Compare Decimals

Name: _____

Prerequisite: Compare Fractions

Study the example showing ways to compare fractions. Then solve problems 1–6.

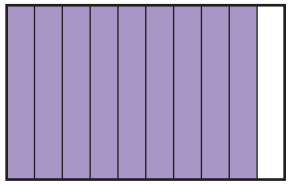
Example

Compare $\frac{9}{10}$ and $\frac{5}{10}$.

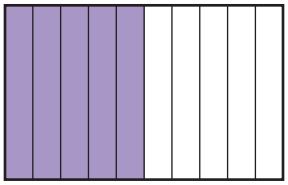
Use models.

$\frac{9}{10} > \frac{5}{10}$

The model shows $\frac{9}{10}$.

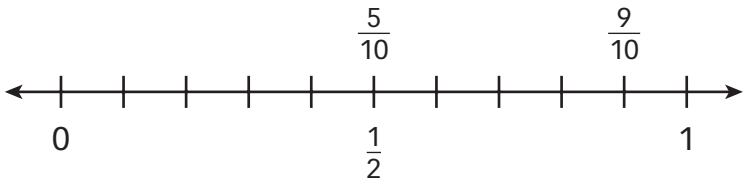


The modelshows $\frac{5}{10}$.



Use a number line and the fraction $\frac{1}{2}$ as a benchmark.

$\frac{9}{10} > \frac{5}{10}$



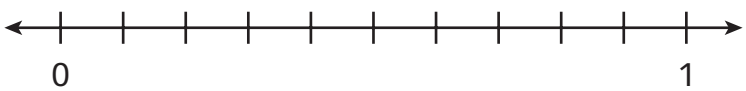
$\frac{9}{10} > \frac{1}{2}$ and $\frac{5}{10} = \frac{1}{2}$

1 Label $\frac{2}{10}$ and $\frac{6}{10}$ on the number line below.
Write a symbol to compare the two fractions. $\frac{2}{10}$ ____ $\frac{6}{10}$

2 Look at problem 1. Explain how to use the fraction $\frac{1}{2}$ as a benchmark to compare $\frac{2}{10}$ and $\frac{6}{10}$.

_____

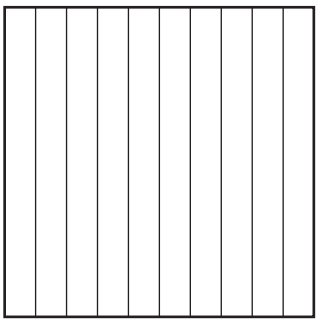
3 Label $\frac{10}{10}$ and $\frac{8}{10}$ on the number line below.
Write a symbol to compare the two fractions. $\frac{10}{10}$ ____ $\frac{8}{10}$

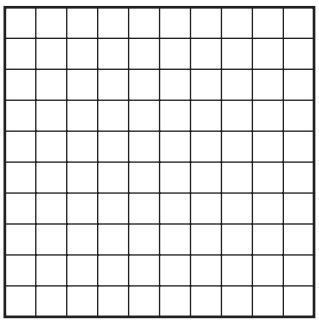


Solve.

4 Shade and label the models below to show $\frac{3}{10}$ and $\frac{3}{100}$.

Write a symbol to compare the fractions. $\frac{3}{10}$ ____ $\frac{3}{100}$





_____ _____

5 Use the symbols $<$, $>$, and $=$ to compare the fractions.

a. $\frac{5}{10}$ ____ $\frac{50}{100}$

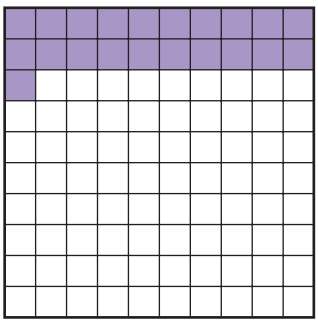
b. $\frac{4}{10}$ ____ $\frac{4}{100}$

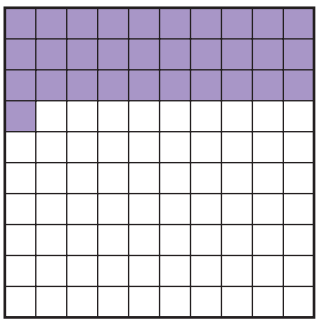
c. $\frac{11}{10}$ ____ $\frac{12}{10}$

d. $\frac{62}{100}$ ____ $\frac{6}{10}$

e. $\frac{9}{100}$ ____ $\frac{9}{10}$

6 Write the fraction that each model shows. Explain which fraction is greater.





_____ _____

Name: _____

Compare Hundredths Decimals

Study the example problem showing how to compare hundredths decimals to solve a problem. Then solve problems 1–7.

Example

Jacob bought an apple and a pear. The apple weighed 0.33 of a pound. The pear weighed 0.35 of a pound. Which piece of fruit weighed less?

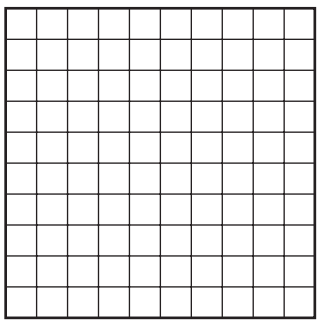
Write equivalent fractions.
The denominators are the same.
Compare numerators. $33 < 35$.

$0.33 = \frac{33}{100}$ $\quad 0.35 = \frac{35}{100}$

same denominator

$0.33 < 0.35$
The apple weighed less than the pear.

1 Shade and label the models below to show 0.33 and 0.35.



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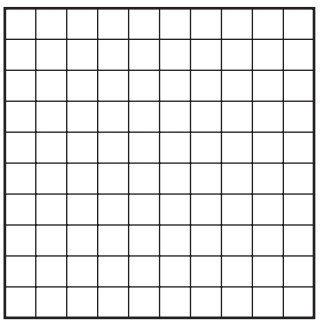


_____

2 Explain how the models show which decimal is less. _____

_____

3 Complete the place-value chart to show 0.33 and 0.35.

Ones	.	Tenths	Hundredths
	.		
	.		

4 Explain how the place-value chart shows which decimal is less. _____

_____

Solve.

5 Use the digits in the tiles below to create decimals that make each inequality true.

0	1	2	3	4	5

a. $0.21 > 0.2\square$

b. $0.46 < 0.\square 6$

c. $0.99 < \square.00$

d. $0.7\square > 0.7\square$

6 Write the symbol ($>$, $<$, $=$) that makes each statement below true.

a. 0.85 ____ 0.82

b. 0.09 ____ 0.10

c. 0.45 ____ 0.54

d. 1.10 ____ 1.01

e. 0.30 ____ 0.3

7 Ryder bought 0.75 pound of turkey and 0.57 pound of cheese. Did he buy more turkey or cheese?

Show your work.

Solution: _____

Name: _____

Compare Tenths and Hundredths Decimals

Study the example problem showing how to compare tenths and hundredths decimals. Then solve problems 1–6.

Example

Colin lives 0.6 mile from school and 0.65 mile from the park. Which place is closer to his home?

Write each decimal as an equivalent fraction. $0.6 = \frac{6}{10}$ $0.65 = \frac{65}{100}$

Write the tenths fraction as a hundredths fraction. $\frac{6}{10} = \frac{60}{100}$

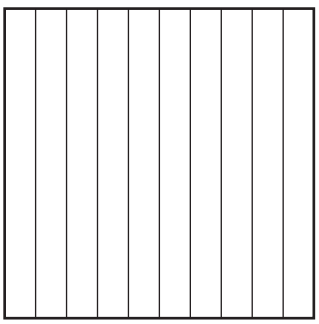
Compare hundredths fractions. $\frac{60}{100} < \frac{65}{100}$

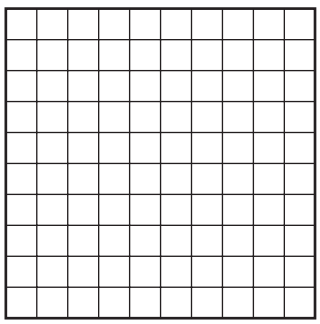
$0.6 < 0.65$

The school is closer to his home.

Lucas bought 0.6 pound of fish and 0.85 pound of shrimp to make a stew.

1 Shade the models below to compare 0.6 and 0.85.





2 Write a symbol to compare the decimals. 0.6 _____ 0.85

3 Did Lucas buy more fish or shrimp?
Use equivalent fractions to explain your answer.

_____

_____

Solve.

4 Compare 0.2 and 0.25 using $>$, $=$, or $<$. Use equivalent fractions to explain your answer.

5 Compare 0.09 and 0.1 using $>$, $=$, or $<$. Use a place-value chart to explain your answer.

Ones	.	Tenths	Hundredths
	.		
	.		

6 Write the decimals 1.00, 0.20, and 0.03 in the place-value chart below. Which number is the greatest? Which number is the least? Use equivalent fractions to explain.

Ones	.	Tenths	Hundredths
	.		
	.		
	.		

Name: _____

Compare Decimals

Solve the problems.

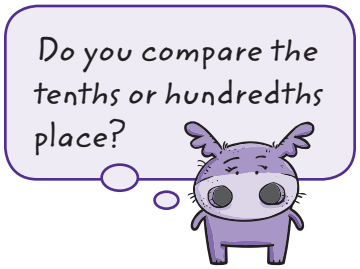
1 Which decimal is less than 0.35?

A 0.5

B 0.29

C 0.36

D 0.53



2 Which is the greatest—0.19, 1.00, 0.91, or 0.02?

A 0.02

B 0.19

C 0.91

D 1.00

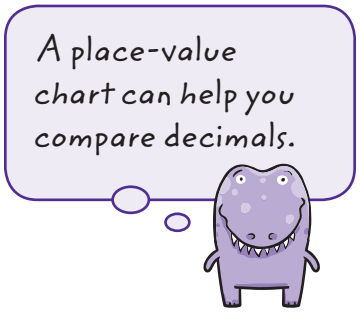
Sadie chose **B** as the correct answer. How did she get that answer?

_____

_____

_____

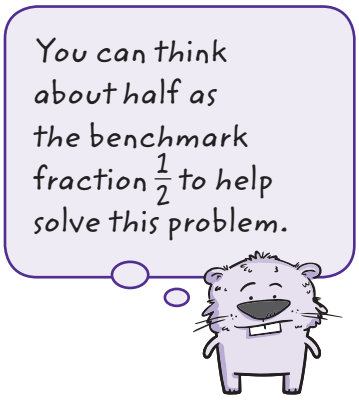
_____



3 Classify each decimal below as less than half, equal to half, or greater than half, by writing each decimal in the correct column of the chart.

0.05 0.52 0.25 0.48 0.9 0.50 0.6 1.05

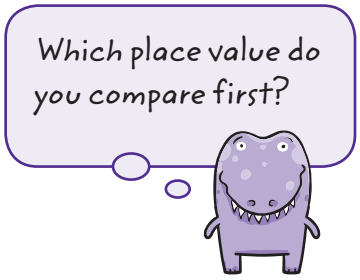
Less than Half	Equal to Half	Greater than Half



Solve.

4 Milk costs $0.50 and juice costs $0.55. Which costs less, milk or juice?

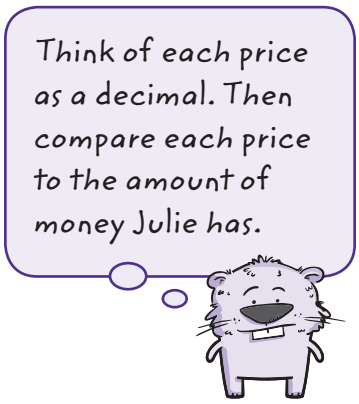
Show your work.



Solution: _____

5 Julie has 2 dollars to spend on lunch. A slice of pizza is $2.25. A sandwich is $2. A bowl of soup is $1.95. What can Julie buy for lunch? Explain your answer.

Show your work.



Solution: _____

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