

Launch Into Decimals and Fractions

River of Grass

Everglades National Park is located on the southern tip of Florida. It is the largest subtropical wilderness in the United States and covers 7,800 square miles with nine distinct ecosystems.

The Everglades is really a slow-moving river. It is called the River of Grass because the sedge grass growing in the swamps looks like a rippling field of grass. Over 360 types of birds and 50 types of reptiles live in the Everglades, including the American alligator and the American crocodile.

One way to see the Everglades is by airboat. Airboats glide on top of the grass, and you can see the different wonders of this swampy grassland. What would you like to see on the River of Grass?



More About the Everglades

- There are 39 endangered or threatened species in the Everglades, including the Florida panther and the West Indian manatee.
- American crocodiles live in the salty waters of the Everglades. Alligators have U-shaped snouts. Crocodiles have V-shaped snouts and look like they are smiling.
- Nearly 8 million people rely on the Everglades for drinking water.



Three Reads

First, read to understand the situation.

Next, read to understand the math.

Then, read to ask what mathematical questions could be asked about the problem.

Tavi takes an airboat tour near the Everglades. The airboat captain stops the boat at different scenic points. The airboat travels 1.2 miles, $1\frac{1}{2}$ miles, 2.1 miles, and then $2\frac{1}{5}$ miles back to the starting point of the tour.



Read the final question. Make a plan to solve the problem.

Tavi takes an airboat tour near the Everglades. The airboat captain stops the boat at different scenic points. The airboat travels 1.2 miles, $1\frac{1}{2}$ miles, 2.1 miles, and then $2\frac{1}{5}$ miles back to the starting point of the tour.

What is the total distance Tavi travels by airboat?

Write, model, or draw to solve the problem.



A large empty rectangular box with a blue border, intended for students to write their solution to the problem.

Discuss with a partner or in a group.

**Math
Talk**

How did you find the total distance of the airboat ride? Is there another way to solve the problem? Compare how you solved the problem with the way other students in your class solved the problem.

Add and Subtract Decimals

✓ Show What You Know

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

1.

	Hundreds	Tens	Ones
	<input type="text"/>	<input type="text"/>	
		5	8
+		7	6
<hr/>			

2.

	Hundreds	Tens	Ones
		<input type="text"/>	<input type="text"/>
		8	2
-		4	7
<hr/>			

▶ Patterns Write the next three terms.

3. 15, 22, 29, 36, _____, _____, _____

4. 100, 91, 82, 73, _____, _____, _____

▶ Relate Fractions and Decimals Write as a decimal or a fraction.

5. 0.7 _____

6. $\frac{6}{100}$ _____

7. 0.39 _____

8. $\frac{4}{10}$ _____

9. 0.20 _____

10. $\frac{53}{100}$ _____

▶ Compose and Decompose Whole Numbers

11. Show two ways to decompose 5,412.

$$5,412 = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

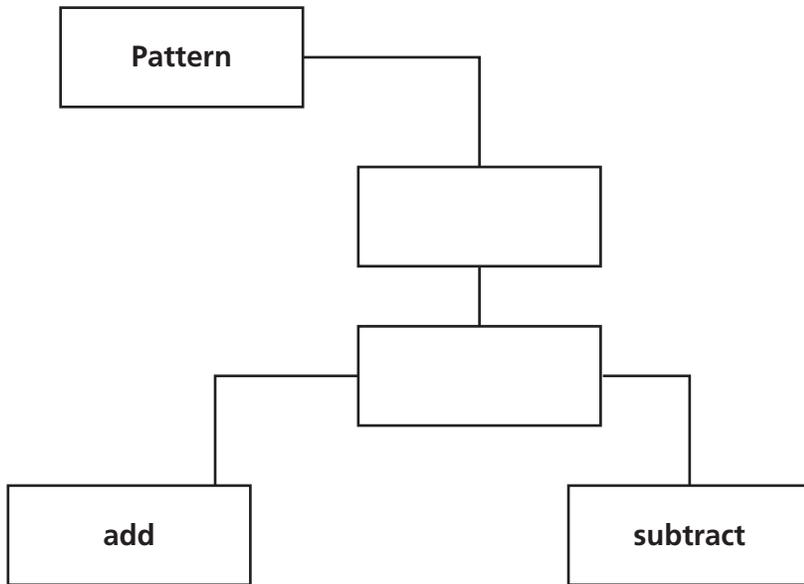
$$5,412 = \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$$

12. Write the number.

$$4 \text{ thousands} + 15 \text{ hundreds} + 3 \text{ tens} + 26 \text{ ones} = \underline{\quad}$$

Visualize It

Use the ✓ words to complete the tree map.



Connect to Vocabulary

Review Words

hundredth
pattern
tenth
thousandth

Preview Words

✓ sequence
✓ term

Understand Vocabulary

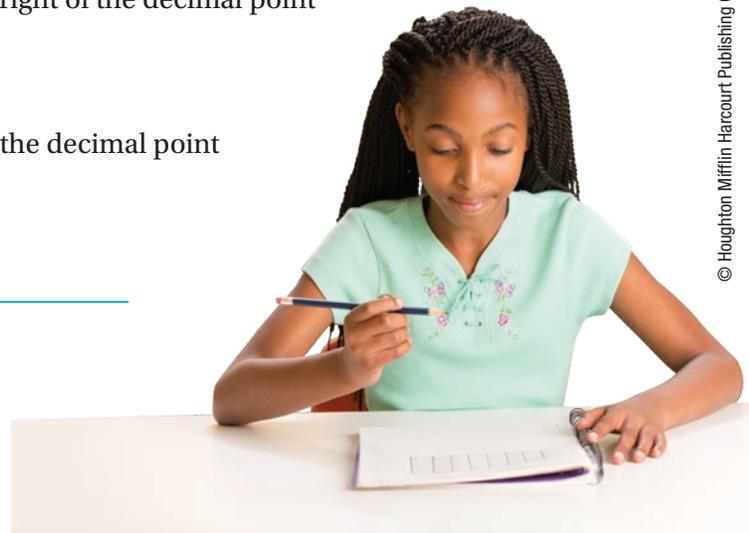
Read the description. Which word do you think is described?

- The place value of the second digit to the right of the decimal point

- An ordered set of numbers _____
- The place value of the digit immediately to the right of the decimal point

- The place value of the third digit to the right of the decimal point

- Each of the numbers in a sequence _____



Name _____

Patterns with Decimals

I Can use addition or subtraction to describe a pattern or create a sequence with decimals.



UNLOCK the Problem **Real World**

A state park rents canoes for guests to use at the lake. It costs \$5.00 to rent a canoe for 1 hour, \$6.75 for 2 hours, \$8.50 for 3 hours, and \$10.25 for 4 hours. If this pattern continues, how much should it cost Jason to rent a canoe for 7 hours?

A **sequence** is an ordered list of numbers. A **term** is each number in a sequence. You can find the pattern in a sequence by comparing one term with the next term.

STEP 1 Write the terms you know in a sequence. Then look for a pattern by finding the difference from one term in the sequence to the next.



STEP 2 Write a rule that describes the pattern in the sequence.

Rule: _____

STEP 3 Extend the sequence to solve the problem.

\$5.00, \$6.75, \$8.50, \$10.25, _____, _____, _____

So, it should cost _____ to rent a canoe for 7 hours.

Florida's B.E.S.T.

- Algebraic Reasoning 5.AR.3.1
- Number Sense & Operations 5.NSO.2.3
- Mathematical Thinking & Reasoning
MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1,
MTR.6.1



- **MTR** How can you write an expression to find the next term if x is the last term in the pattern?

Example Write a rule for the pattern in the sequence.
Then find the unknown terms in the sequence.

29.6, 28.3, 27, 25.7, _____, _____, _____, 20.5, 19.2

STEP 1 Look at the first few terms in the sequence.

Think: Is the sequence increasing or decreasing
from one term to the next?

STEP 2 Write a rule that describes the pattern in the sequence.

What operation can be used to describe a sequence that increases?

What operation can be used to describe a sequence that decreases?

Rule: _____

STEP 3 Use your rule to find the unknown terms.
Then complete the sequence above.

- Explain how you know whether your rule for a sequence
would involve addition or subtraction. _____

Try This!

A How can you write the rule for the pattern using an
expression? Use the rule to find the unknown term.

65.9, 65.3, _____, 64.1, 63.5, 62.9

Rule: _____

B Write the first four terms of the sequence.

Rule: start at 0.35, add 0.15

_____, _____, _____, _____

Share and Show



Write a rule for the sequence.

1. 0.5, 1.8, 3.1, 4.4, ...

Think: Is the sequence increasing or decreasing?

Rule: _____

- ✓ 2. 23.2, 22.1, 21, 19.9, ...

Rule: _____

Write a rule for the pattern using an expression. Then use the rule to find the unknown term.

3. 0.3, 1.5, _____, 3.9, 5.1

Rule: _____

- ✓ 4. 19.5, 18.8, 18.1, 17.4, _____

Rule: _____



MTR 2.1 Demonstrate understanding in multiple ways.

Besides addition, what other operation can be used to describe an increase from one term to the next?

On Your Own

Write the first four terms of the sequence.

5. **Rule:** start at 10.64, subtract 1.45

_____, _____, _____, _____

6. **Rule:** start at 0.87, add 2.15

_____, _____, _____, _____

7. **Rule:** start at 19.3, add 1.8

_____, _____, _____, _____

8. **Rule:** start at 29.7, subtract 0.4

_____, _____, _____, _____

9. Marta put \$4.87 in her coin bank. Each day she added 1 quarter, 1 nickel, and 3 pennies. How much money was in her coin bank after 6 days? Write the rule for the pattern as an expression.

10. **MTR** Look at the list below. Do the numbers show a pattern? Explain how you know.

11.23, 10.75, 10.3, 9.82, 9.37, 8.89





11. Bren has a deck of cards. As shown below, each card is labeled with a rule describing a pattern in a sequence. Select a card and decide on a starting number. Use the rule to write the first five terms in your sequence.



Sequence: _____, _____, _____, _____, _____

Write a problem that relates to your sequence and requires the sequence be extended to solve.

Pose a Problem

Solve your problem.

12. Jin-hye and Huy are playing a number pattern game. Huy wrote the following sequence.

33.5, 34.6, 35.7, _____, 37.9

What is the unknown term in the sequence? _____

Patterns with Decimals

Go Online

Interactive Examples

Write a rule for the sequence. Then find the unknown term.

13. 2.6, 3.92, 5.24, 6.56, 7.88

14. 25.7, 24.1, _____, 20.9, 19.3

Think: $2.6 + ? = 3.92$; $3.92 + ? = 5.24$

$$2.6 + 1.32 = 3.92$$

$$3.92 + 1.32 = 5.24$$

Rule: _____ **add 1.32** _____

Rule: _____

Write the first four terms of the sequence.

15. **Rule:** start at 17.3, add 0.9

16. **Rule:** start at 28.6, subtract 3.1

_____, _____, _____, _____

_____, _____, _____, _____

Problem Solving

17. The Ride-It Store rents bicycles. The cost is \$8.50 for 1 hour, \$13.65 for 2 hours, \$18.80 for 3 hours, and \$23.95 for 4 hours. If the pattern continues, how much will it cost Nate to rent a bike for 6 hours?

18. Yoona walks dogs every day to earn money. The fees she charges per month are 1 dog, \$40; 2 dogs, \$37.25 each; 3 dogs, \$34.50 each; 4 dogs, \$31.75 each. A pet store wants her to walk 8 dogs. If the pattern continues, how much will Yoona charge to walk each of the 8 dogs?

19.  **WRITE** *Math* Give an example of a rule describing the pattern for a sequence. Then write the first five terms of the sequence for your rule.

Lesson Check

20. A store has a sale on books. The price is \$17.55 for one book, \$16.70 each for 2 books, \$15.85 each for 3 books, and \$15 each for 4 books. If this pattern continues, how much per book will it cost to buy 7 books?
21. A bowling alley offers special weekly bowling rates. The weekly rates are 5 games for \$15, 6 games for \$17.55, 7 games for \$20.10, and 8 games for \$22.65. If this pattern continues, how much will it cost to bowl 10 games in a week?

Spiral Review

22. Find the product.

$$\begin{array}{r} 284 \\ \times 36 \\ \hline \end{array}$$

23. At a sale, a shoe store sold 8 pairs of shoes for a total of \$256. Each pair cost the same amount. What was the price of each pair of shoes?

24. Marcie jogged 0.8 mile on Wednesday and 0.9 mile on Thursday. How far did she jog on the two days?

25. Terrance has 5.5 cups of flour. He uses 3.75 cups of flour. How much flour does Terrance have left?

Name _____

Add and Subtract Decimals Through Thousandths

I Can add and subtract multi-digit numbers with decimals to the thousandths.

Florida's B.E.S.T.

- Number Sense & Operations 5.NSO.2.3
- Measurement 5.M.2.1
- Mathematical Thinking & Reasoning MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.6.1



UNLOCK the Problem Real World

At the 2010 Winter Olympics, Armin Zoeggeler won the bronze medal in the men's luge event. In his fastest run, he completed the first interval in 21.261 seconds. It took him another 27.198 seconds to reach the finish line. What was Zoeggeler's finish time?

- Underline the sentence that tells you what you are trying to find.
- Circle the numbers you need to use.

Add decimals through thousandths. $21.261 + 27.198$

THINK

- Line up the numbers in each place.
- First, add the thousandths.
- Then, add the hundredths, tenths, ones, and tens. Regroup as needed.
- Place the decimal point in the sum.

RECORD

So, Zoeggeler's finish time was _____ seconds.

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Why would you use paper and pencil instead of mental math to solve this problem?

Try This! Use subtraction to check your work. Subtract one of the addends from the sum.

Addition and subtraction are opposite, or **inverse operations**. You can use subtraction to check your answer to an addition problem.

← The difference should equal the other addend.

Example

Zoeggeler finished the first half of the run in 31.116 seconds. The second half took only 17.343 seconds. How many seconds faster was the second half of the run?

Estimate. $31 - 17 =$ _____

STEP 1

Line up the place values.
Subtract the thousandths.

$$\begin{array}{r} 31.116 \\ -17.343 \\ \hline 3 \end{array}$$

STEP 2

Subtract the hundredths.
Subtract the tenths. Regroup as needed.

$$\begin{array}{r} 31.116 \\ -17.343 \\ \hline 3 \end{array}$$

STEP 3

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

$$\begin{array}{r} 31.116 \\ -17.343 \\ \hline 13.773 \end{array}$$

So, Zoeggeler was _____ seconds faster in the second half of the run.

To check subtraction using the inverse operation, add the number you subtracted to the difference. The sum should equal the number you subtracted from.

Math Talk

MTR 3.1 Complete tasks with mathematical fluency.

Explain how you know without adding that the sum of 2.475 and 6.43 will result in a 5 in the thousandths place.

Try This! Subtract. Then check your work.

		4	2.	7	8	4	
	-		6.	9	8	0	
<hr/>							

	+		6.	9	8	0	
<hr/>							

Share and Show

Math Board

Find the sum or difference.

1.
$$\begin{array}{r} 1.845 \\ -0.357 \\ \hline \end{array}$$

2. $3.46 + 6.834$

3. $13 - 0.943$

4.
$$\begin{array}{r} 0.254 \\ 1.3 \\ +0.79 \\ \hline \end{array}$$

On Your Own

Find the sum or difference.

$$\begin{array}{r} 5. \quad 3.704 \\ -1.325 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 14.467 \\ +12.33 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 23.002 \\ - 1.74 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 9.94 \\ \quad 0.318 \\ + 1.283 \\ \hline \end{array}$$

Find the sum or difference.

$$9. \quad 21.54 + 4.758$$

$$10. \quad 6.328 - 3.62$$

$$11. \quad 15.87 - 3.274$$

$$12. \quad 2.45 + 3.247 + 1.8$$

Find the unknown numbers in the pattern.
Then write a description for the pattern.

$$13. \quad 2.1, 3.3, 4.5, 5.7, \underline{\quad}, 8.1, \underline{\quad}$$

Description: _____

$$14. \quad 4.05, 4.00, 3.95, \underline{\quad}, 3.85, \underline{\quad}$$

Description: _____

Problem Solving

Use the table to solve Problems 15–16.

15. Apolo Ohno won the men's 500-meter speed skating final at the 2006 Winter Olympics. His time for the race was 41.935 seconds. Francois-Louis Tremblay came in second, finishing 0.067 second behind Ohno. What was Tremblay's time?
- _____

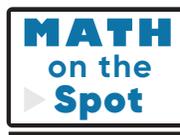
16. **MTR** Jon Eley came in fifth in the men's speed skating final. How many seconds after Apolo Ohno did Eley finish?
- _____

17. The sum of two numbers is 4.004. One number has a 4 in the tenths place and a 3 in the thousandths place. The other number has a 1 in the ones place and an 8 in the hundredths place. What are the two numbers?
- _____

Men's 500-Meter Speed Skating Final	
Skater	Time (in seconds)
A. Ohno	41.935
F. Tremblay	■
E. Bedard	42.039
H. Ahn	42.089
J. Eley	42.497

Show the Math

Demonstrate Your Thinking



Fill in the bubble completely to show your answer.

18. Team A spent 61.242 seconds and 59.438 seconds running a relay race. Team B spent 60.561 seconds and 60.289 seconds running the relay race. Which statement is true?
- (A) Team A won by 0.17 second. (C) Team A won by 1.17 seconds.
(B) Team B won by 0.17 second. (D) Team B won by 1.17 seconds.
19. A shop is selling preowned DVDs for \$6.99 each and preowned video games for \$8.49 each. You have \$30 to spend. Which of these combinations could you buy?
- (A) Two DVDs and two video games
(B) Three DVDs and one video game
(C) Three DVDs and three video games
(D) One DVD and three video games
20. Manuel is walking from his home to his school. He has walked 0.142 mile so far and has 0.088 mile left to walk. How far is Manuel's home from school?
- _____
21. Toni has a ribbon that is 2.75 meters long. She cuts off 0.345 meter. How much of the ribbon does Toni have left?
- _____



Add and Subtract Decimals Through Thousandths

Go Online

Interactive Examples

Find the sum or difference.

22.
$$\begin{array}{r} 13.87 \\ + 6.06 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 26.25 \\ - 5.73 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 2.50 \\ + 0.926 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 43.66 \\ - 9.08 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 6.27 \\ 0.133 \\ + 4.31 \\ \hline \end{array}$$

27.
$$\begin{array}{r} 25.75 \\ - 8.2 \\ \hline \end{array}$$

Find the sum or difference.

28. $6.389 + 17.39$

29. $8.747 - 4.8$

30. $2.09 + 12.639$

Find the unknown numbers in the pattern.
Then write a description for the pattern

31. 1.0, 2.1, 3.2, 4.3, _____ 6.5, 7.6

Description: _____

32. 5.03, 5.00, 4.97, 4.94 _____ 4.88

Description: _____

Problem Solving

33. Qiqi finished a biking race in 21.39 minutes. Juanita took 19.59 minutes to finish. How much longer did Qiqi take to finish the race than Juanita?

34. The sum of two numbers is 5.036. One number has a 4 in the tenths place and a 7 in the thousandths place. The other number has a 1 in the ones place and a 2 in the hundredths place. What are the two numbers?

Lesson Check

Fill in the bubble completely to show your answer.

35. Dara spends \$13.02 on sandals, \$9.85 on shorts, and \$15.20 on a hat. How much change does she receive back from \$50?
- (A) \$10.93
(B) \$11.93
(C) \$11.34
(D) \$12.67
37. Juan has a batting average of 0.334. Gary has a batting average of 0.284. What is the difference between the batting averages of the two baseball players?
- (A) 0.50
(B) 0.05
(C) 0.028
(D) 0.042
36. Ling's relay team ran the first part of the race in 28.134 seconds, the second part in 17.922 seconds, and the third part in 34.023 seconds. By how many seconds did Ling's team beat the next closest team which, who ran the race in 83.736 seconds?
- (A) 3.412 seconds
(B) 3.657 seconds
(C) 3.327 seconds
(D) 4.073 seconds
38. Giovanni is jogging from the park to the school. He has jogged 0.424 mile so far. He has 0.384 mile left to jog. How far is the park located away from the school?
- (A) 0.730 mile
(B) 0.808 mile
(C) 1.032 miles
(D) 0.40 mile

Spiral Review

39. Which decimal represents four and two hundred seven thousandths?
- (A) 4.207
(B) 4.27
(C) 4.270
(D) 4.277
40. Estimate the quotient $57,142 \div 83$.
-

Try Another Problem

Nick is buying juice for himself and 5 friends. Each bottle of juice costs \$1.25. How much do 6 bottles of juice cost? Make a table to find the cost of 6 bottles of juice.

Use the graphic below to solve the problem.



Read the Problem

What do I need to find?

What information do I need to use?

How will I use the information?

Solve the Problem

So, the total cost of 6 bottles of juice is _____.

2. What if Ginny says that 12 bottles of juice cost \$25.00? Is Ginny's statement reasonable? Explain. _____

3. If Nick had \$10, how many bottles of juice could he buy? _____

Math Talk

MTR 5.1 Use patterns and structure.

Describe how you could use another strategy to solve this problem.

Share and Show

Math Board

1. Sara wants to buy a bottle of apple juice from a vending machine. She needs exactly \$2.30. She has the following bills and coins:



Make and complete a table to find all the ways Sara could pay for the juice.

First, draw a table with a column for each type of bill or coin.

Next, fill in your table with each row showing a different way Sara can make exactly \$2.30.

2. What if Sara decides to buy a bottle of water that costs \$1.85? What are all the different ways she can make exactly \$1.85 with the bills and coins she has? Which coin must Sara use?
3. At the end of August, Mr. Diaz had a balance of \$441.62. Since then, he has written two checks for \$157.34 and \$19.74 and made a deposit of \$575.00. Mr. Diaz says his balance is \$739.54. Find Mr. Diaz's correct balance.

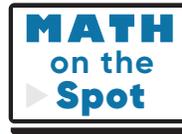
On Your Own

Use the following information to solve Problems 4–6.

At Open Skate Night, admission is \$3.75 with a membership card and \$5.00 without a membership card. Skate rentals are \$3.00.

4. Aidan paid the admission for himself and two friends at Open Skate Night. Aidan had a membership card, but his friends did not. Aidan paid with a \$20 bill. How much change should Aidan receive?

5. The Moores paid \$6 more for skate rentals than the Cotters did. Together, the two families paid \$30 for skate rentals. How many pairs of skates did the Moores rent?



6. **MTR** Ahanu and 5 of her friends are going to Open Skate Night. Ahanu does not have a membership card. Only some of her friends have membership cards. What is the total amount that Ahanu and her friends might pay for admission?

7. Marisol bought 5 movie tickets for a show. Each ticket cost \$6.25. Complete the table to show the price of 2, 3, 4, and 5 tickets.

Number of Tickets	Price
1	\$6.25
2	
3	
4	
5	

Show the Math

Demonstrate Your Thinking

Add and Subtract Money

Go Online

Interactive Examples

Use the table to solve Problems 8–9.

8. Dorian and Jack decided to go bowling. Jack is a member. They need only 1 lane, but each needs to rent shoes. If Jack pays for both of them with \$20, what change should he receive?

Calculate the cost: $\$7.50 + \$3.95 + \$2.95 = \14.40

Calculate the change: $\$20 - \$14.40 = \$5.60$

Bowl-a-Rama		
	Regular Cost	Member's Cost
Lane Rental (up to 4 people)	\$9.75	\$7.50
Shoe Rental	\$3.95	\$2.95

9. Kajal and her friends decided to rent 4 lanes at regular cost for a party. Ten people need to rent shoes, and 4 people are members. What is the total cost for the party?

Use the following information to solve Problems 10–12.

At the concession stand, medium sodas cost \$1.25 and hot dogs cost \$2.50.

10. Parvati's group brought in pizzas, but is buying drinks at the concession stand. How many medium sodas can Parvati's group buy with \$20? Make a table to show your answer.

11. Jack bought 2 medium sodas and 2 hot dogs. He paid with \$20. What was his change?

12. How much would it cost to buy 3 medium sodas and 2 hot dogs?

13.  **WRITE** *Math* Write a money problem that shows money being added to and subtracted from a bank account. Then solve the problem.

Lesson Check

14. Prakrit bought a pack of paper for \$5.69 and printer toner for \$9.76. He paid with a \$20 bill. What was his change?
15. Talim paid for her sandwich and drink with a \$10 bill and received \$0.63 in change. The sandwich was \$7.75. Sales tax was \$0.47. What was the cost of her drink?

Spiral Review

16. Afreen has saved \$425 to spend during her 14-day vacation. About how much money can she spend each day?
17. What decimal is $\frac{1}{10}$ of 0.08?
18. Tyrone bought 2.25 pounds of Swiss cheese and 4.2 pounds of turkey at the deli. About how much was the weight of the two items?
19. Lyneth ate 4.2 ounces of trail mix. Cedric ate 4.25 ounces of trail mix. How much more trail mix did Cedric eat?

Name _____

Chapter Review

1. Chaz kept a record of how many gallons of gas he purchased each day last week.

Day	Gas (in gallons)
Monday	4.5
Tuesday	3.9
Wednesday	4.258
Thursday	3.75
Friday	4.256

How many gallons of gas did he purchase from Tuesday to Thursday last week?

2. For problems 2a–2c, select True or False for each statement.

2a. $1.734 - 0.268 = 1.466$ True False

2b. $4.57 + 7.945 = 12.515$ True False

2c. $14 - 0.821 = 13.821$ True False

3. Students are selling muffins at a school bake sale. One muffin costs \$0.25, 2 muffins cost \$0.37, 3 muffins cost \$0.49, and 4 muffins cost \$0.61. If this pattern continues, how much will 7 muffins cost? Explain how you found your answer.

4. The sum of two numbers is 6.006. One number has a 6 in the tenths place and a 2 in the thousandths place. The other number has a 3 in the ones place and a 7 in the hundredths place. What are the two numbers?
-

5. Rowanda jogged 2.14 kilometers farther than Terrance. Select the values that could represent how far each student jogged. Mark all that apply.

- Rowanda: 6.5 km, Terrance: 4.36 km
- Rowanda: 4.8 km, Terrance: 2.76 km
- Rowanda: 3.51 km, Terrance: 5.65 km
- Rowanda: 7.24 km, Terrance: 5.1 km

6. Subtract.

$$\begin{array}{r} 5 \\ - 4.368 \\ \hline \end{array}$$

7. Benjamin rode his bicycle 3.6 miles on Saturday and 4.85 miles on Sunday. How many miles did he ride Saturday and Sunday combined? Use the digits on the tiles to solve the problem. Digits may be used more than once or not at all.

$$\begin{array}{r} \square \square \square . \square \square \square \\ + \square \square \square . \square \square \square \\ \hline \square \square \square . \square \square \square \end{array}$$

0	1
2	3
4	5
6	7
8	9

Name _____

8. 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.

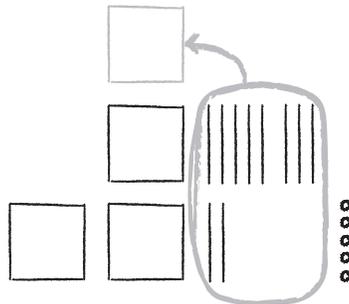
9. A vet measured the mass of two birds. The mass of the robin was 76.64 grams. The mass of the blue jay was 81.54 grams. What is the difference in the masses of the birds?

_____ grams

10. Rick bought 5 yogurt bars at a snack shop. Each yogurt bar cost \$1.75. Complete the table to show the price of 2, 3, 4, and 5 yogurt bars.

Number of Yogurt Bars	Price
1	\$1.75
2	
3	
4	
5	

11. 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 the roads. Does Kisha's work make sense? Explain why or why not.



12. Bob and Ling are playing a number pattern game. Bob wrote the following sequence.

28.9, 26.8, 24.7, _____, 20.5

What is the unknown term in the sequence?

13. You have \$20 to spend. Songs are \$1.79 and movies are \$4.99. Select Yes or No to indicate whether you can buy the combination of songs and movies.

13a. 1 movie and 8 songs Yes No

13b. 3 movies and 3 songs Yes No

13c. 2 movies and 5 songs Yes No

14. 0.8, 2.1, 3.4, 4.7,... Choose the answers that make the statement true.

The next number in the sequence is

5.2

6.0

5.3

6.1

because the

rule for the sequence is

add 1.3

add 0.3

subtract 1.5

subtract 0.8

Name _____

15. Alejandra starts with \$139.55 in her savings account. She adds \$18.25 to the account every week.

15a. How much will she have in her account after 3 weeks?

15b. In week 4, Alejandra only deposits \$15.65 instead of the usual amount. How much money will be in her savings account after 4 weeks?

16. Miguel has \$20. He spends \$7.25 on a movie ticket, \$3.95 for snacks, and \$1.75 for bus fare each way. How much money does Miguel have left?

\$ _____

17. Yolanda's sunflower plant was 64.34 centimeters tall in July. During August, the plant grew 18.2 centimeters.

Part A

What will the plant's height be at the end of August? Explain.

Part B

How much will the plant have to grow to reach 100 cm by the end of September?

18. Oscar ran the 100-yard dash in 12.41 seconds. Jesiah ran the 100-yard dash in 11.85 seconds. How many seconds faster was Jesiah's time than Oscar's time?

_____ second(s)

19. Write the next four terms of the sequence.

Rule: start at 32.9, subtract 3.67.

_____, _____, _____, _____

20. Troy and Lazetta are solving the following word problem.

Rosalie's cat weighs 9.8 pounds. Her dog weighs 25.4 pounds. What is the weight of both animals combined?

Troy sets up his problem as $9.8 + 25.4$. Lazetta sets up her problem as $25.4 + 9.8$. Who is correct? Explain your answer and solve the problem.

21. Add

$$\begin{array}{r} 7.584 \\ + 3.999 \\ \hline \end{array}$$