

Fifth Grade
Answer Key
Unit 1: Decimals

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Problem of the Day

Lesson 1

Write a 7-digit number using the following rules.

- Use at least 4 different digits.
- The number in the hundreds place has a value that is the 10 times the value of the number in the tens place.
- The value of the digit in the hundred thousands place has a value that is $\frac{1}{10}$ the value of the digit in the millions place.

Sample answer:

Answer: 6,735,552

Lesson 2

Write the number two hundred thousand, fifty-six in standard form.

Answer: 200,056

Write the number 1,234,203 in word form.

Answer: one million, two hundred
thirty-four thousand, two
hundred-three

Lesson 3

How can you write the number 4 as a fraction?

$$\frac{4}{4}$$

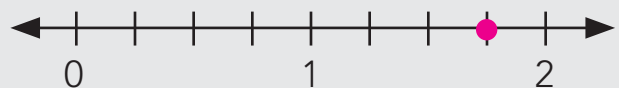
Lesson 4

Write the number 34,080 in expanded form.

$$30,000 + 4,000 + 80$$

Lesson 5

Plot a point to show the location of $1\frac{3}{4}$.



Problem of the Day

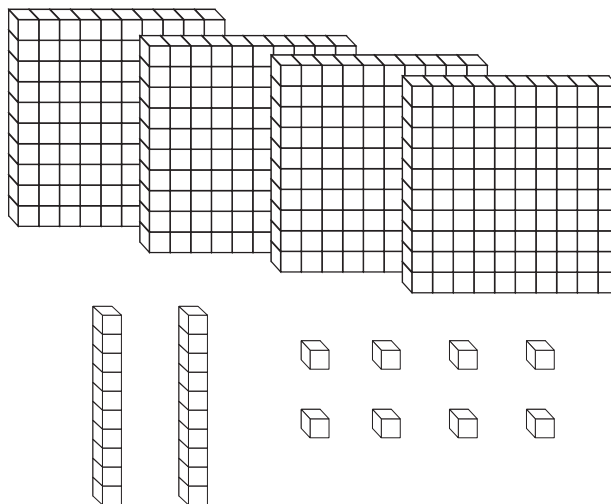
Lesson 6

Which comparison is correct?

- A. $3,405 < 3,099$
- B. $29,019 > 100,000$
- C. $298,306 > 298,400$
- D. $1,299,008 < 1,299,210$

Lesson 9

What number is represented by the Base Ten Blocks shown?



428

Lesson 7

Round 45,674 to the nearest ten thousand and to the nearest ten.

Rounded to the nearest ten thousand: _____ **50,000**

Rounded to the nearest ten: _____ **45,670**

Lesson 10

Find the sum:

$$3,000 + 4,000 + 800 + 200 =$$

8,000

Lesson 8

What is 10,000 more than 29,000?

39,000

Problem of the Day

Lesson 11

Add: $3,489 + 17,102 =$

20,591

Lesson 14

Estimate the difference by rounding each number to the nearest ten thousand.

$46,480 - 19,521 =$

30,000

Lesson 12

What is the best estimate of the sum of $23,450 + 9,016$?

- A. 11,000
- B. 30,000**
- C. 35,000
- D. 40,000

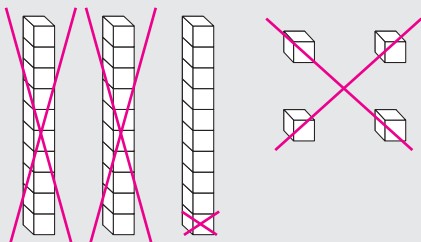
Lesson 15

Subtract: $400,000 - 367,294 =$

32,706

Lesson 13

Use the models to show how to subtract 25 from 34.



Problem of the Day

Lesson 16

Complete the strip diagram.

4,086	
3,125	961

How did you find the missing value?
Explain.

Sample answer: I subtracted 3,125 from 4,086 to find the missing value.

Lesson 18

An elementary school is building a new playground. The cost of landscaping around the playground is \$2,498. The cost of the playground equipment is \$10,230. The school budgeted \$15,000 for the project. How much of the budget is left after paying for the landscaping and playground equipment?

\$2,502

Lesson 17

The Walker family has two rain barrels. In one rain barrel, they collected 5,602 ounces of water. In the other rain barrel, they collected 1,984 ounces of water.

How many ounces of water did they collect in all? **7,586**

What is the difference in the amount of water in the two rain barrels?

3,618

Lesson 19

Draw a number line to show the location of the numbers 34,980 and 34,969. Use the number line to compare the numbers.

34,980  34,969

Lesson 20

How are the values of the two underlined digits related?

2,576,683

Sample answer: The 6 in the thousands place is ten times more than the 6 in the hundreds place.

Pre-Assessment

Read each problem below and solve.

1. Look at the number below. How does the value of the digit in the tenths place compare to the value of the digit in the hundredths place?

2.55

Sample answer: It is 10 times more than the digit in the hundredths place.

2. Which of the following is the number 0.09 written as a fraction?

A. $\frac{1}{9}$

B. $\frac{9}{10}$

C. $\frac{9}{100}$

D. $\frac{9}{1000}$

3. Write the number 3.12 in word form.

three and twelve hundredths

4. Write the number forty-two and thirty-one thousandths in standard form.

42.031

5. Which of the following shows the number 56.208 in expanded form?

A. $(5 \times 10) + (6 \times 1) + (2 \times \frac{1}{100}) + (8 \times \frac{1}{1000})$

B. $(5 \times 10) + (6 \times 1) + (2 \times \frac{1}{10}) + (8 \times \frac{1}{100})$

C. $(5 \times 10) + (6 \times \frac{1}{10}) + (2 \times \frac{1}{100}) + (8 \times \frac{1}{1000})$

D. $(5 \times 10) + (6 \times 1) + (2 \times \frac{1}{10}) + (8 \times \frac{1}{1000})$

6. Which number line shows the location of 0.45?



7. Compare the numbers shown. Write $<$, $>$, or $=$.

$$0.4 \text{ (} > \text{)} 0.36$$

8. Aliyah bought cheese at the deli. She rounded the number of pounds of cheese she bought to the nearest tenth and said she bought about 0.5 pound of cheese. Which of the following could be the actual amount of cheese Aliya bought?

A. 0.049 pound

C. 0.51 pound

B. 0.39 pound

D. 1.45 pounds

9. Add: $4.6 + 3.59$

A. 4.05

C. 8.19

B. 7.19

D. 40.5

10. Subtract: $10 - 8.03$

A. 1.96

C. 2.03

B. 1.97

D. 8.17

Decimal Place Value Quiz

1. What is the value of each digit in the number 2,003.601? Write the value in words.
 2: millions 3: ones
 6: tenths 1: thousandths
2. Complete each statement to compare the digits in the number 33.66?
 The digit in the ones place is $\frac{1}{10}$
 the digit in the tens place.
 The digit in the tenths place is 10 times
 the digit in the hundredths place.

Write each decimal as a fraction.

3. 0.12: $\frac{12}{100}$
4. 0.009: $\frac{9}{1,000}$

5. Write the number four hundred and fifteen thousandths in standard form and expanded form.
 Standard form: 400.015
 Expanded form: $400 + \frac{15}{1000}$
6. Plot a point to show the location of 1.8 on the number line.



Compare the numbers. Write $<$, $=$, or $>$.

7. 3.45 $<$ 3.7

8. 0.06 $=$ 0.060

Round each number to the nearest whole number, nearest tenth, and nearest hundredth.

9. 33.407
 Nearest whole number: 33
 Nearest tenth: 33.4
 Nearest hundredth: 33.41
10. 0.595
 Nearest whole number: 1
 Nearest tenth: 0.6
 Nearest hundredth: 0.60

Decimal Addition Quiz

Write the decimal point in the answer for each sum.

1. $35.19 + 6.027 = 41.217$

2. $0.871 + 9.35 = 10.221$

3. $0.067 + 0.19 = 0.257$

4. $303.6 + 558.67 = 862.27$

Find the sum using any method. Show your work.

5. $0.245 + 0.18 = 0.425$

6. $0.45 + 0.23 = 0.68$

7. $1.9 + 4.5 = 6.4$

8. $24.3 + 19.65 = 43.95$

9. Which sum is closest to 1?

A. $0.35 + 0.07$

B. $0.081 + 0.009$

C. $0.23 + 0.801$

D. $0.6 + 0.044$

10. Which sum is closest to 0.5?

A. $0.3 + 0.298$

B. $0.19 + 0.267$

C. $0.003 + 0.002$

D. $1.32 + 4.24$

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Assessment

Read each problem below and solve.

- What is the value of the underlined digit in the number 1.207?
 - seven
 - seven tenths
 - seven hundredths
 - seven thousandths
- Complete each statement to compare the digits in the number 4.477.

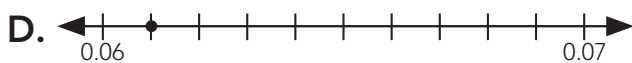
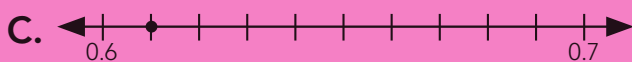
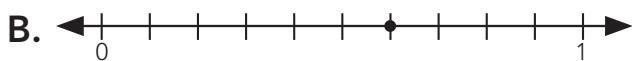
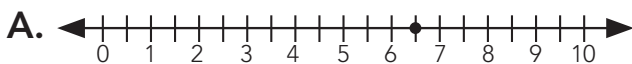
The digit in the ones is place is ten times the digit in the tenths place.

The digit in the thousandths place is one-tenth the digit in the hundredths place.

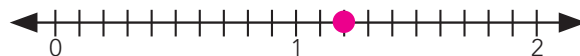
Write each of the numbers shown below in standard form and expanded form.

- Twenty-five hundredths
Standard form: 0.25
Expanded form: 0.2 + 0.05
- Forty and seventy-nine thousandths
Standard form: 40.79
Expanded form: 40 + 0.7 + 0.09
- Write the number 5,036,001.048 in word form.
five million, thirty-six thousand, one and forty-eight thousandths
- Which of the following is the number 0.005 written as a fraction?
 - $\frac{1}{5}$
 - $\frac{5}{100}$
 - $\frac{1}{500}$
 - $\frac{5}{1000}$

- Which number line shows a point at 0.61?



- Plot a point on the number line to show the location of 1.2.



Compare the numbers shown. Write $<$, $=$, or $>$.

9. $0.8 > 0.203$

10. $1.02 > 0.998$

11. $0.26 < 0.27$

Complete the tables by rounding each number to the nearest whole number, the nearest tenth, and the nearest hundredth.

12.

	Rounded to the Nearest Whole Number	Rounded to the Nearest Tenth	Rounded to the Nearest Hundredth
45,078.491	45,078	45,078.5	45,078.49

13.

	Rounded to the Nearest Whole Number	Rounded to the Nearest Tenth	Rounded to the Nearest Hundredth
0.599	1.0	0.6	0.60

Add using the standard algorithm. Show your work.

14. $12.89 + 3.078 =$

15. $137.061 + 24.38 =$

Subtract using the standard algorithm. Show your work.

16. $13.67 - 8.59 = 5.08$

17. $5.1 - 3.062 = 2.038$

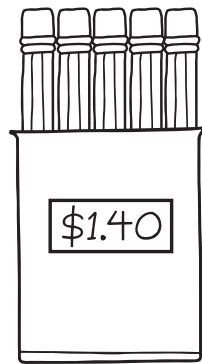
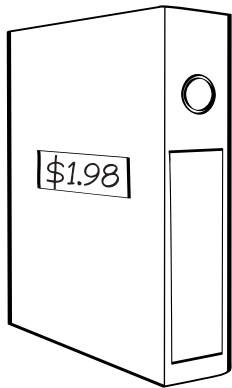
18. Omar is 121.92 centimeters tall. His sister Jada is 106.68 centimeters tall. How much taller is Omar than Jada?

- A. 15.24 centimeters
- B. 25.34 centimeters
- C. 25.36 centimeters
- D. 228.6 centimeters

19. Mr. McGill has a container filled with 100 liters of water. After pouring some of the water into a cup, the container has 34.05 liters of water remaining. How much water did Mr. McGill pour into the cup?

- A. 65.71 liters
- B. 65.95 liters
- C. 134.05 liters
- D. 165.95 liters

20. Savannah has \$30 to spend on school supplies. How much money does she have left after buying a binder and a package of pencils?



Answer: _____ **\$26.62**

Write 0.16 as a fraction.

$$\frac{16}{100}$$

Write 0.4 as a fraction.

$$\frac{4}{10}$$

Write 0.108 as a fraction.

$$\frac{108}{1,000}$$

Write 0.003 as a fraction.

$$\frac{3}{1,000}$$

Write 0.22 as a fraction.

$$\frac{22}{100}$$

Write 0.432 as a fraction.

$$\frac{432}{1,000}$$

Write 0.80 as a fraction.

$$\frac{8}{10}$$

Write 0.80 as a fraction.

$$\frac{8}{10}$$

Write 0.77 as a fraction.

$$\frac{77}{100}$$

Write 0.005 as a fraction.

$$\frac{5}{1,000}$$

Write 0.2 as a fraction.

$$\frac{2}{10}$$

Write 0.08 as a fraction.

$$\frac{8}{100}$$

Write 0.221 as a fraction.

$$\frac{221}{1,000}$$

Write 0.909 as a fraction.

$$\frac{909}{1,000}$$

Write 0.44 as a fraction.

$$\frac{44}{100}$$

Write 0.818 as a fraction.

$$\frac{818}{1,000}$$

$$0.38 + 0.55$$

0.93

$$0.004 + 0.6$$

$$0.604$$

$$0.098 + 0.002$$

0.100

$$0.432 + 0.284$$

0.716

$$0.99 + 0.101$$

$$1.091$$

$$0.65 + 0.015$$

$$0.665$$

$$0.367 + 0.85$$

1.217

$$0.4 + 0.592$$

0.992

$$8.08 + 12.52$$

20.6

$$0.654 + 0.824$$

1.478

$$6.108 + 5.204$$

11.312

$$0.42 + 0.89$$

1.31

$$4.53 + 2.401$$

6.931

$$30.15 + 50.87$$

81.02

$$0.307 + 0.602$$

0.909

$$0.46 + 0.373$$

0.833

$$0.89 - 0.55$$

0.34

$$0.19 - 0.05$$

0.14

$$0.098 - 0.072$$

0.026

$$0.48 - 0.21$$

0.27

$$0.99 - 0.16$$

0.83

$$0.75 - 0.4$$

0.35

$$0.212 - 0.081$$

0.131

$$0.48 - 0.39$$

0.09

$$0.405 - 0.025$$

0.38

$$0.66 - 0.27$$

0.39

$$0.119 - 0.099$$

0.02

$$0.41 - 0.28$$

0.13

$$0.543 - 0.051$$

.492

$$0.28 - 0.09$$

0.19

$$0.478 - 0.185$$

0.293

$$0.081 - 0.043$$

0.038

$$0.105 - 0.06$$

0.99

$$0.37 - 0.26$$

0.11

$$\begin{array}{r} 19.2 \\ - 8.17 \\ \hline 11.03 \end{array}$$

$$\begin{array}{r} 54 \\ - 26.302 \\ \hline 27.698 \end{array}$$

$$\begin{array}{r} 30.1 \\ - 18.003 \\ \hline 12.097 \end{array}$$

$$\begin{array}{r} 0.48 \\ - 0.036 \\ \hline 0.444 \end{array}$$

$$\begin{array}{r} 8 \\ - 4.49 \\ \hline 3.51 \end{array}$$

$$\begin{array}{r} 341 \\ - 19.533 \\ \hline 321.467 \end{array}$$

$$\begin{array}{r} 10.2 \\ - 5.24 \\ \hline 4.96 \end{array}$$

$$\begin{array}{r} 50 \\ - 19.516 \\ \hline 30.484 \end{array}$$

$$\begin{array}{r} 70.4 \\ - 68.001 \\ \hline 2.399 \end{array}$$

$$\begin{array}{r} 0.83 \\ - 0.016 \\ \hline 0.814 \end{array}$$

$$\begin{array}{r} 4 \\ - 2.32 \\ \hline 1.68 \end{array}$$

$$\begin{array}{r} 522 \\ - 85.288 \\ \hline 436.712 \end{array}$$

$$\begin{array}{r} 32.2 \\ - 9.13 \\ \hline 23.07 \end{array}$$

$$\begin{array}{r} 51 \\ - 35.15 \\ \hline 15.85 \end{array}$$

$$\begin{array}{r} 90.8 \\ - 24.027 \\ \hline 66.773 \end{array}$$

$$\begin{array}{r} 0.78 \\ - 0.073 \\ \hline 0.707 \end{array}$$

$$\begin{array}{r} 1 \\ - 0.19 \\ \hline 0.81 \end{array}$$

$$\begin{array}{r} 560 \\ - 115.203 \\ \hline 444.797 \end{array}$$

Malik and Sam each ran an obstacle course in the park. Malik completed the course in 38.287 seconds. It took Sam 3.12 seconds longer than Malik to complete the course. How long did it take Sam to complete the course?

41.407 seconds

Ruby has two building blocks. One block has a height of 2.4 centimeters and the other block has a height of 3.25 centimeters. What is the total height when the two blocks are stacked on top of each other?

5.65 centimeters

Elisa has 8 ounces of butter. A recipe for honey-butter rolls calls for 4.5 ounces of butter. How much butter will Elisa have left after making one batch of the rolls?

3.5 ounces

Lila's time on the 50-yard freestyle is 24.18 seconds. The school record on the 50-yard freestyle is 23.49 seconds. By how many seconds would Lila need to decrease her time to tie her school's record?

0.69 seconds

At the beginning of the school year, the chameleon in Mr. Harris's classroom was 15.25 inches long. By the end of the year, the chameleon had grown 2.5 inches. How long was the chameleon at the end of the year?

17.75 inches

A newborn baby weighed 7.5 pounds at birth. The baby gained 0.75 pound during his first week. How much did the baby weigh at 1 week of age?

8.25 pounds

The combined mass of two glass marbles is 39.3 grams. If the mass of one of the marbles is 18.68 grams, what is the mass of the other marble?

20.62

The Cho family is on a road trip. They stop at a rest stop to buy gasoline. The price of regular unleaded gasoline is \$3.059 per gallon and the price of premium unleaded gasoline is \$3.579 per gallon. What is the difference in price between a gallon of regular unleaded gasoline and premium unleaded gasoline?

\$0.52

Shopping Trip #1

You buy:

- One watermelon

You pay with



What is your change?

Answer:

\$0.11

Shopping Trip #2

You buy:

- One pound of bananas
- One can of soup

You pay with



What is your change?

Answer:

\$7.71

Shopping Trip #3

You buy:

- One can of tuna
- One pound of swiss cheese
- One loaf of bread

You pay with



What is your change?

Answer:

\$5.01

Shopping Trip #4

You buy:

- One gallon of milk
- One zucchini
- One bag of pretzels

You have



Do you have enough? If so, how much do you have left? If not, how much more do you need?

Answer:

Sample answer:
Yes, I have \$3.43 left.

Create a number line to show the location of 0.34 and 0.5.



Use your number line to help you compare the numbers.

$$0.34 < 0.5$$

Write a number that has a digit in the tenths place that has a value that is $\frac{1}{10}$ the value of the digit in the ones place.

Sample answer: 45.51

Write the number fourteen thousand, fifty-one and seventy-five thousandths in expanded notation and standard form.

$$10,000 + 4,000 + 50 +$$

Expanded notation: $1 + 0.07 + 0.005$

Standard form: $14,051.075$

A penny has a mass of 2.5 grams, a nickel has a mass of 5 grams, a dime has a mass of 2.27 grams, and a quarter has a mass of 5.67 grams. There are 2 coins on a scale showing a total mass of 7.94 grams. Which two coins are on the scale?

a dime and a quarter

Find the difference.

$$7.65 - 4.88 = \underline{2.77}$$

Which two numbers shown below will have a sum closest to 0.5?

0.37

0.04

0.109

0.21

Find the sum.

$$4.56 + 71.8 = \underline{76.36}$$

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

$$45.96 + 63.201 = 109.161$$

Sample answer:

When you add 45 and 63, you get 108.

That is how I know that the decimal has to go after the first three numbers.

Find the difference.

$$10.3 - 7.802 = \underline{2.498}$$

Round 27.365 to the nearest whole number, the nearest tenth, and the nearest hundredth.

Nearest whole number: 27

Nearest tenth: 27.4

Nearest thousandth: 27.365

Subtract.

$$\begin{array}{r} 25 \\ - 6.73 \\ \hline 18.27 \end{array}$$

Write the word name for the number shown.

4,000,276.109

**four million, two hundred seventy-six
and one hundred nine thousandths**