

School-Home Letter

Vocabulary

equivalent decimals Two or more decimals that name the same amount

percent The comparison of a number to 100; *percent* means "per hundred"

Dear Family,

During the next few weeks, our math class will be learning more about *decimal place value* and using what we learn to *compare and order decimals*. We will also begin to understand the concept of *percent* and learn to relate *fractions, decimals, and percents*.

You can expect to see homework that provides practice with *decimals and percent*.

Here is a sample of how your child will be taught to *compare and order decimals*.

MODEL Compare and Order Decimals

This is how we will be comparing and ordering decimals.

Order 36.839, 3.92, and 36.831 from least to greatest.

Compare the whole number parts of the decimal. Since 3 is less than 36, the decimal 3.92 is the least.

STEP 1

Line up the decimal places. There are the same number of tens and ones, so compare the tenths.

36.839
36.831

There is the same number of tenths.

STEP 2

Compare the hundredths.

36.839
36.831

There is the same number of hundredths.

STEP 3

Compare the thousandths.

36.839
36.831

$9 > 1$

The order from least to greatest is 3.92, 36.831, 36.839.

Tips

If you are having difficulty comparing the correct decimal place values, use a sheet of grid paper and write each digit and the decimal point of the decimal in separate boxes. Line up the decimal points of the decimals you are ordering and look at the columns of numbers created to compare place values.

Carta para la casa

Vocabulario

decimales equivalentes Dos o más decimales que representan la misma cantidad

porcentaje La comparación de un número con 100; porcentaje significa "tanto por ciento"

Querida familia,

Durante las próximas semanas, en la clase de matemáticas aprenderemos más acerca del valor posicional decimal y cómo usar lo que aprendamos para comparar y ordenar decimales. También empezaremos a comprender el concepto de porcentaje y aprenderemos a relacionar fracciones, decimales y porcentajes.

Llevaré a la casa tareas para practicar los decimales y los porcentajes.

Este es un ejemplo de la manera como aprenderemos a comparar y ordenar decimales.

MODELO Comparar y ordenar decimales

Así es como compararemos y ordenaremos decimales.

Ordenar 36.839, 3.92 y 36.831 de menor a mayor

Compara las partes enteras de los decimales. Dado que 3 es menor que 36, 3.92 es el menor.

PASO 1

Alinea los lugares decimales. Tienen la misma cantidad de decenas y unidades, por lo tanto compara los décimos.

36.839
36.831

Tienen la misma cantidad de décimos.

PASO 2

Compara los centésimos.

36.839
36.831

Tienen la misma cantidad de centésimos.

PASO 3

Compara los milésimos.

36.839
36.831

$9 > 1$

Los números ordenados de menor a mayor son 3.92, 36.831, 36.839.

Pistas

Si tienes dificultad al comparar los valores posicionales decimales correctos, usa una hoja de papel cuadriculado y escribe cada dígito y el punto decimal del decimal en casillas separadas. Alinea los puntos decimales de los decimales que estás ordenando y observa las columnas de números para comparar los valores posicionales.

Name _____

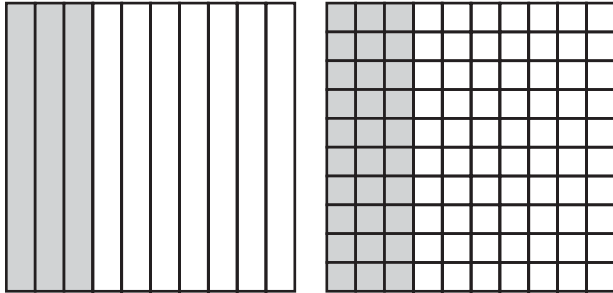
Model Equivalent Decimals



MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

Use tenths models and hundredths models. Are the two decimals equivalent? Write *yes* or *no*.

1. 0.3 and 0.30



yes

2. 0.77 and 0.7

3. 0.8 and 0.08

4. 0.1 and 0.10

5. 0.05 and 0.55

Write an equivalent decimal. You may use a decimal model or number lines.

6. 0.2

7. 0.480

8. 0.400

9. 0.7

10. 0.30

11. 0.100

12. $\frac{3}{4}$

13. $\frac{1}{5}$

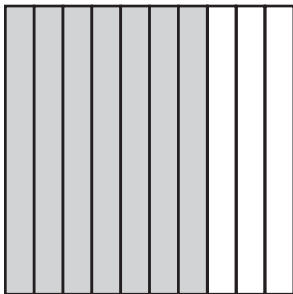
Problem Solving

14. Juliana shaded 6 parts of a tenths model. Hope says she can model a decimal equivalent to Juliana's by shading 6 squares of a hundredths model. Is Hope correct? Why or why not?

15. Julio has 80 pennies. He wants to trade them with his sister for an equivalent value in dimes. How many dimes will Julio's sister give him for the 80 pennies?

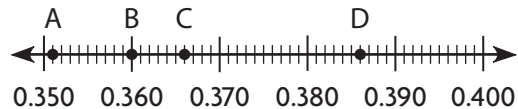
Lesson Check (MA.4.A.2.4)

1. Which decimal is equivalent to the shaded part of the model below?



- (A) 0.77 (C) 0.07
(B) 0.70 (D) 0.007

2. Jayla located the point 0.36 on a number line. Which point on the number line below represents an equivalent decimal for 0.36?



- (F) A
(G) B
(H) C
(I) D

Review Grade 4 (MA.4.A.6.1)

3. What is the value of the digit 6 in the number 635,029,578?

- (A) 6 hundreds
(B) 6 thousands
(C) 6 millions
(D) 6 hundred millions

4. Jonah thinks of an 8-digit number that has a 5 in the millions place. The digit in the ten thousands place that is twice the digit in the ten millions place. Which of the following could be Jonah's number?

- (F) 18,520,000 (H) 52,040,000
(G) 25,040,000 (I) 85,040,000

Look Back (MA.3.G.5.3)

5. Bethany's piano lesson begins at 2:10 P.M. It ends at 3:20 P.M. How long is Bethany's piano lesson?

- (A) 10 minutes
(B) 50 minutes
(C) 1 hour 10 minutes
(D) 110 minutes

6. Elias sees a movie that begins at 4:30 P.M. The movie lasts for 1 hour 45 minutes. At what time will the movie end?

- (F) 5:15 P.M. (H) 6:15 P.M.
(G) 5:45 P.M. (I) 6:45 P.M.

← SPIRAL REVIEW

← SPIRAL REVIEW

Name _____

Equivalent Decimals

MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

Write *equivalent* or *not equivalent* to describe the two decimals.

1. 0.12 and 0.012

not equivalent

2. 0.02 and 0.020

3. 9.006 and 9.06

4. 0.34 and 0.340

5. 5.8 and 5.800

6. 0.77 and 0.077

7. 0.49 and 0.409

8. 0.99 and 0.990

9. 4.81 and 4.381

Write = or \neq to describe the two decimals.

10. 1.2 \bigcirc 0.2

11. 0.81 \bigcirc 0.810

12. 5.09 \bigcirc 5.090

13. 11.67 \bigcirc 11.6

14. 7.448 \bigcirc 7.44

15. 2.77 \bigcirc 2.770

16. 1.21 \bigcirc 1.2100

17. 0.72 \bigcirc 0.720

18. 4.478 \bigcirc 4.479

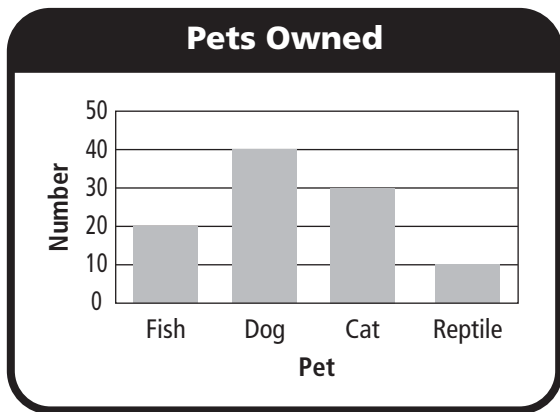
Problem Solving

19. Sadie fills 4 pages of the 10 pages in her sticker album. What part of her album does Sadie fill? Write your answer as two equivalent decimals.
- _____

20. Emmanuel has a collection of 100 shells. Seven of the shells are conch shells. What part of Emmanuel's shell collection is conch shells? Write your answer as two equivalent decimals.
- _____

Lesson Check (MA.4.A.2.4)

1. The graph shows the results of a survey.



Which of the following shows a decimal equivalent for the part of pets owned that is cats?

- (A) 0.003 (C) 0.03
 (B) 0.030 (D) 0.3

2. Ms. Hammond says that the part of her classroom walls covered by a blackboard is equal to 0.25. Which of the following is an equivalent decimal in word form?

- (F) twenty-five thousandths
 (G) two hundred five thousandths
 (H) twenty-five hundredths
 (I) twenty-five

Review Grade 4 (MA.4.A.1.1)

3. Dakota puts 56 flowers into 7 vases. If Dakota puts the same number of flowers into each vase, which number sentence can be used to find the number of flowers?

- (A) $\square \times 7 = 56$ (C) $\square \times 9 = 56$
 (B) $\square \times 8 = 56$ (D) $\square \times 32 = 7$

4. In the number sentence below, which number does the ★ represent?

$$6 \times \star = 36$$

- (F) 9 (H) 6
 (G) 7 (I) 4

Look Back (MA.3.A.2.1, MA.4.A.2.4)

5. The model shows the part of a day Gavin spends at work. He works 8 hours a day. What fraction of the day does he work?



- (A) $\frac{8}{1}$ (C) $\frac{3}{8}$
 (B) $\frac{24}{8}$ (D) $\frac{1}{3}$

6. Which of the following points represents the fraction $\frac{1}{3}$?



- (F) A (H) C
 (G) B (I) D



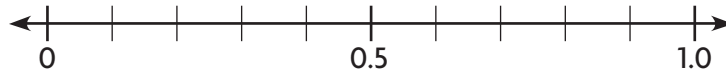
Name _____

Estimate Decimal Amounts



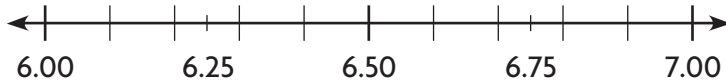
MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

Use the number line and the benchmarks 0, 0.5, and 1.0 to estimate the decimal.



- | | | | |
|-----------------------|------------------|------------------|------------------|
| 1. 0.56
<u>0.5</u> | 2. 0.22
_____ | 3. 0.87
_____ | 4. 0.04
_____ |
| 5. 0.41
_____ | 6. 0.79
_____ | 7. 0.95
_____ | 8. 0.38
_____ |

Use the number line and the benchmarks 0, 0.25, 0.50, 0.75, and 1.00 to estimate the decimal.



- | | | | |
|-------------------|-------------------|-------------------|--------------------|
| 9. 6.81
_____ | 10. 6.12
_____ | 11. 6.57
_____ | 12. 6.269
_____ |
| 13. 6.89
_____ | 14. 6.68
_____ | 15. 6.16
_____ | 16. 6.43
_____ |

Problem Solving

- | | |
|--|--|
| 17. A scientist records a butterfly's wingspan as 7.32 centimeters. Using benchmarks to estimate, about how many centimeters is the butterfly's wingspan?
_____ | 18. Edwin and his friends see a movie that lasts 1.4 hours. Using benchmarks to estimate, about how long does the movie last?
_____ |
|--|--|

Lesson Check (MA.4.A.2.4)

- Which decimal is closest to 4.75?
 - (A) 4.070
 - (B) 4.171
 - (C) 4.710
 - (D) 4.900
- Reagan finished the obstacle course in 15.19 seconds, Erick finished in 14.81 seconds, Eva finished in 15.06 seconds, and Gregory finished in 14.52 seconds. Who finished the obstacle course in a time closest to 15 seconds?
 - (F) Reagan
 - (G) Erick
 - (H) Eva
 - (I) Gregory

Review Grade 4 (MA.4.A.4.2)

- Erika sold 24 boxes of cookies to raise money for the Girl Guide's camping trip. This is 3 times as many boxes, b , as Giselle sold.

24 ● 3 ● b

 Which symbols make the equation true?
 - (A) =, \div
 - (B) =, \times
 - (C) =, +
 - (D) \times , =
- Trenton's age divided by 3 is Raymond's age. Raymond is 6 years old. Which equation shows how to find Trenton's age, t ?
 - (F) $6 + t = 3$
 - (G) $6 = 3 \times t$
 - (H) $t \div 3 = 6$
 - (I) $6 \times t = 3$



Look Back (MA.3.A.6.2)

- Choose the number that is NOT a multiple of 9.
 - (A) 36
 - (B) 42
 - (C) 72
 - (D) 108
- Which of the following best describes the pattern below?

2, 4, 8, 16, 32

 - (F) Add 2.
 - (G) Subtract 2.
 - (H) Multiply by 2.
 - (I) Divide by 2.



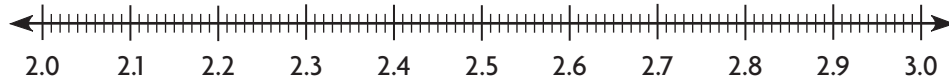
Name _____

Compare Decimals



MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

Use the number line to compare. Write *true* or *false*.



1. $2.12 > 2.2$

false

2. $2.6 < 2.64$

3. $2.08 = 2.8$

4. $2.73 < 2.77$

5. $2.4 = 2.40$

6. $2.89 > 2.876$

7. $2.98 < 2.098$

8. $2.57 < 2.75$

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

9. $0.38 \bigcirc 0.34$

Tens	Ones	.	Tenths	Hundredths
	0	.	3	8
	0	.	3	4

10. $46.2 \bigcirc 46.20$

Tens	Ones	.	Tenths	Hundredths
4	6	.	2	
4	6	.	2	0

11. $0.8 \bigcirc 0.88$

Tens	Ones	.	Tenths	Hundredths
	0	.	8	
	0	.	8	8

12. $25.09 \bigcirc 25.48$

Tens	Ones	.	Tenths	Hundredths
2	5	.	0	9
2	5	.	4	8

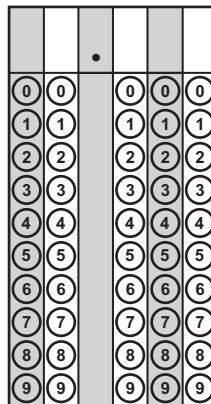
Problem Solving **REAL WORLD**

13. Veronica drank 0.5 liter of water. Hector drank $\frac{3}{10}$ liter of water. Who drank less water?

14. Abby spent \$6.36 on her lunch and Colby spent \$6.63 on his lunch. Who spent less money on lunch—Abby or Colby?

Lesson Check (MA.4.A.2.4)

1. Karina drank 1.4 liters of water after her basketball practice. Wesley drank 1.14 liters of water after his karate class. Which amount of water is greater?



Review Grade 4 (MA.4.A.1.2)

2. Ayden bought 4 sweatshirts for \$19 each. How much did Ayden spend in all?

Ⓐ \$36 Ⓒ \$76
 Ⓑ \$46 Ⓓ \$84

3. Jasmine wants to use mental math to find the product 4×621 . Which of the following shows how Jasmine can use addition to break apart 621?

Ⓕ $(4 \times 6) + (4 \times 2) + (4 \times 1)$
 Ⓖ $(4 \times 600) + (4 \times 20) + (4 \times 1)$
 Ⓗ $(4 \times 6) + (40 \times 20) + (400 \times 100)$
 Ⓘ $(4 \times 600) + (4 \times 2) + (4 \times 10)$



Look Back (MA.3.A.2.3, MA.4.A.2.4)

4. Which of the following fractions is greater than $\frac{4}{8}$?

Ⓐ $\frac{1}{8}$ Ⓒ $\frac{1}{2}$
 Ⓑ $\frac{3}{8}$ Ⓓ $\frac{6}{8}$

5. Which of the following could replace the \blacksquare below to make a true statement?

$$\frac{4}{6} < \frac{\blacksquare}{6}$$

Ⓕ 5 Ⓗ 3
 Ⓖ 4 Ⓘ 2



Name _____

Order Decimals



MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

Use the number line to order the decimals from least to greatest.



1. 3.62, 3.26, 3.68, 3.3

3.26, 3.3, 3.62, 3.68

2. 3.1, 3.08, 3.15, 3.22

3. 3.94, 3.91, 3.86, 3.96

4. 3.07, 3.7, 3.17, 3.71

Order the decimals from greatest to least.

5. \$7.30, \$7.03, \$0.73, \$7.37

6. 0.8, 0.08, 0.88, 0.78

7. 4.67, 5.02, 4.76, 5.2

8. \$2.75, \$2.07, \$2.77, \$2.60

Problem Solving

9. On Friday the rainfall measured 0.48 inch, on Saturday it measured 0.19 inch, and on Sunday it measured 0.80 inch. What is the order of rainfall amounts from greatest to least?

10. Three runners ran the 100-meter dash. Sergio finished in 12.03 seconds. Jaimie finished in 11.87 seconds. Marco finished in 12.40 seconds. In what order did the runners finish the race?

Lesson Check (MA.4.A.2.4)

- Which of the following correctly lists the decimals ordered from least to greatest?
 - (A) 1.29, 2.09, 1.92, 1.2
 - (B) 2.09, 1.92, 1.29, 1.2
 - (C) 1.29, 1.2, 1.92, 2.09
 - (D) 1.2, 1.29, 1.92, 2.09
- Which decimal is greater than 0.6?
 - (F) 0.68
 - (G) 0.60
 - (H) 0.48
 - (I) 0.06

Review Grade 4 (MA.4.A.1.2)

- Which of the following shows how to use mental math to find 24×199 ?
 - (A) $(24 \times 200) - (24 \times 1)$
 - (B) $(24 \times 200) + (24 \times 1)$
 - (C) $(20 \times 200) + (4 \times 200)$
 - (D) $2 \times (12 + 199)$
- Donovan visited 8 different states over vacation. He spent 3 nights in a hotel in each state and each night cost him \$50. What did Donovan spend in all on the hotel costs during his vacation?
 - (F) \$120
 - (G) \$150
 - (H) \$400
 - (I) \$1,200

← SPIRAL REVIEW

Look Back (MA.3.A.2.3, MA.4.A.2.4)

- Which of the following lists the fractions in order from greatest to least?
 - (A) $\frac{3}{12}, \frac{5}{12}, \frac{1}{12}$
 - (B) $\frac{7}{12}, \frac{2}{12}, \frac{6}{12}$
 - (C) $\frac{8}{12}, \frac{4}{12}, \frac{3}{12}$
 - (D) $\frac{2}{12}, \frac{5}{12}, \frac{9}{12}$
- Which of the following is greater than $\frac{3}{7}$ but less than $\frac{6}{7}$?
 - (F) $\frac{2}{7}$
 - (G) $\frac{3}{7}$
 - (H) $\frac{4}{7}$
 - (I) $\frac{7}{7}$

← SPIRAL REVIEW

Name _____

Compare and Order Decimals



MA.4.A.2.4 Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.

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

1. 1.045 1.05

2. 72.67 7.267

3. 0.09 0.090

Think: The digits in the ones place are the same.

4. $\$3.58$ $\$3.60$

5. 8.335 8.341

6. 123.05 123.211

Order the decimals from greatest to least.

7. $4.7, 4.07, 4.72, 4.27$

8. $16.05, 16.55, 16.005, 16.5$

9. $1.864, 0.93, 1.098, 0.938$

Order the decimals from least to greatest.

10. $2.117, 1.904, 2.08, 1.919$

11. $7.6, 7.073, 7.08, 7.56$

12. $22.014, 2.8, 22.03, 2.09$

Order the numbers from least to greatest.

13. $\frac{1}{2}, 0.25, 0.52, \frac{9}{10}$

14. $0.88, \frac{1}{8}, \frac{1}{4}, 0.75$

15. $\frac{2}{5}, 0.65, \frac{1}{10}, 0.90$

Problem Solving REAL WORLD

16. Jan got 0.8 of the test questions correct. Rosa got 0.75 correct, and Salim got 0.85 correct. Who got the second-greatest number of questions correct?

17. Abraham uses stickers to create his own wrapping paper. He covers 0.3 of a sheet of paper with stars and nine hundredths with moons. Which shape covers more of the paper?

Lesson Check (MA.4.A.2.4)

- Which of the following is less than 12.036?
 - (A) 12.1
 - (B) 12.04
 - (C) 12.038
 - (D) 12.03
- Which shows numbers in order from greatest to least?
 - (A) $0.55, \frac{1}{5}, \frac{5}{10}, 0.05$
 - (B) $\frac{1}{5}, \frac{5}{10}, 0.05, 0.55$
 - (C) $0.55, \frac{5}{10}, \frac{1}{5}, 0.05$
 - (D) $\frac{1}{5}, 0.05, \frac{5}{10}, 0.55$

Review Grade 4 (MA.4.A.6.1)

- Which is correct?
 - (A) $50,267 = 50,276$
 - (B) $21,400 < 21,050$
 - (C) $634,907 > 634,098$
 - (D) $101,101 \neq 101,101$
- Which shows all the digits that can replace \blacksquare to make the statement true?

$45,609 \leq 45, \blacksquare 09$

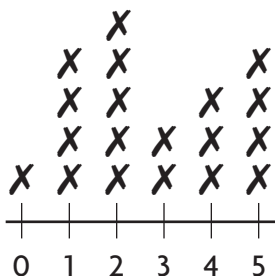
 - (A) 6, 7, 8, 9
 - (B) 7, 8, 9
 - (C) 0, 1, 2, 3, 4, 5
 - (D) 0, 1, 2, 3, 4, 5, 6



Look Back (MA.3.S.7.1)

- Based on the line plot below, how many homes have 3 or more televisions?
- Based on the frequency table below, how many times did a coin land heads up?

Number of Televisions in Home



- (A) 9
- (B) 10
- (C) 12
- (D) 15

Coin Toss	Frequency
Heads	
Tails	

- (F) 2
- (G) 12
- (H) 20
- (I) 22



Name _____

Make a Chart · Decimals



MA.4.A.2.1 Use decimals through the thousandths place to name numbers between whole numbers.

Use the clues to find each number or numbers.

1. A number is between 3.2 and 3.4 and has three digits. The sum of the tenths and hundredths digits is 7. The hundredths digit is odd. What is the number?

Think: What are the possible tenths digits?

3.25

2. A number has five digits and is between 20.1 and 20.3. The tens digit and the tenths digit are the same. The thousandths digit is one less than the tenths digit. The sum of the digits to the right of the decimal point is 3. What is the number?

3. A four-digit number between 12 and 13 has an odd number in the hundredths place and an even number in the tenths place. The hundredths digit is greater than the tenths digit. The sum of the tenths and hundredths digits is 9. What are the possible four-digit numbers?

4. A number has 4 digits. The digit in the hundredths place is greater than the digit in the hundredths place of 4.361. The digit in the thousandths place is greater than the digit in the tenths place of 2.85. What are the possible four-digit numbers between 8.6 and 8.7?

Lesson Check (MA.4.A.2.1)

- Andre thinks of a five-digit number between 16.45 and 16.47. The hundredths digit is greater than the thousandths digit. The product of the hundredths and thousandths digits is 12. What is Andre's number?
 - (A) 16.426
 - (B) 16.443
 - (C) 16.452
 - (D) 16.462
- Lucy uses only the digits 4 and 7 to make 4-digit numbers in which the tenths digit is less than the hundredths digit. She then lists the numbers from least to greatest. Which of the following could be Lucy's list?
 - (F) 4.744, 4.747, 7.477, 74.47
 - (G) 4.477, 4.474, 7.474, 7.477
 - (H) 4.474, 4.477, 7.474, 7.477
 - (I) 4.447, 4.477, 7.774, 77.47


Review Grade 4 (MA.4.A.6.3)

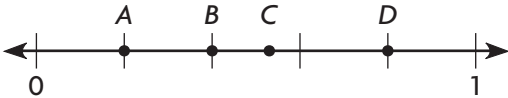
- Sixteen out of 36 cookies in a jar are peanut butter. In simplest form, what fraction shows the part of the cookies in the jar that are peanut butter?
 - (A) $\frac{16}{36}$
 - (B) $\frac{8}{18}$
 - (C) $\frac{4}{9}$
 - (D) $\frac{1}{2}$
- Which of the following fractions is in simplest form?
 - (F) $\frac{9}{36}$
 - (G) $\frac{7}{21}$
 - (H) $\frac{17}{34}$
 - (I) $\frac{9}{11}$



Look Back (MA.3.A.2.1, MA.4.A.2.4)

- Jenna drew 3 shapes and shaded parts of each shape. What mixed number is represented by the 3 shaded shapes?


- Which of the following points represents the fraction $\frac{2}{5}$?



- (A) $2\frac{1}{6}$
- (B) $2\frac{1}{3}$
- (C) $2\frac{5}{6}$
- (D) $3\frac{5}{6}$
- (F) A
- (G) B
- (H) C
- (I) D



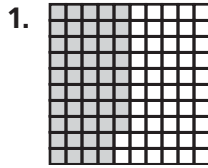
Name _____

Understand Percent

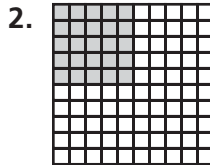


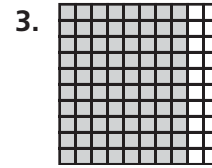
MA.4.A.6.5 Relate halves, fourths, tenths, and hundredths to decimals and percents.

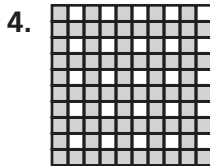
Write a fraction, a decimal, and a percent to represent the shaded part.

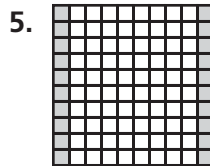


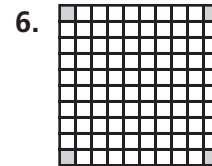
$\frac{48}{100}$, or $\frac{12}{25}$;
0.48; 48%

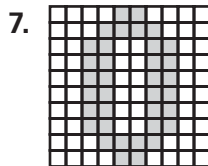


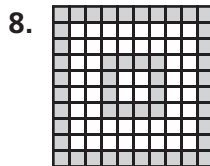


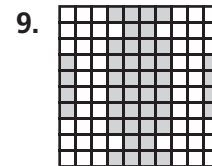












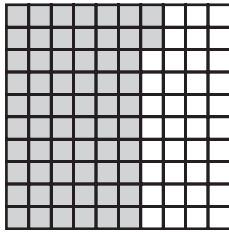
Problem Solving

10. Corey makes a mosaic from equal-sized tiles in 10 rows, each with 10 tiles. Seventy tiles are green and the rest are blue. What percent of the tiles are blue tiles?

11. Of the first 100 people that enter the mall on Saturday, 26 are teenagers. What percent of the first 100 people to enter the mall are teenagers?

Lesson Check (MA.4.A.6.5)

1. What percent of the model is shaded?



- (A) 0.62% (C) 62%
 (B) 6.2% (D) 620%

2. Mitchell has 100 marbles. Thirteen marbles are purple, 34 are red, 26 are yellow, and the rest are green. What percent of Mitchell's marbles are green?

- (F) 0.27%
 (G) 27%
 (H) 37%
 (I) 270%

Review Grade 4 (MA.4.A.2.1)

3. The average rainfall in Gainesville, during the month of August, is 5.27 inches. What is the value of the digit 7 in 5.27?

- (A) 7 hundreds (C) 7 hundredths
 (B) 7 tenths (D) 7 thousandths

4. What is one hundred two and forty-three thousandths written in standard form?

- (F) 102.43 (H) 102.0043
 (G) 102.043 (I) 0.10243

← SPIRAL REVIEW

Look Back (MA 3.A.2.4, MA.4.A.6.5)

5. Look at the models below.



Which fraction is equivalent to $\frac{2}{3}$?

- (A) $\frac{1}{6}$ (C) $\frac{4}{6}$
 (B) $\frac{2}{6}$ (D) $\frac{5}{6}$

6. Look at the shapes below. Of the shapes, 6 are shaded.



Which fraction is equivalent to $\frac{6}{10}$?

- (F) $\frac{3}{4}$ (H) $\frac{3}{8}$
 (G) $\frac{3}{5}$ (I) $\frac{3}{10}$

← SPIRAL REVIEW

Name _____

Relate Fractions, Decimals, and Percents



MA.4.A.6.5 Relate halves, fourths, tenths, and hundredths to decimals and percents.

Write the fraction or decimal as a percent.

1. $\frac{1}{5} \times \frac{20}{20} = \frac{20}{100}$ 2. $\frac{1}{4}$

3. 0.72

4. 0.03

20%

5. $\frac{4}{25}$

6. $\frac{44}{50}$

7. 0.6

8. 0.47

Write the percent as a decimal and a fraction.

9. 75%

10. 2%

11. 11%

12. 40%

13. 90%

14. 33%

15. 56%

16. 7%

Problem Solving

17. Kyla's mother buys 1% milk for her family to pour on their cereal. What is 1% written as a decimal and as a fraction?

18. Roberto bought a book that is 100 pages long. Last night he read 34 pages of the book. What percent of the book does Roberto have left to read?

Lesson Check (MA.4.A.6.5)

- Melissa got a 92% on her last math quiz. Which of the following is equivalent to 92%?
 - (A) 9.2
 - (B) $\frac{92}{10}$
 - (C) $\frac{23}{25}$
 - (D) 0.092
- Brody ate $\frac{2}{5}$ of a whole pizza. What percent is equivalent to $\frac{2}{5}$?
 - (F) 10%
 - (G) 20%
 - (H) 40%
 - (I) 50%

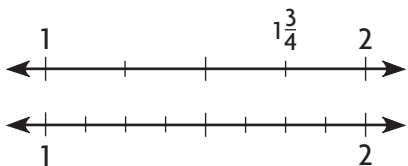
Review Grade 4 (MA.4.A.2.4)

- Adrianna walked three tenths of a mile. Which of the following is the best estimate for the fraction of a mile she walked?
 - (A) $\frac{1}{4}$
 - (B) $\frac{1}{2}$
 - (C) $\frac{3}{4}$
 - (D) 1
- Leonardo has completed 6 of the 10 tasks required to complete his badge in knot tying. Which of the following is the best estimate for the fraction of tasks Leonardo has completed as a decimal?
 - (F) 0.25
 - (G) 0.50
 - (H) 0.75
 - (I) 1.00



Look Back (MA.3.A.2.4, MA.4.A.6.5)

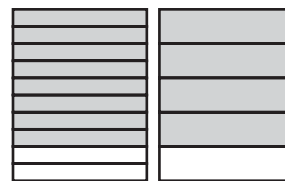
- Look at the number lines below.



Which fraction is equivalent to $1\frac{3}{4}$?

- (A) $1\frac{7}{8}$
- (B) $1\frac{6}{8}$
- (C) $1\frac{5}{8}$
- (D) $1\frac{4}{8}$

- Look at the models below.



Which fraction is equivalent to $\frac{8}{10}$?

- (F) $\frac{1}{5}$
- (G) $\frac{2}{5}$
- (H) $\frac{3}{5}$
- (I) $\frac{4}{5}$



Name _____

Chapter 9 Extra Practice

Lesson 9.2 (pp. 367–370)

Write *equivalent* or *not equivalent* to describe the two decimals.

1. 0.46 and 0.460

2. 3.9 and 3.09

3. 0.8 and 0.08

4. 2.070 and 2.07

Write = or \neq to describe the two decimals.

5. 5.01 5.010

6. 1.006 1.06

7. 7.230 7.023

8. 4.37 4.3

9. 8.9 8.09

10. 15.2 15.200

Write an equivalent decimal in standard form and word form.

11. 9.4

12. 4.08

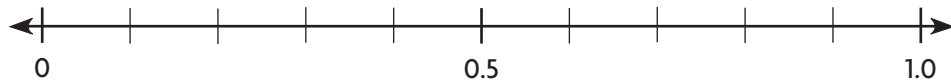
13. 7.16

14. Larry has a rock collection. Thirty-four hundredths of his collection is marble stone. What are two equivalent decimals, in standard form, for thirty-four hundredths?

15. The school playground covers three tenths of the school grounds. A garden covers four hundredths of the school grounds. What are two equivalent decimals, in standard form, for three tenths?

Lesson 9.3 (pp. 371–374)

Use the number line and the benchmarks 0, 0.5, and 1.0 to estimate the decimals.



1. 0.374

2. 0.18

3. 0.56

4. 0.891

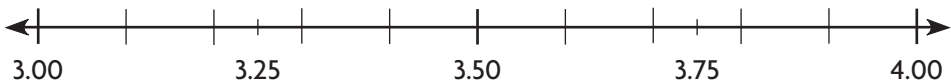
5. 0.48

6. 0.13

7. 0.29

8. 0.751

Use the number line and the benchmarks 0, 0.25, 0.50, 0.75, and 1.00 to estimate the decimals.



9. 3.04

10. 3.52

11. 3.23

12. 3.68

13. 3.19

14. 3.61

15. 3.08

16. 3.44

Use benchmarks to estimate. You may wish to use a number line.

17. The typical annual rainfall in Tallahassee, Florida, is 64.59 inches. About how much annual rainfall does Tallahassee receive?

18. Betty buys 5.3 pounds of oranges and 3.6 pounds of grapefruit? About how many pounds of oranges does she buy?

Lesson 9.6 (pp. 383–386)

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

1. $2.30 \bigcirc 2.298$

2. $\$35.81 \bigcirc \35.81

3. $49.07 \bigcirc 49.101$

4. $5.200 \bigcirc 5.20$

5. $0.19 \bigcirc 0.9$

6. $\$1.10 \bigcirc \1.01

7. $0.99 \bigcirc \frac{1}{9}$

8. $\frac{1}{2} \bigcirc 0.20$

9. $\frac{1}{4} \bigcirc 0.25$

Order the decimals from greatest to least.

10. 2.71, 2.7, 1.68, 1.86

11. 6.3, 6.33, 6.003, 6.034

12. \$2.90, \$4.17, \$2.89, \$2.09

13. 0.8, 0.827, 8.742, 8.074

Order the decimals from least to greatest.

14. 7.7, 7.77, 7.07, 7.37

15. 4.15, 4.015, 0.450, 1.504

16. 3.28, 0.975, 3.09, 3.829

17. 5.64, 56.78, 5.069, 5.604

Order the numbers from greatest to least.

18. $\frac{1}{3}$, $\frac{3}{4}$, 0.5, 0.98

19. $\frac{1}{4}$, $\frac{9}{10}$, 0.45, $\frac{4}{5}$

20. Ellen wraps a rectangular box in 5.34 minutes. Write three numbers that are greater than 5 and less than 5.34.

21. Toby walks a total of 23.75 miles in one week. Write three numbers that are greater than 23.75 and less than 25.

Lesson 9.7 (pp. 387–390)

1. Wendy writes a riddle: I am a number with three digits and am between 2.6 and 2.9. The product of the digits in the tenths place and the hundredths place is 64. What number am I?

2. Sasha solves this riddle: I am a number with four digits between 31.4 and 31.8. The product of the digits in the tenths place and the hundredths place is 42. What number am I?

3. Ted swims the 50-meter freestyle in 43.22 seconds. His 3 friends swim the same 50-meter freestyle in 43.21 seconds, 43.45 seconds, and 43.43 seconds. Which time is less than Ted's time?

4. Eva and 3 friends walk in a road race. Eva walks 5.30 miles in two hours. Her friends walk 5.23 miles, 5.05 miles, and 5.33 miles in two hours. Write the distances in order from least to greatest.

Lesson 9.9 (pp. 397–400)

Write the fraction or decimal as a percent.

1. $\frac{67}{100}$

2. $\frac{3}{4}$

3. 0.93

4. 0.07

5. $\frac{5}{10}$

6. 0.40

7. $\frac{1}{5}$

8. 0.65

Write the percent as a decimal and a fraction.

9. 26%

10. 8%

11. 40%

12. 80%

13. 33%

14. 7%

