

Dear Family,

Throughout the next few weeks, our math class will be studying decimals. We will be naming, comparing, ordering, and rounding decimals through thousandths. We will also be adding and subtracting decimals through hundredths.

You can expect to see homework that includes adding and subtracting decimals through hundredths.

Here is a sample of how your child will be taught to add decimals.

Vocabulary

decimal A number with one or more digits to the right of the decimal point

difference The result of subtracting two numbers

place value The value of each digit in a number based on the location of the digit

sum The result of adding two or more numbers

thousandth One of one thousand equal parts

MODEL Adding Decimals

Add 12.78 and 31.14.

STEP 1

Estimate the sum.

12.78 is about 13.

31.14 is about 31.

$$13 + 31 = 44$$

STEP 2

Write the problem with the decimal points aligned. Add the hundredths first. Then, add the tenths, ones, and tens. Regroup as needed.

$$\begin{array}{r} 1 \\ 12.78 \\ +31.14 \\ \hline 43.92 \end{array}$$

Tips

Adding and Subtracting Decimals

Always remember to align numbers on the decimal point when adding or subtracting decimals. That way, you are adding or subtracting the same place values.

Activity

Collect store advertisements from the newspaper. Have your child practice adding and subtracting decimals by writing and solving problems that involve money using the store advertisement.

Carta para la casa

Querida familia,

Durante las próximas semanas, en la clase de matemáticas estudiaremos los decimales. Nombraremos, compararemos, ordenaremos y redondearemos decimales hasta las milésimas. También sumaremos y restaremos decimales hasta las centésimas.

Llevaré a la casa tareas con actividades que incluyen sumar y restar decimales hasta los centésimos.

Este es un ejemplo de la manera como aprenderemos a sumar decimales.

Vocabulario

decimal Un número con uno o más dígitos a la derecha del punto decimal

diferencia El resultado de restar dos números

milésimas Una de mil partes iguales

suma o total El resultado de sumar dos o más números

valor posicional El valor de cada dígito en un número basado en la ubicación del dígito

MODELO Sumar decimales

Suma 12.78 y 31.14.

PASO 1

Estima la suma.

12.78 es aproximadamente 13.

31.14 es aproximadamente 31.

$$13 + 31 = 44$$

PASO 2

Escribe el problema con los puntos decimales alineados. Suma los centésimos primero. Después suma las décimas, las unidades y las decenas. Reagrupa si es necesario.

$$\begin{array}{r} 1 \\ 12.78 \\ +31.14 \\ \hline 43.92 \end{array}$$

Pistas

No olvides alinear los números con el punto decimal cuando sumes o restes decimales. De esa manera estarás sumando y restando los mismos valores posicionales.

Actividad

Recorte algunos avisos publicitarios de varias tiendas que vea en el periódico.

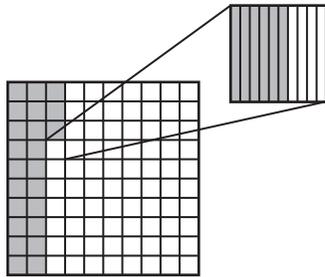
Pida a su hijo que use la información de los avisos para escribir y resolver problemas que incluyan cantidades de dinero.

Name _____

Thousandths

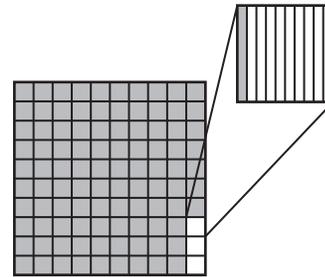
Write the decimal shown by the shaded parts of each model.

1.



0.236

2.



Think: 2 tenths, 3 hundredths, and 6 thousandths are shaded

Complete the sentence.

3. 0.4 is 10 times as much as _____.

4. 0.003 is $\frac{1}{10}$ of _____.

Use place-value patterns to complete the table.

| Decimal | 10 times as much as | $\frac{1}{10}$ of |
|---------|---------------------|-------------------|
| 5. 0.1 | | |
| 6. 0.09 | | |
| 7. 0.04 | | |
| 8. 0.6 | | |

| Decimal | 10 times as much as | $\frac{1}{10}$ of |
|----------|---------------------|-------------------|
| 9. 0.08 | | |
| 10. 0.2 | | |
| 11. 0.5 | | |
| 12. 0.03 | | |

Problem Solving REAL WORLD

- The diameter of a dime is seven hundred five thousandths of an inch. Complete the table by recording the diameter of a dime.
- What is the value of the 5 in the diameter of a half dollar?

- Which coins have a diameter with a 5 in the hundredths place?

| U.S. Coins | |
|-------------|----------------------|
| Coin | Diameter (in inches) |
| Penny | 0.750 |
| Nickel | 0.835 |
| Dime | |
| Quarter | 0.955 |
| Half dollar | 1.205 |

Lesson Check

1. What is the relationship between 3.0 and 0.3?
 (A) 0.3 is 10 times as much as 3.0
 (B) 3.0 is $\frac{1}{10}$ of 0.3
 (C) 3.0 is equal to 0.3
 (D) 0.3 is $\frac{1}{10}$ of 3.0
2. A penny is 0.061 inch thick. What is the value of the 6 in the thickness of a penny?
 (A) 6 tens
 (B) 6 thousandths
 (C) 6 tenths
 (D) 6 hundredths

Spiral Review

3. What is the number seven hundred thirty-one million, nine hundred thirty-four thousand, thirty written in standard form? (Lesson 1.2)
 (A) 731,934
 (B) 731,934,003
 (C) 731,934,030
 (D) 731,934,300
4. A city has a population of 743,182 people. What is the value of the digit 3? (Lesson 1.2)
 (A) 3 hundreds
 (B) 3 thousands
 (C) 3 ten thousands
 (D) 3 thousandths
5. Which expression matches the words "three times the sum of 8 and 4"? (Lesson 1.10)
 (A) $3 \times (8 + 4)$
 (B) $3 \times 8 + 4$
 (C) $3 + 8 \times 4$
 (D) $3 \times (8 \times 4)$
6. A family of 2 adults and 3 children goes to a play. Admission costs \$8 per adult and \$5 per child. Which expression does NOT show the total admission cost for the family? (Lesson 1.12)
 (A) $(\$8 \times 2) + (\$5 \times 3)$
 (B) $\$16 + \15
 (C) $(\$8 \times \$5) + (2 + 3)$
 (D) \$31

Name _____

Place Value of Decimals

Write the value of the underlined digit.

1. $0.2\bar{8}7$

2. $5.\bar{3}49$

3. $2.70\bar{4}$

8 hundredths, or 0.08

4. $9.\bar{1}54$

5. $4.00\bar{6}$

6. $7.2\bar{5}8$

7. $0.1\bar{9}8$

8. $6.\bar{8}21$

9. $8.02\bar{7}$

Write the number in two other forms.

10. 0.326

11. 8.517

12. 0.924

13. 1.075

Problem Solving 

14. In a gymnastics competition, Paige's score was 37.025. What is Paige's score written in word form?

15. Jake's batting average for the softball season is 0.368. What is Jake's batting average written in expanded form?

Lesson Check

1. When Mindy went to China, she exchanged \$1 for 6.589 Yuan. What digit is in the hundredths place of 6.589?
(A) 5
(B) 6
(C) 8
(D) 9
2. The diameter of the head of a screw is 0.306 inch. What is this number written in word form?
(A) three hundred six
(B) three hundred six thousandths
(C) thirty-six thousandths
(D) three and six thousandths

Spiral Review

3. Each car on a commuter train can seat 114 passengers. If the train has 7 cars, how many passengers can the train seat?
(Lesson 1.6)
(A) 770
(B) 774
(C) 778
(D) 798
4. Which of the following expressions has a value of 10? (Lesson 1.11)
(A) $(9 + 15) \div 3 + 2$
(B) $9 + (15 \div 3) + 2$
(C) $9 + 15 \div (3 + 2)$
(D) $(9 + 15 \div 3) + 2$
5. Danica has 15 stickers. She gives 3 to one friend and gets 4 from another friend. Which expression matches the words?
(Lesson 1.10)
(A) $15 + 3 + 4$
(B) $15 - (3 + 4)$
(C) $15 - 3 + 4$
(D) $15 + 3 - 4$
6. There are 138 people seated at the tables in a banquet hall. Each table can seat 12 people. All the tables are full except one. How many full tables are there?
(Lesson 2.7)
(A) 6
(B) 11
(C) 12
(D) 13

Name _____

Compare and Order DecimalsCompare. Write $<$, $>$, or $=$.

1. $4.735 \text{ } \textcircled{<} \text{ } 4.74$

2. $2.549 \text{ } \textcircled{\quad} \text{ } 2.549$

3. $3.207 \text{ } \textcircled{\quad} \text{ } 3.027$

4. $8.25 \text{ } \textcircled{\quad} \text{ } 8.250$

5. $5.871 \text{ } \textcircled{\quad} \text{ } 5.781$

6. $9.36 \text{ } \textcircled{\quad} \text{ } 9.359$

7. $1.538 \text{ } \textcircled{\quad} \text{ } 1.54$

8. $7.036 \text{ } \textcircled{\quad} \text{ } 7.035$

9. $6.700 \text{ } \textcircled{\quad} \text{ } 6.7$

Order from greatest to least.

10. 3.008; 3.825; 3.09; 3.18

11. 0.275; 0.2; 0.572; 0.725

12. 6.318; 6.32; 6.230; 6.108

13. 0.456; 1.345; 0.645; 0.654

Algebra Find the unknown digit to make each statement true.

14. $2.48 > 2.4 \text{ } \blacksquare \text{ } 1 > 2.463$

15. $5.723 < 5.72 \text{ } \blacksquare \text{ } < 5.725$

16. $7.64 < 7. \text{ } \blacksquare \text{ } 5 < 7.68$

Problem Solving  **REAL WORLD**

17. The completion times for three runners in a 100-yard dash are 9.75 seconds, 9.7 seconds, and 9.675 seconds. Which is the winning time?

18. In a discus competition, an athlete threw the discus 63.37 meters, 62.95 meters, and 63.7 meters. Order the distances from least to greatest.

Lesson Check

Jay, Alana, Evan, and Stacey work together to complete a science experiment. The table at the right shows the amount of liquid left in each of their beakers at the end of the experiment.

| Student | Amount of liquid (liters) |
|---------|---------------------------|
| Jay | 0.8 |
| Alana | 1.05 |
| Evan | 1.2 |
| Stacey | 0.75 |

- Whose beaker has the greatest amount of liquid left in it?
 (A) Jay (C) Evan
 (B) Alana (D) Stacey
- Whose beaker has the least amount of liquid left in it?
 (A) Jay (C) Evan
 (B) Alana (D) Stacey

Spiral Review

- Janet walked 3.75 miles yesterday. Which is the word form of 3.75? (Lesson 3.2)
 (A) three and seventy-five tenths
 (B) three hundred seventy-five hundredths
 (C) three hundred seventy-five thousandths
 (D) three and seventy-five hundredths
- A dance school allows a maximum of 15 students per class. If 112 students sign up for dance class, how many classes does the school need to offer to accommodate all the students? (Lesson 2.7)
 (A) 7 (C) 9
 (B) 8 (D) 10
- Which expression has a value of 7? (Lesson 1.12)
 (A) $[(29 - 18) + (17 + 8)] \div 6$
 (B) $[(29 - 18) + (17 - 8)] \div 4$
 (C) $[(29 + 18) - (17 + 8)] \div 2$
 (D) $[(29 + 18) + (17 - 8)] \div 8$
- Cathy cut 2 apples into 6 slices each. She ate 9 slices. Which expression matches the words? (Lesson 1.10)
 (A) $(2 \times 6) - 9$
 (B) $(6 \times 9) - 2$
 (C) $(9 \times 2) - 6$
 (D) $(9 - 6) \times 2$

Name _____

Round Decimals

Write the place value of the underlined digit. Round each number to the place of the underlined digit.

1. $0.\underline{7}82$

tenths

0.8

2. $\underline{4}.735$

3. $2.\underline{3}48$

4. $0.5\underline{0}6$

5. $15.\underline{1}86$

6. $8.4\underline{6}5$

Name the place value to which each number was rounded.

7. 0.546 to 0.55

8. 4.805 to 4.8

9. 6.493 to 6

10. 1.974 to 2.0

11. 7.709 to 8

12. 14.637 to 15

Round 7.954 to the place named.

13. tenths

14. hundredths

15. ones

Round 18.194 to the place named.

16. tenths

17. hundredths

18. ones

Problem Solving REAL WORLD

19. The population density of Montana is 6,699 people per square mile. What is the population density per square mile of Montana rounded to the nearest whole number?

20. Alex's batting average is 0.346. What is his batting average rounded to the nearest hundredth?

Lesson Check

- Ms. Ari buys and sells diamonds. She has a diamond that weighs 1.825 carats. What is the weight of Ms. Ari's diamond rounded to the nearest hundredth?
 (A) 1.8 carats
 (B) 1.82 carats
 (C) 1.83 carats
 (D) 1.9 carats
- A machinist uses a special tool to measure the diameter of a small pipe. The measurement tool reads 0.276 inch. What is this measure rounded to the nearest tenth?
 (A) 0.2 inch
 (B) 0.27 inch
 (C) 0.28 inch
 (D) 0.3 inch

Spiral Review

- Four ice skaters participate in an ice skating competition. The table shows their scores. Who has the highest score? (Lesson 3.3)
- Which of the following statements is true about the relationship between the decimals 0.09 and 0.9? (Lesson 3.1)

| Name | Points |
|---------|--------|
| Natasha | 75.03 |
| Taylor | 75.39 |
| Rowena | 74.98 |
| Suki | 75.3 |

- (A) Natasha
 (B) Taylor
 (C) Rowena
 (D) Suki
- 0.09 is equal to 0.9.
0.09 is 10 times as much as 0.9.
0.9 is $\frac{1}{10}$ of 0.09.
0.09 is $\frac{1}{10}$ of 0.9
- The population of Foxville is about 12×10^3 people. Which is another way to write this number? (Lesson 1.5)
 (A) 120
 (B) 1,200
 (C) 12,000
 (D) 120,000
- Joseph needs to find the quotient of $3,216 \div 8$. In which place is the first digit in the quotient? (Lesson 2.1)
 (A) ones
 (B) tens
 (C) hundreds
 (D) thousands

Name _____

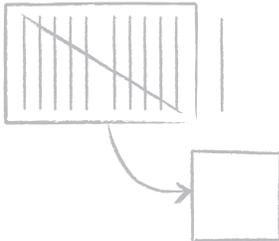
Decimal Addition

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

7. $3.8 + 1.4 = \underline{\hspace{2cm}}$

8. $2.71 + 2.15 = \underline{\hspace{2cm}}$

9. $2.9 + 1.4 = \underline{\hspace{2cm}}$

Problem Solving 

10. 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?

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

Lesson Check

- What is the sum of 2.5 and 1.9?
(A) 0.6
(B) 1.6
(C) 3.4
(D) 4.4
- Keisha walked 0.65 hour in the morning and 0.31 hour in the evening. How many hours did she walk altogether?
(A) 0.96 hour
(B) 0.86 hour
(C) 0.34 hour
(D) 0.33 hour

Spiral Review

- Jodi walks 35 minutes a day. If she walks for 240 days, how many minutes altogether does Jodi walk? (Lesson 1.7)
(A) 840 minutes
(B) 850 minutes
(C) 8,400 minutes
(D) 8,500 minutes
- David 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 altogether over the 6 days? (Lesson 1.6)
- The Speeders soccer team charged \$12 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? (Lesson 2.6)
(A) 56
(B) 57
(C) 58
(D) 59
- What is the value of the expression? (Lesson 1.11)
$$6 + 18 \div 3 \times 4$$

(A) 2
(B) 30
(C) 32
(D) 48

| Visitors to the Snake Exhibit | | | | | |
|-------------------------------|----|----|----|----|----|
| 30 | 25 | 44 | 12 | 25 | 32 |

- (A) \$42 (C) \$308
(B) \$210 (D) \$1,176

Name _____

Decimal Subtraction

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. $0.67 - 0.42 = \underline{\hspace{2cm}}$

5. $0.9 - 0.2 = \underline{\hspace{2cm}}$

6. $3.25 - 1.67 = \underline{\hspace{2cm}}$

7. $4.1 - 2.7 = \underline{\hspace{2cm}}$

8. $3.12 - 2.52 = \underline{\hspace{2cm}}$

9. $3.6 - 1.8 = \underline{\hspace{2cm}}$

Problem Solving 

10. 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?

11. Tim 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?

Lesson Check

1. Janice 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?
 (A) 1.68 miles
 (B) 1.62 miles
 (C) 1.58 miles
 (D) 1.52 miles
2. 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?
 (A) 0.7 million
 (B) 1.7 million
 (C) 5.3 million
 (D) 6.3 million

Spiral Review

3. What is the value of the underlined digit in 91,764,350? (Lesson 1.2)
 (A) 700,000
 (B) 70,000
 (C) 7,000
 (D) 700
4. How many zeros are in the product $(6 \times 5) \times 10^3$? (Lesson 1.5)
 (A) 3
 (B) 4
 (C) 5
 (D) 6
5. To evaluate the following expression, which step should you do first? (Lesson 1.12)
 $7 \times (4 + 16) \div 4 - 2$
 (A) Multiply 7 and 4.
 (B) Add 4 and 16.
 (C) Divide 16 by 4.
 (D) Subtract 2 from 4.
6. In the past two weeks, Sue earned \$513 at her part-time job. She worked a total of 54 hours. About how much did Sue earn per hour? (Lesson 2.5)
 (A) \$5
 (B) \$10
 (C) \$12
 (D) \$15

Name _____

Estimate Decimal Sums and Differences

Use rounding to estimate.

1.
$$\begin{array}{r} 5.38 \\ +6.14 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 2.57 \\ +0.14 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 9.65 \\ -3.12 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 7.92 \\ +5.37 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array}$$

Use benchmarks to estimate.

5.
$$\begin{array}{r} 2.81 \\ +3.72 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 12.54 \\ + 7.98 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6.34 \\ +3.95 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 16.18 \\ - 5.94 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 17.09 \\ + 3.98 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 14.01 \\ - 4.51 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 11.47 \\ + 9.02 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 19.97 \\ -11.02 \\ \hline \end{array}$$

Problem Solving  **REAL WORLD**

13. Elian bought 1.87 pounds of chicken and 2.46 pounds of turkey at the deli. About how much meat did he buy altogether?
-
-
- _____

14. Jenna bought a gallon of milk at the store for \$3.58. About how much change did she receive from a \$20 bill?
-
-
- _____

Lesson Check

1. Regina has two electronic files. One has a size of 3.15 MB and the other has a size of 4.89 MB. Which is the best estimate of the total size of the two electronic files?
 (A) 7 MB
 (B) 7.5 MB
 (C) 8 MB
 (D) 8.5 MB
2. Madison is training for a marathon, which is 26.2 miles. She currently can run 18.5 miles in a day. About how many more miles in a day does she have to add to run the length of a marathon?
 (A) 8 miles
 (B) 7.5 miles
 (C) 6.5 miles
 (D) 6 miles

Spiral Review

3. A machine prints 8 banners in 120 seconds. How many seconds does it take to print one banner? (Lesson 2.2)
 (A) 10 seconds
 (B) 12 seconds
 (C) 15 seconds
 (D) 18 seconds
4. To which place value is the number rounded?
(Lesson 3.4)

5.319 to 5.3

 (A) ones
 (B) tenths
 (C) hundredths
 (D) thousandths
5. The average distance from Mars to the sun is about one hundred forty-one million, six hundred twenty thousand miles. How do you write the number that shows this distance in standard form? (Lesson 1.2)
 (A) 141,620
 (B) 1,416,200
 (C) 14,162,000
 (D) 141,620,000
6. Logan ate 1.438 pounds of grapes. His brother Ralph ate 1.44 pounds of grapes. Which brother ate more grapes? (Lesson 3.3)
 (A) Logan
 (B) Ralph
 (C) They ate the same amount of grapes.
 (D) There is not enough information to decide which brother ate more grapes.

Name _____

Add Decimals

Estimate. Then find the sum.

1. Estimate: _____

$$\begin{array}{r} 2.85 \\ +7.29 \\ \hline \end{array}$$

$$\begin{array}{r} 1\ 1 \\ 2.85 \\ +7.29 \\ \hline \end{array}$$

10.14

2. Estimate: _____

$$\begin{array}{r} 4.23 \\ +6.51 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 6.8 \\ +4.2 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 2.7 \\ +5.37 \\ \hline \end{array}$$

Find the sum.

5. $6.8 + 4.4$

6. $6.87 + 5.18$

7. $3.14 + 2.9$

8. $16.18 + 5.94$

9. $19.8 + 31.45$

10. $25.47 + 7.24$

11. $9.17 + 5.67$

12. $19.7 + 5.46$

Problem Solving  **REAL WORLD**

13. Marcela's dog gained 4.1 kilograms in two months. Two months ago, the dog's mass was 5.6 kilograms. What is the dog's current mass?

14. During last week's storm, 2.15 inches of rain fell on Monday and 1.68 inches of rain fell on Tuesday. What was the total amount of rainfall on both days?

Lesson Check

- Lindsay has two packages she wants to mail. One package weighs 6.3 ounces, and the other package weighs 4.9 ounces. How much do the packages weigh together?
 (A) 11.4 ounces
 (B) 11.2 ounces
 (C) 10.9 ounces
 (D) 10.5 ounces
- Anton rode his mountain bike three days in a row. He biked 12.1 miles on the first day, 13.4 miles on the second day, and 17.9 miles on the third day. How many total miles did Anton bike during the three days?
 (A) 58.2 miles
 (B) 47.1 miles
 (C) 43.4 miles
 (D) 42.4 miles

Spiral Review

- In the number 2,145,857, how does the digit 5 in the thousands place compare to the digit 5 in the tens place? (Lesson 1.1)
 (A) It is 10 times greater.
 (B) It is 100 times greater.
 (C) It is 1,000 times greater.
 (D) It is 10,000 times greater.
- Which of the following expressions does NOT have the same value as 10^5 ? (Lesson 1.4)
 (A) $10 \times 10 \times 10 \times 10 \times 10$
 (B) 100,000
 (C) the fifth power of 10
 (D) $5 \times 10,000$
- Carmen works at a pet store. To feed 8 cats, she empties four 6-ounce cans of cat food into a large bowl. Carmen divides the food equally among the cats. How many ounces of food will each cat get? (Lesson 1.9)
 (A) 3 ounces
 (B) 4 ounces
 (C) 6 ounces
 (D) 8 ounces
- There are 112 students in the Hammond Middle School marching band. The band director wants the students to march with 14 students in each row for the upcoming parade. How many rows will there be? (Lesson 2.3)
 (A) 8
 (B) 10
 (C) 12
 (D) 14

Name _____

Subtract Decimals

Estimate. Then find the difference.

1. Estimate: 3

$$\begin{array}{r} 6.5 \\ -3.9 \\ \hline \end{array}$$

$$\begin{array}{r} 5\ 15 \\ \cancel{6.5} \\ -3.9 \\ \hline \end{array}$$

$$\begin{array}{r} \cancel{6.5} \\ -3.9 \\ \hline \end{array}$$

$$\begin{array}{r} \cancel{6.5} \\ -3.9 \\ \hline 2.6 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 4.23 \\ -2.51 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 8.6 \\ -5.1 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 2.71 \\ -1.34 \\ \hline \end{array}$$

Find the difference. Check your answer.

5.
$$\begin{array}{r} 16.3 \\ -4.4 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 12.56 \\ -5.18 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3.14 \\ -2.9 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 34.9 \\ -4.29 \\ \hline \end{array}$$

9. $2.54 - 1.67$

10. $25.8 - 14.7$

11. $11.63 - 6.7$

12. $5.24 - 2.14$

Problem Solving  **REAL WORLD**

13. The width of a tree was 3.15 inches last year. This year, the width is 5.38 inches. How much did the width of the tree increase?

14. The temperature decreased from 71.5°F to 56.8°F overnight. How much did the temperature drop?

Lesson Check

1. During training, Janice kayaked 4.68 miles on Monday and 5.61 miles on Tuesday. How much farther did she kayak on Tuesday?
(A) 1.13 miles
(B) 1.03 miles
(C) 0.93 mile
(D) 0.83 mile
2. Devon had a length of rope that was 4.78 meters long. He cut a 1.45-meter length from it. How much rope does he have left?
(A) 6.23 meters
(B) 5.13 meters
(C) 3.33 meters
(D) 2.33 meters

Spiral Review

3. A dairy farm has 9 pastures and 630 cows. The same number of cows are placed in each pasture. How many cows are in each pasture? (Lesson 2.2)
(A) 60
(B) 70
(C) 600
(D) 700
4. Moya records 6.75 minutes of an interview on one tape and 3.75 minutes of the interview on another tape. How long was the total interview? (Lesson 3.8)
(A) 9.25 minutes
(B) 9.5 minutes
(C) 10.25 minutes
(D) 10.5 minutes
5. Joanna, Dana, and Tracy shared some trail mix. Joanna ate 0.125 pound of trail mix, Dana ate 0.1 pound, and Tracy ate 0.12 pound of trail mix. Which lists the friends in order from least to greatest amount of trail mix eaten? (Lesson 3.3)
(A) Dana, Tracy, Joanna
(B) Joanna, Tracy, Dana
(C) Tracy, Dana, Joanna
(D) Joanna, Dana, Tracy
6. The local park has 4 bike racks. Each bike rack can hold 15 bikes. There are 16 bikes in the bike racks. Which expression shows the total number of empty spaces in the bike racks? (Lesson 1.11)
(A) $(15 \times 16) + 4$
(B) $(15 \times 16) - 4$
(C) $(4 \times 15) + 16$
(D) $(15 \times 4) - 16$

Name _____

Patterns with Decimals

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

1. 2.6, 3.92, 5.24, **6.56**, 7.88

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**

2. 25.7, 24.1, _____, 20.9, 19.3

Rule: _____

3. 14.33, 13.22, 12.11, 11.00, _____

Rule: _____

4. 1.75, _____, 6.75, 9.25, 11.75

Rule: _____

Write the first four terms of the sequence.

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

_____, _____, _____, _____

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

_____, _____, _____, _____

Problem Solving 

7. 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?

8. Lynne 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 Lynne charge to walk each of the 8 dogs?

Lesson Check

1. 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 will it cost to buy 7 books?
(A) \$14.15 each
(B) \$13.30 each
(C) \$13.15 each
(D) \$12.45 each
2. 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?
(A) \$25.20
(B) \$27.75
(C) \$28.20
(D) \$37.95

Spiral Review

3. Find the product. (Lesson 1.7)

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

- (A) 2,556
(B) 7,704
(C) 9,224
(D) 10,224
4. 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? (Lesson 2.2)
(A) \$22
(B) \$32
(C) \$248
(D) \$2,048
5. Marcie jogged 0.8 mile on Wednesday and 0.9 mile on Thursday. How far did she jog altogether? (Lesson 3.8)
(A) 0.1 mile
(B) 0.17 mile
(C) 1.1 miles
(D) 1.7 miles
6. Bob has 5.5 cups of flour. He uses 3.75 cups of flour. How much flour does Bob have left? (Lesson 3.9)
(A) 2.75 cups
(B) 2.25 cups
(C) 1.75 cups
(D) 1.25 cups

Name _____

Problem Solving • Add and Subtract Money

Solve. Use the table to solve 1–3.

- Dorian and Jack decided to go bowling. They each need to rent shoes and 1 lane, and Jack is a member. 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 |

- Natalie 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?

- Warren paid \$23.85 and received no change. He is a member and rented 2 lanes. How many pairs of shoes did he rent?

Use the following information to solve 4–6.

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

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

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

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

Lesson Check

1. 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?
 - (A) \$5.55
 - (B) \$5.45
 - (C) \$4.55
 - (D) \$4.45
2. Elysse paid for her lunch with a \$10 bill and received \$0.63 in change. The lunch special was \$7.75. Sales tax was \$0.47. What was the cost of her drink?
 - (A) \$1.15
 - (B) \$1.97
 - (C) \$2.87
 - (D) \$2.97

Spiral Review

3. Tracie has saved \$425 to spend during her 14-day vacation. About how much money can she spend each day? (Lesson 2.5)
 - (A) \$45
 - (B) \$42
 - (C) \$30
 - (D) \$14
4. Which of the following decimals is $\frac{1}{10}$ of 0.08? (Lesson 3.1)
 - (A) 8.0
 - (B) 0.8
 - (C) 0.18
 - (D) 0.008
5. 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? (Lesson 3.7)
 - (A) 6 pounds
 - (B) 7 pounds
 - (C) 8 pounds
 - (D) 29 pounds
6. Shelly ate 4.2 ounces of trail mix. Marshall ate 4.25 ounces of trail mix. How much more trail mix did Marshall eat? (Lesson 3.9)
 - (A) 0.45 ounce
 - (B) 0.27 ounce
 - (C) 0.23 ounce
 - (D) 0.05 ounce

Name _____

Choose a Method

Find the sum or difference.

1.
$$\begin{array}{r} 7.24 \\ +3.18 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ 7.24 \\ +3.18 \\ \hline 10.42 \end{array}$$

2.
$$\begin{array}{r} 5.2 \\ 6.47 \\ +12.16 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 6.37 \\ -4.98 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 0.64 \\ 9.68 \\ +1.47 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 14.87 \\ +3.65 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 60.12 \\ -14.05 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 2.72 \\ +9.48 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 16.85 \\ +83.4 \\ \hline \end{array}$$

9. $\$13.60 - \8.74 _____

10. $\$25.00 - \16.32 _____

11. $13.65 + 6.90 + 4.35$ _____

Problem Solving  **REAL WORLD**12. Jill bought 6.5 meters of blue lace and 4.12 meters of green lace. What was the total length of lace she bought?

_____13. Zack bought a coat for \$69.78. He paid with a \$100 bill and received \$26.73 in change. How much was the sales tax?

Lesson Check

1. Jin buys 4 balls of yarn for a total of \$23.78. She pays with two \$20 bills. What is her change?
(A) \$1.78
(B) \$3.78
(C) \$16.22
(D) \$18.22
2. Allan is measuring his dining room table to make a tablecloth. The table is 0.45 meter longer than it is wide. If it is 1.06 meters wide, how long is it?
(A) 1.51 meters
(B) 1.41 meters
(C) 1.01 meters
(D) 1.10 meters

Spiral Review

3. Which of the following can be used to find $56 \div 4$? (Lesson 1.8)
(A) $(4 \times 7) + (4 \times 8)$
(B) $(4 \times 50) + (4 \times 6)$
(C) $(2 \times 28) + (2 \times 2)$
(D) $(4 \times 10) + (4 \times 4)$
4. Jane, Andre, and Maria pick apples. Andre picks three times as many pounds as Maria. Jane picks two times as many pounds as Andre. The total weight of the apples is 840 pounds. How many pounds of apples does Andre pick? (Lesson 2.9)
(A) 84 pounds
(B) 252 pounds
(C) 504 pounds
(D) 840 pounds
5. What is the sum of $6.43 + 0.89$? (Lesson 3.8)
(A) 5.54
(B) 6.22
(C) 6.32
(D) 7.32
6. Hannah bought a total of 5.12 pounds of fruit at the market. She bought 2.5 pounds of pears, and she also bought some bananas. How many pounds of bananas did she buy? (Lesson 3.9)
(A) 2.37 pounds
(B) 2.62 pounds
(C) 3.37 pounds
(D) 3.5 pounds

Name _____

Chapter 3 Extra Practice

Lessons 3.1 - 3.2

Complete the sentence.

1. 0.7 is 10 times as much as _____.

2. 0.003 is $\frac{1}{10}$ of _____.

Write the value of the underlined digit.

3. 3.872

4. 0.194

5. 11.776

6. 4.001

Lessons 3.3 - 3.4

Order from greatest to least.

1. 5.006, 5.917, 5.08, 5.99

2. 0.823, 1.823, 0.732, 0.832

Write the place value of the underlined digit. Round each number to the place of the underlined digit.

3. 0.829

4. 7.918

5. 11.507

Lessons 3.5 - 3.9

Estimate. Then find the sum or difference.

1. Estimate: _____

$$\begin{array}{r} 8.5 \\ + 1.8 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} 26.42 \\ - 9.8 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 8.26 \\ + 0.47 \\ \hline \end{array}$$

4. Estimate: _____

$$7.06 - 1.95$$

5. Estimate: _____

$$24 - 5.392$$

6. Estimate: _____

$$3.6 + 2.16 + 1.34$$

Lesson 3.10

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

1. 56.38, 51.28, 46.18, 41.08, _____

2. 2.1, 4.3, 6.5, _____, 10.9

Rule: _____

Rule: _____

3. 15.24, 15.14, 15.04, _____, 14.84

4. 9.98, 13.09, 16.2, _____, 22.42

Rule: _____

Rule: _____

Lesson 3.11

Complete the table to solve.

1. Alicia's goal is to have \$30 in her account. She starts with \$24.50 from washing cars. She spends \$8.25 at the movies. Then she earns another \$11.50. Does Alicia now have \$30? By how much is she over or under?

| Alicia's Account | |
|------------------|---------|
| Starting Balance | \$24.50 |
| Spent: \$8.25 | _____ |
| | _____ |
| Earned: \$11.50 | _____ |
| Current Balance | _____ |

Lesson 3.12

Find the sum or difference.

1. $4.15 + 3.55 + 1.85$

2. $\$25 - \12.35

3.
$$\begin{array}{r} 2.74 \\ +9.36 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 12.15 \\ - 6.13 \\ \hline \end{array}$$
