BRILLA COLLEGE PREP
Middle School

Day 4

Read this passage and answer the questions that follow.

Tell Me Again!

by Else Holmelund Minarik

1 "Tell me again how you learned to ride a horse," I would ask my father when I was a little girl in Denmark. I was no more than four years old—too little to learn to ride a horse by myself. But I liked to hear my father tell his story.

2 And then he would begin.

3 "When I was a little boy, as little as you are now," he would say, "I wanted to ride the horses. But I was too small to mount a horse. So I would slip into my father's stables to be with the horses and admire them. Such big, powerful animals they were!

4 "The gentle workhorses stood quietly in their stalls, eating their hay. I would clamber[1] up the side of one of the stalls and slide over onto the horse's back.

5 "Then I would clutch its mane and fancy[2] us galloping over the meadows, down to the shore, and even into the sea.

6 "When I grew tall enough to mount a horse," he said, "my wish came true."

7 "You swim with the horses now," I said. "You even swim with Fiery. And he has spirit!"

8 Everybody knew about Fiery, the great black stallion with the fiery temper, and how he behaved when he first came to the stables. He reared in his stall. He snorted and kicked. He rolled his eyes. And everyone was afraid of him. Everyone, except my father.

9 I wanted to hear more. "Now tell how you made Fiery your friend," I begged. This was my favorite story.

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1 *clamber* - climb
2 *fancy* - imagine

10 "Well, little Else," my father went on, "I just talked to him. I talked as a friend. You must talk to a horse like Fiery.

11 "I'd say, 'No, little horse. No, my friend. You can't run free. You must learn to let me ride you.'

12 "And soon Fiery began to listen. He knew from my voice that I would be his friend."

13 So Fiery let my father teach him to carry a rider. Then Fiery would take my father across the soft green meadows or even into the lively waters of the northern sea.

14 I loved to see Father riding Fiery bareback[3] into the sea. There they swam, Father and Fiery, out in the cold, clear water.

15 Often I would watch them from the shore, holding tight to my mother's hand. They swam so bravely. I was so proud of them!

16 Then Father and Fiery would come splashing out of the water and gallop along the shore toward us. They made a fine stop—just in time!

17 Fiery towered over us. He tossed his head and shook a spray of sea water from his glistening black coat.

18 Father was laughing and patting Fiery's neck.

19 And I was making a wish.

20 I wished that someday I could have a horse, too . . . but a smaller one!

---

3 *bareback* - without a saddle

101. What is Fiery like when he first comes to the stables?

A He is quiet and lazy.

B He is wild and full of spirit

C He makes friends with everyone.

D He only lets Else's father ride him.

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102. Where does Else **most** like to watch her father ride Fiery?

A on the farm

B in the stables

C at the seashore

D in the meadow

103. Read these sentences from the passage.

"When I was a little boy, as little as you are now," he would say, "I wanted to ride the horses. But I was too small to mount a horse."

In the second sentence, "mount" means

A feed

B talk to

C exercise

D climb on

---

104. How does Else feel about horses after watching her father ride Fiery?

A She wants a horse just like fiery.

B She has no interest in riding horses.

C She would like to have a smaller horse.

D She thinks horses should not go into the sea.

105. What does Else learn from her father's story?

A how to train a workhorse

B how to swim with a horse

C how to make friends with a horse

D how to ride a horse without a saddle

106. How does Else feel about her father when he rides Fiery into the sea? Use details from the passage to support your answer.

Sneakers!
The All-Stars of Footwear
by Patrick Joseph

Look down at your feet. What are you wearing on them? Odds are the answer is sneakers. Sneakers are everywhere. But how much do you know about this popular footwear? How were sneakers invented? What are they made of? And why are they called "sneakers" anyway?

Rooted in Rubber

The story of sneakers started about 500 years ago. That's when European explorers in Central and South America noticed Native Americans playing with an unusual ball. The ball was made from a milky, white liquid that oozed out of the cahuchu (ka OO choo) tree. The liquid, known today as latex (LAY tex), hardened as it dried.

Native Americans had practical uses for latex too. They spread the sticky liquid on their feet. Once it dried, it formed a very thin "shoe" that protected their feet from water. They also made waterproof bottles with latex.

When explorers brought latex samples back to Europe in the early 1700s, scientists started searching for their own ways to use it. In 1770, an English chemist named Joseph Priestley discovered that the gummy stuff could rub out pencil marks. People dubbed it "rubber," and the name stuck.

The Right Stuff

By the early 1800s, manufacturers in the United States and Europe had found many uses for rubber. They used the stretchy, waterproof stuff for raincoats, hoses, elastic bands, and more. But rubber wasn't very good for making most things. It got too brittle in the cold and too sticky in the heat.

That changed in 1839. An inventor named Charles Goodyear mixed rubber and a smelly yellow chemical called sulfur. Then he accidentally spilled the mixture onto a hot stove. The resulting glop stayed firm and stretchy whatever the temperature. It was called vulcanized (VUL can ized) rubber, named after Vulcan, the Roman god of fire.

Sneaking Around

A few years later, manufacturers teamed vulcanized rubber soles, or shoe bottoms, with a tough fabric called canvas. The result was comfortable, lightweight shoes. Up until then, almost everyone wore leather shoes with hard soles that clomped loudly with each step. The new rubber-soled shoes were very quiet. You could easily sneak around in them, so people started calling them "sneakers."

At first, sneakers weren't very popular. For one thing, they were expensive. And people were more excited about using vulcanized rubber to make tires for bicycles—and, later, cars. But in 1916, a rubber company introduced a simple sneaker called Keds. Its price was low, so many people could afford a pair. Keds were a huge success.

A year later, another company called Converse created the first basketball sneaker. The All Star model featured rubber soles that kept players from slipping on the court. They also had canvas tops that went up around the ankle for good support. Sneakers were off and running.

Stepping Up Design

It wasn't until the fitness craze of the 1970s that many people started taking sneakers seriously, though.

Track coach Bill Bowerman was one of these people. He realized that if he could create lighter sneakers, his runners would save energy. In fact, shaving just one ounce off the shoes would help. The runner's legs would lift 200 fewer pounds over the course of a mile. That could help his athletes win races.

One day in 1971, inspired by his breakfast, Bowerman poured liquid rubber into his wife's waffle iron, and let it harden. The experiment ruined the waffle iron. But it resulted in the first "waffle soles." These were lighter than flat soles because of all the notches in the waffle pattern. Plus they gave better traction, or grip. A new model for sneaker soles hit the pavement.

Modern Wonders

Today, sneakers are big business. In 2000, people in the United States spent more than $15 billion on them. That means they purchased more than 405 million pairs. Modern sneaker designs jump far beyond the first canvas-and-rubber model.

Whether you wear sneakers to play sports or for fashion flair, the choices today are endless. So the next time you get a new pair of sneakers, take a good look at how they're made. Think about what goes into them and all the history behind them. Then slip them on and take off!

6. Charles Goodyear accidentally discovered rubber. Which statement shows the cause of that accident?

A He added some raised notches and a waffle pattern.

B He poured hot rubber onto a waffle iron to harden.

C He let white liquid latex cool and harden as it dried.

D He dropped rubber mixed with sulfur on a hot stove.

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7. How did rubber get its name?

A People were excited about using it to make bicycle tires.

B European explorers found Native Americans playing ball.

C An inventor mixed hot latex with a chemical called sulfur.

D An English scientist discovered that it erased pencil marks.

8. "It wasn't until the fitness **craze** of the 1970s that many people started taking sneakers seriously, though."
Which definition of **craze** is used in the sentence? **craze** /krÂ£z/ **1)** v. to annoy someone. **2)** n. a popular fashion or thing to do. **3)** n. a very thin crack. **4)** v. to cover in small thin cracks.

A definition 1

B definition 2

C definition 3

D definition 4

9. Write a summary of the selection. Begin with the main idea. Use the subheadings as a guide, and use evidence from the text in your answer.

Lesson 21

Relate Decimals and Fractions

Name: _____

Prerequisite: Find Equivalent Fractions

Study the example showing how to identify equivalent fractions with denominators of 10 and 100. Then solve problems 1–5.

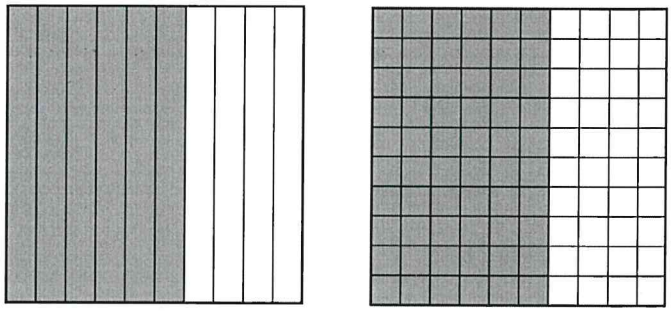
Example

Explain how $\frac{6}{10} = \frac{60}{100}$.

Use multiplication to find equivalent fractions.

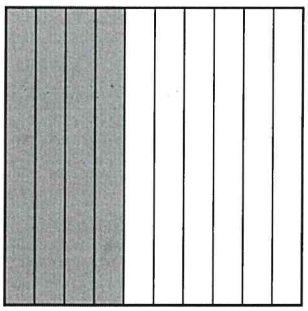
$$\frac{6}{10} = \left(\frac{6 \times 10}{10 \times 10}\right) = \frac{60}{100}$$

Use models to show equivalent fractions.



$\frac{6}{10}$ = $\frac{60}{100}$

1 Write the fractions that the models below show.



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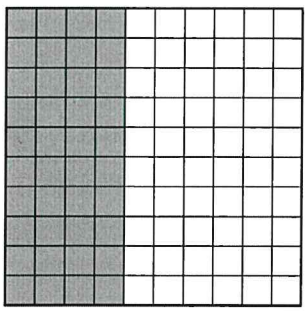


_____

2 Look at problem 1. Use multiplication to find the equivalent fractions.

_____

Vocabulary

equivalent fractions two or more fractions that name the same part of a whole.

Solve.

3 Fill in the blanks with numbers and fractions to make true sentences.

a. _____ $+ \frac{15}{100} = \frac{55}{100}$

_____ tenths + _____ hundredths = 55 hundredths.

b. _____ $+ \frac{4}{10} = \frac{55}{100}$

_____ hundredths + _____ tenths = 55 hundredths.

c. _____ $+ \frac{5}{100} = \frac{55}{100}$

_____ tenths + _____ hundredths = 55 hundredths.

d. _____ $+ \frac{25}{100} = \frac{55}{100}$

_____ tenths + _____ hundredths = 55 hundredths.

Of the 100 students in the fourth grade, 70 students are girls.

4 Write a fraction in tenths and a fraction in hundredths to tell what fraction of the fourth-grade students are girls.

_____

5 Write a fraction in tenths and a fraction in hundredths to tell what fraction of the fourth-grade students are boys.

_____

Name: _____

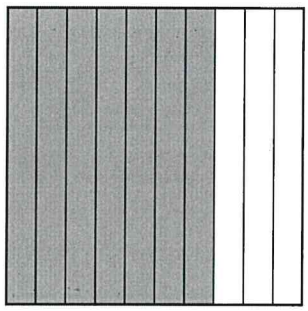
Name the Same Amount

Study the example showing ways to name the same amount as a fraction and a decimal. Then solve problems 1–7.

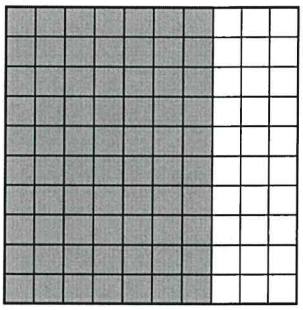
Example

How do you write decimals equivalent to $\frac{7}{10}$ and $\frac{70}{100}$?

The model shows $\frac{7}{10}$.



The model shows $\frac{70}{100}$.



A place-value chart shows the value of $\frac{7}{10}$ and $\frac{70}{100}$.

$\frac{7}{10} = 0.7$ $\quad$ $\frac{70}{100} = 0.70$

Ones	•	Tenths	Hundredths
0	•	7	0

1 What decimal is equivalent to $\frac{3}{10}$?

Fill in the place-value chart to show the decimal.

Ones	•	Tenths
	•	

2 What decimal is equivalent to $\frac{55}{100}$?

Fill in the place-value chart to show the decimal.

Ones	•	Tenths	Hundredths
	•		

3 Write a decimal equivalent to $\frac{75}{100}$. _____

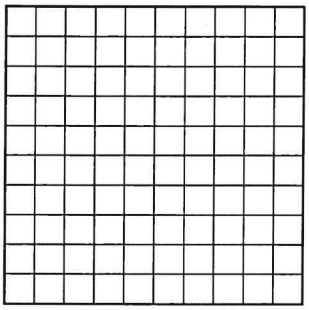
Vocabulary

decimal fraction (or decimal) a number containing a decimal point that separates a whole from fractional place values, such as tenths and hundredths.

0.7 and 0.70 are decimals.

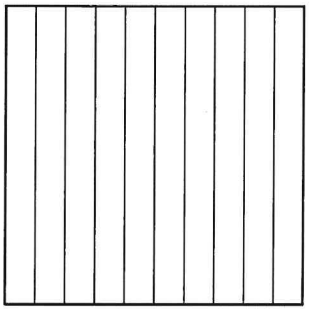
Solve.

4 What decimal is equivalent to $\frac{80}{100}$? Shade the model below to show the fraction and the decimal. Then write the decimal.



$\frac{80}{100} =$ _____

5 Look at problem 4. Shade the model below to show an equivalent tenths fraction and decimal. Then write the fraction and decimal.



_____ = _____

6 Use what you know about equivalent fractions to explain why 0.8 and 0.80 are equivalent.

_____

_____

7 Find the sum of $\frac{80}{100}$ and $\frac{20}{100}$. Then use what you know about equivalent fractions to explain why $0.8 + 0.2 = 1$.

_____

_____

_____

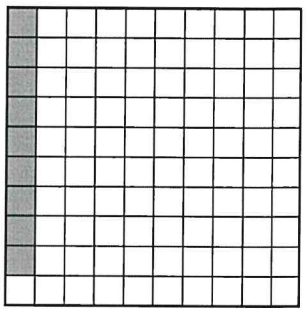
Name: _____

Write a Decimal as an Equivalent Fraction

Study the example problem showing how to write a decimal as an equivalent fraction. Then solve problems 1–8.

Example

Alanna has an assortment of books in her bookcase. 0.09 of her books are comic books. What fraction of the books are comic books?



Decimal: 0.09

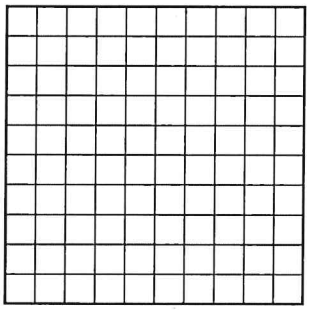
Words: 9 hundredths

Fraction: $\frac{9}{100}$

$\frac{9}{100}$ of the books are comic books.

Ones	.	Tenths	Hundredths
0	.	0	9

1 Shade the model below to show 0.34.



2 Show 0.34 in a place-value chart.

Ones	.	Tenths	Hundredths
	.		

3 Write 0.34 in words. _____

4 Write 0.34 as a fraction. _____

Solve.

5 Tell whether each number sentence is *True* or *False*.

a. $0.3 = \frac{3}{100}$ ☐ True ☐ False

b. $0.03 = \frac{3}{100}$ ☐ True ☐ False

c. $0.3 = \frac{30}{100}$ ☐ True ☐ False

d. $0.3 = \frac{3}{10}$ ☐ True ☐ False

6 Write two equivalent fractions to 0.3.

_____

7 Which of the following names the same number as 0.62? Circle the letter for all that apply.

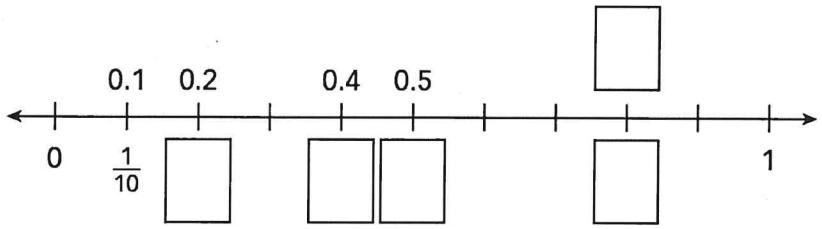
A sixty-two hundredths

B six tenths and 2 hundredths

C $\frac{62}{10}$

D $\frac{62}{100}$

8 The number line below shows 1 whole divided into tenths. Write numbers in the boxes to label the missing fractions and decimal. Explain how you know what numbers to write.



_____

_____

_____

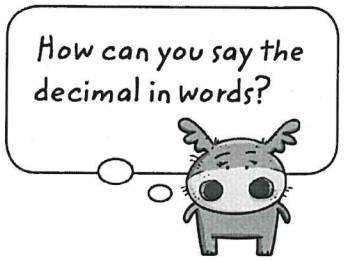
_____

Name: _____

Relate Decimals and Fractions

Solve the problems.

1 What is 0.5 written as a fraction?
Circle the letter for all that apply.



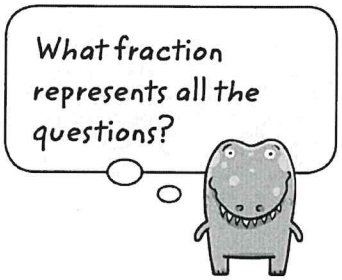
A $\frac{5}{100}$

B $\frac{5}{10}$

C $\frac{50}{100}$

D $\frac{50}{10}$

2 Rita correctly answered 9 questions out of 10 on a test. What fraction of the test questions did Rita answer incorrectly?



A $\frac{9}{10}$

B $\frac{9}{100}$

C $\frac{1}{10}$

D $\frac{1}{100}$

Patrick chose **A** as the correct answer. How did he get that answer?

_____

_____

_____

_____

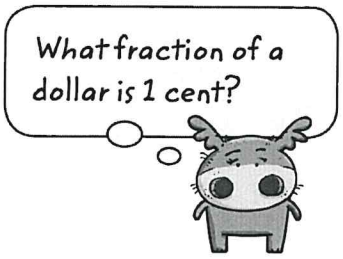
_____

_____

Solve.

3 Austin bought an eraser for 65 cents and a pencil for 20 cents. What fraction of a dollar did he spend? Write the fraction as a decimal.

Show your work.



Solution: _____

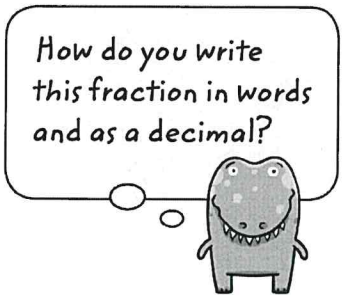
4 Tell whether each number below is equivalent to $\frac{15}{100}$.

a. fifteen hundredths ☐ Yes ☐ No

b. 1.5 ☐ Yes ☐ No

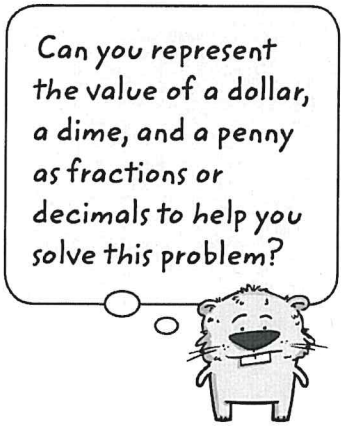
c. $\frac{15}{10}$ ☐ Yes ☐ No

d. 0.15 ☐ Yes ☐ No



5 Mackenzie has 1 dollar, 2 dimes, and 3 pennies. Jorge has only dimes and pennies but has the same amount of money as Mackenzie. How many dimes and pennies could Jorge have?

Show your work.



Solution: _____

_____

Writing

Directions: This section tests editing skills by asking you to revise a short passage. Read the passage and answer the questions that follow.

[1] Pat and I were looking forward to our three-day weekend. [2] We had just had a very hectic week of school, and we couldn't wait to be "set free" for three full days of fun and excitement. [3] Along with Pat's "super-cool" Uncle Ray we were driving an hour north of town for a camping weekend in the wilderness. [4] Uncle Ray is a mechanic and takes care of Pat. [5] Uncle Ray was picking us up at school. [6] The car all packed and ready to go camping. [7] Now there were just two minutes left in the school day.

142. Which sentence needs a comma?

A sentence 1

B sentence 3

C sentence 4

D sentence 7

143. Which sentence should be left out of the story?

A sentence 2

B sentence 4

C sentence 5

D sentence 7

144. Choose the **best** concluding sentence to add to the paragraph.

A Pat, who lives down the block from me, then raised her hand.

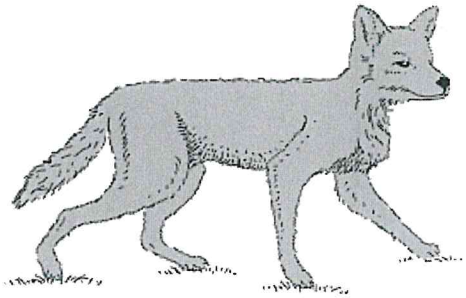
B Finally, the teacher gave us a little homework to do for Monday.

C We sat at our desks and impatiently waited for the final bell to ring.

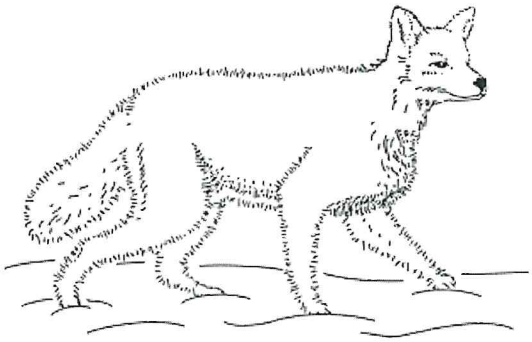
D My little brother sometimes goes camping with us, but not this time.

Thursday: Science

Base your answers to questions 1 and 2 on the diagram below and on your knowledge of science.



Fox in Summer



Fox in Winter

1. The fox has dark fur in the summer, which turns white for the winter. Explain how this adaptation helps the fox to survive in winter.

_____

_____

_____

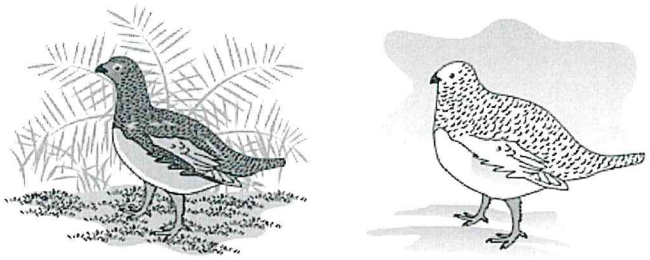
2. Identify **another** seasonal adaptation, other than fur color, that helps the fox to survive in winter.

_____

_____

_____

Use the diagrams below to answer questions 3, 4 and 5. The diagrams below show an artic bird in the summer and the same individual bird in the winter.



Arctic bird in summer Arctic bird in winter

3. Identify one **physical** structure of the arctic bird that changes from summer to winter.

_____

4. Explain how this **seasonal adaptation** helps the artic bird to survive.

_____

_____

_____

5. Identify **another** seasonal adaptation that allows the arctic bird to survive in winter.

_____

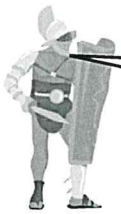
_____

_____

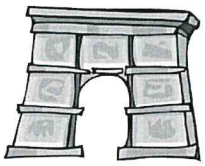
Day 4

Roman Numerals

Maths worksheets from mathsphere.co.uk



Remember, the Romans used letters for their numbers. Here are the letters they used.



The Romans used these capital letters:

I	V	X	L	C	D	M
1	5	10	50	100	500	1000

Try writing the numbers from 10 to 20 using Roman numerals.

10 ☐ 11 ☐ 13 ☐ 14 ☐ 15 ☐

16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐

Try writing these Roman numerals as numbers.

XXXI ☐ XVI ☐ XX ☐ XLVII ☐

XXXV ☐ XXVIII ☐ XXXIX ☐ XLI ☐

Now try these harder Roman numerals.

1. CLXI ☐ 2. CCIII ☐ 3. CCCXLV ☐ 4. CD ☐