Multiply: } \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \text{ ones} \\ \text{Subtract: } \underline{\hspace{1cm}} \text{ ones} - \underline{\hspace{1cm}} \text{ ones.} \end{array}$$

So, Mrs. Cleary paid _____ for each case of magazines.

1. Ray bought 18 baseball caps for his baseball team. Each cap was \$5 off of its original price. The price tag said \$34. How much did Ray spend on caps?

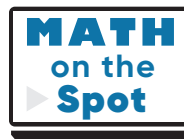
$$\begin{array}{r} 34 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} \$29 \\ \times 18 \\ \hline \\ + \\ \hline \end{array}$$

So, Ray spent _____ on caps.

2. Samantha sold 9 teddy bears that she made. She was paid \$98 in January and \$28 in February for all the bears. If the bears were all the same price, what was the price of one bear?
3. Harley is planning a special dinner for the debate club. There are 21 members in the club. If each member's salad costs \$3.35 and entree costs \$12.65, what will the total cost of the meals be?
4. Henrik bought a set of 5 books for \$32. He saved \$8 by buying the books as a set rather than at the regular price. What is the regular price of each book?
5. Yasmine opens a checking account with \$176.32. She deposits her paycheck of \$15.38. Then she withdraws \$30 to buy a new purse. What is the balance in her checking account?
6. Palo bought a car for \$1,284 using money from his savings account. His parents give him \$120, which he immediately puts in his savings account. He wants to repay his savings account over the next 6 months. If he saves an equal amount each month, how much will he need to save each month?
7. Lassa bought a car. She paid the dealer \$2,220 and then finished paying for her car by making 9 equal payments of \$352. How much was the total cost of her car?

On Your Own

8. Don buys a shirt for \$24.85. His friend Daryl spends \$3.15 more for his shirt. Sean paid the same price as Daryl for his shirt but bought 2. How much did Sean spend for his 2 shirts?



9. Mingmei buys 3 smart bulbs in a set for \$30. She saved \$6 by buying the set instead of buying the smart bulbs separately. If each smart bulb costs the same amount, how much does each of the 3 smart bulbs cost when purchased separately?

10. Loan saved \$60. Jeff saved 29 times as much as Loan did. Jeff saved 3 times as much as Marco. How much did Marco save? Explain how you found your answer.

11. The grocery store has a sale on soup. One can costs \$2.59 but you can buy 8 cans for a total of \$16.00. How much do you save per can if you buy 8 at the sale price?

12. Yong plans to save \$55 each month for 5 years. How much will he have at the end of 5 years?

Show the Math

Demonstrate Your Thinking

Problem Solving • Applications

Fill in the bubble completely to show your answer.

13. Zhi downloads 7 apps for a total of \$24. Two of them cost \$2.00 each. If the other apps all cost the same amount, how much does each cost?
- (A) \$3.43 (C) \$4
(B) \$3.70 (D) \$4.25
14. Jeremiah spends \$51.25 at the mall. He buys a game for \$24.25 and 3 packs of neon light sticks. If the packs are all the same price, how much does 1 pack cost?
- (A) \$15 (C) \$25
(B) \$8 (D) \$9
15. Delilah buys a loaf of bread, 3 pounds of turkey, and 2 pounds of cheese. The turkey costs \$3.00 per pound and the cheese costs \$2.00 per pound. A loaf of bread costs \$3.49. How much does Delilah spend in all?
- (A) \$13.75
(B) \$16.49
(C) \$8.49
(D) \$17.49
16. While working at the school store, Jermyn sold a letter jacket for \$40.50 and some notebooks for \$2.00 each. If he collected a total of \$92.50, how many notebooks did he sell?
- (A) 25
(B) 66
(C) 26
(D) 104

Solve Multistep Money Problems

Go Online

Interactive Examples

1. You can buy 4 movies for \$16. One movie costs \$5.98. How much do you save per movie if you buy 4 at the sale price?

2. Jaime sold a coat for \$51.67 and some scarves for \$6 each. The total for the receipts was \$123.67. How many scarves did he sell?

Problem Solving

3. Margie bought 3 identical sweaters for a total of \$114. She saved \$18 by buying the 3 sweaters on sale rather than at the regular price. What is the regular price of each sweater? Explain how you found the answer.

4. Keira rented a car for 3 days. She paid \$118 rent each day. Insurance for the 3 days came to a total of \$35. How much did Keira pay in all? Explain how you found your answer.

Lesson Check

Fill in the bubble completely to show your answer.

5. The Wallace family saves the same amount of money each month for vacation. From January 1 to September 30 they saved \$1,314. How much does the Wallace family save each month for vacation?
- (A) \$156
(B) \$131
(C) \$146
(D) \$152
6. A coach bought 3 dozen soccer balls. Each ball cost \$28. How much did the coach pay for all of the soccer balls? (Remember, 1 dozen = 12.)
- (A) \$84
(B) \$840
(C) \$336
(D) \$1,008
7. Iago spent \$49 at the fair. Gratia spent \$14 more than twice as much as Iago spent. How much did the two of them spend in all?
- (A) \$112
(B) \$161
(C) \$126
(D) \$140
8. Paula bought 8 pairs of socks. She paid \$104. Two pairs of socks cost \$16 each. The other pairs each cost the same amount. How much did each of the other pairs of socks cost?
- (A) \$12
(B) \$17
(C) \$13
(D) \$18

Spiral Review

Solve.

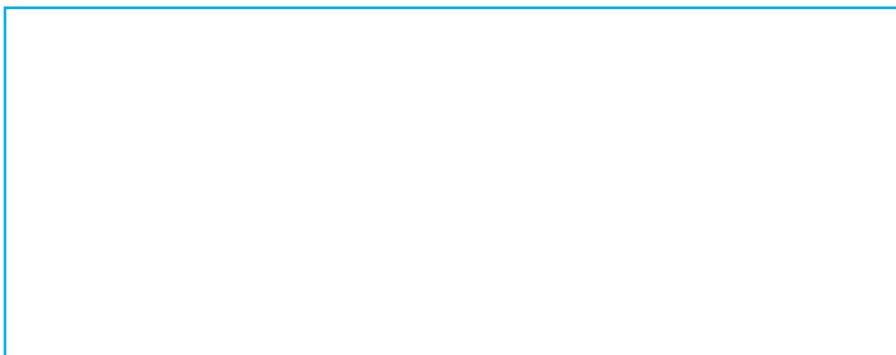
$26 \times 44 \underline{\hspace{2cm}}$

$7,640 \div 5 \underline{\hspace{2cm}}$

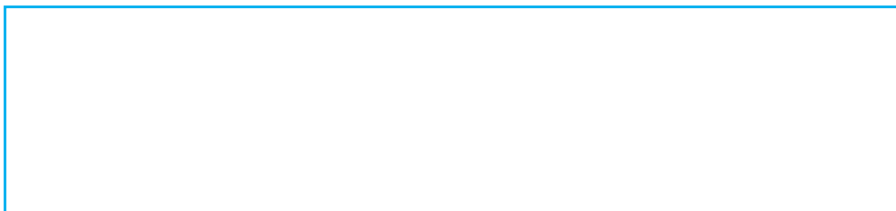
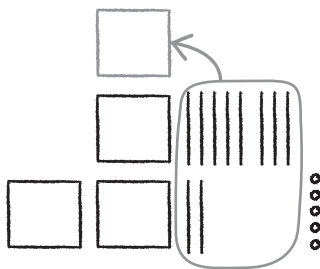
$6 \times 1,336 \underline{\hspace{2cm}}$

Chapter Review

1. The school is 3.65 miles from Tonya's house and 1.28 miles from Jamal's house. How much farther from school is Tonya's house than Jamal's house? Explain how you can use a quick picture to solve the problem.



2. Clayton Road is 2.25 miles long. Wood Pike Road is 1.8 miles long. Kisha used a quick picture to find the combined length of Clayton Road and Wood Pike Road. Does Kisha's work make sense? Explain why or why not.



3. The park is 1.4 miles from Vincent's house. The library is 0.8 miles from the park. Vincent walks from his house to the park. Then he walks from the park to the library. How far does Vincent walk?

_____ miles

4. Find the sum.

$$\begin{array}{r} 44.81 \\ + 6.20 \\ \hline \end{array}$$

5. Amber has a large gold coin that weighs 1.3 ounces and 2 small gold coins that each weigh 0.6 ounce.

Part A

If Amber places the large gold coin in her left hand and the 2 small gold coins in her right hand, which hand will be holding more weight? Explain.

Part B

How much do the 3 gold coins weigh altogether?

Part C

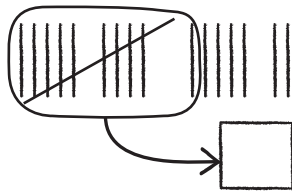
Amber wants to buy another gold coin so that she has 4 ounces of gold coins altogether. How much should the gold coin weigh? Explain.

6. Charis saves \$10.25 in January and \$8.30 in February. How much money does she need to save to have \$20 in all?

\$ _____

Name _____

7. Yi buys 0.9 pound of cheddar cheese and 0.7 pound of swiss cheese. He draws a picture to help find the total weight of cheese.



What is the total weight of the cheese Yi buys?

_____ pounds

8. The Smiths are on a summer road trip. They travel 10.9 hours the first day, 8.6 hours the second day, and 12.4 hours the final day. How many hours does the Smith family travel during the three-day trip?

- Ⓐ 31.9 hours
- Ⓑ 3.8 hours
- Ⓒ 23.3 hours
- Ⓓ 19.5 hours

9. Ferdinand is rowing a boat across a pond that is 24.9 meters wide. He paddles 13.6 meters. How many more meters does he need to paddle to reach the other side of the pond?

_____ meters

10. Write the unknown number for n .

$$n - 4.88 = 10.64$$

$$n = \underline{\hspace{2cm}}$$

11. Find the difference.

$$\begin{array}{r} 1.5 \\ - 0.7 \\ \hline \end{array}$$

12. The difference of two numbers is 3.7. The greater number is 10.5.

Part A

What is the other number? Explain.

Part B

What is the sum of the two numbers? Explain.

13. Ken had a balance of \$1,150.00 in his checking account. He withdrew \$85.35 to buy groceries. One week later he deposited \$250.00 into his checking account. What is the balance in his checking account now?

- (A) \$1,314.65
- (B) \$900.00
- (C) \$335.35
- (D) \$1,335.35

Name _____

14. During one week, Morgan jogged 51.2 kilometers, Karen jogged 53.52 kilometers, and Kelly jogged 6 kilometers less than Morgan. How many more kilometers did Karen jog that week than Kelly?

(A) 104.72 kilometers
(B) 8.32 kilometers
(C) 45.2 kilometers
(D) 57.2 kilometers

15. The book store has a sale on books. One book costs \$7.79 but you can buy 3 books for a total of \$21.00. How much total do you save per book if you buy 3 at the sale price?

16. Marcus read for 1.2 hours in the morning and 2.4 hours in the afternoon. How many hours did he read altogether?

_____ hours

- 17 . What is the sum of 3.2 and 6.9?

(A) 3.7
(B) 9.1
(C) 10.1
(D) 10.2

18. A tailor has 2.3 yards of fabric. She needs 9.6 yards of fabric to make a window treatment. How many more yards of fabric does she need to have enough to make the window treatment?

(A) 4.6 yards
(B) 7.3 yards
(C) 9.9 yards
(D) 11.9 yards

19. The sum of a number and 5.1 is 7.4. What is the number? Explain how you know.

20. Match each expression with its sum or difference.

$5.2 + 2.1$	•	•	9.2
$1.3 + 7.9$	•	•	6.3
$8.8 - 2.5$	•	•	7.3
$1.4 - 0.6$	•	•	0.8

21. Yosif buys a loaf of bread, 2 pounds of apples, and 3 pounds of cheese. The apples cost \$0.88 per pound and the cheese costs \$2.15 per pound. The loaf of bread costs \$3.87. How much does Yosif spend in all?

\$ _____

22. Find one tenth more than the number.

a. 4.56 _____ b. 7.92 _____

23. Find one hundredth more than the number.

a. 7.29 _____ b. 2.5 _____