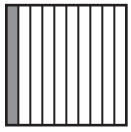
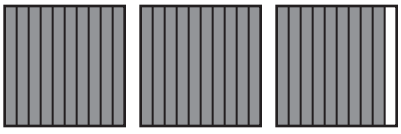
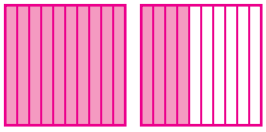
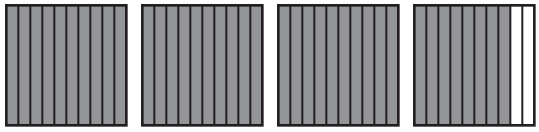
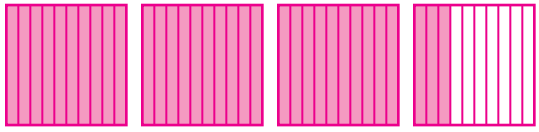
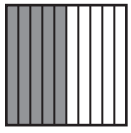
Name _____

Model, Decimal, and Fraction

In each row of the table below, a model, a decimal, and a fraction or mixed number are shown for the same amount. Fill in the missing information.

Model	Decimal	Fraction or Mixed Number
1. 	0.1	$\frac{1}{10}$
2. 	2.9	$2\frac{9}{10}$
3. 	1.4	$1\frac{4}{10}$
4. 	3.8	$3\frac{8}{10}$
5. 	3.3	$3\frac{3}{10}$
6. 	0.5	$\frac{5}{10}$

7. In addition to the models used, in what other way could you represent the decimals, fractions, and mixed numbers?

Possible answer: you could show the decimals, fractions, and mixed numbers on a number line.

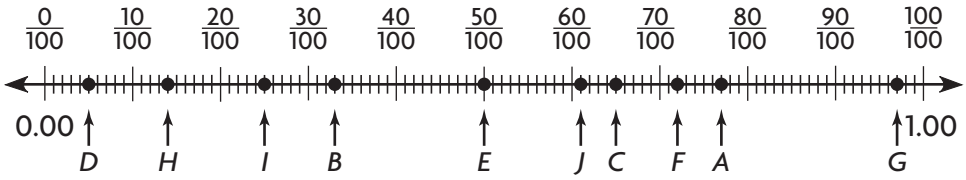
8. Write Math Describe how you filled in the missing model and fraction when only the decimal 1.4 was given.

Possible answer: I used the word form to determine that 1.4 is the same as 1 and 4 tenths. I wrote this as a mixed number, and then I made a model showing 1 completely shaded model and 1 model with 4 tenths shaded.

Name _____

Which Hundredth Is It?

The number line below shows ten points, each labeled with a letter.



For each fraction or decimal, write the letter that shows its position on the number line.

1. $\frac{65}{100}$ C

2. $\frac{72}{100}$ F

3. 0.25 I

4. $\frac{97}{100}$ G

5. $\frac{33}{100}$ B

6. 0.14 H

7. $\frac{5}{100}$ D

8. 0.77 A

9. 0.61 J

10. 0.50 E

11. Between which two letters would 0.75 be located? F and A

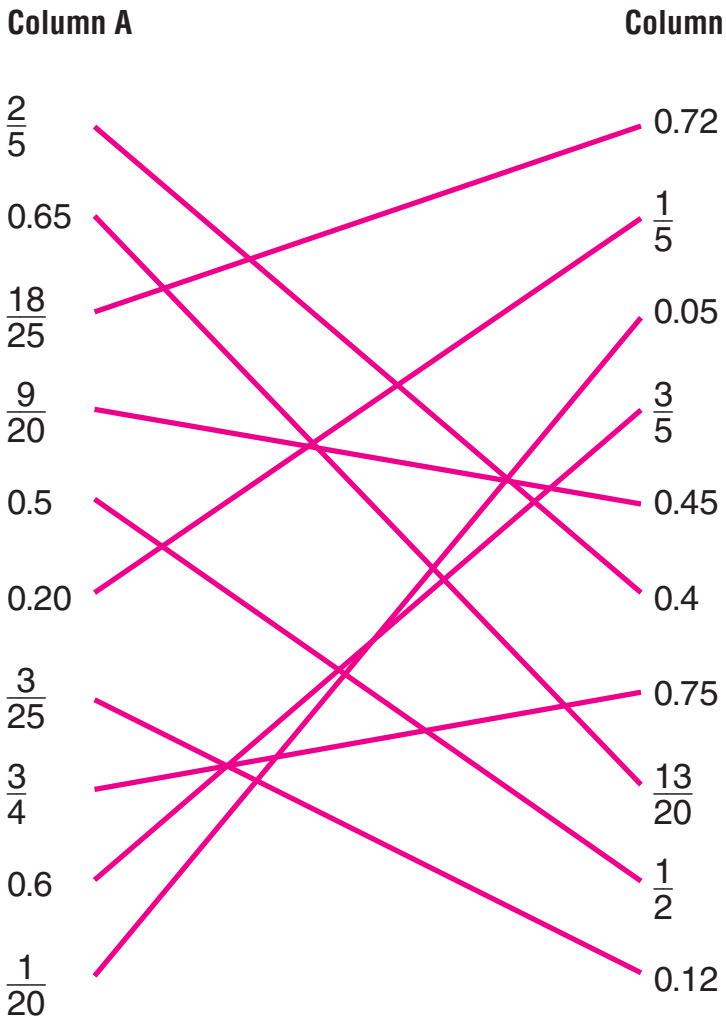
12. Write Math Describe how you would order the ten fractions and decimals above from least to greatest.

Possible answer: I would locate each number on the number line. The points on the left are the lesser numbers, so I would write them as they appear from left to right on the number line.

Name _____

Matching Fractions and Decimals

Match each fraction or decimal in Column A with an equivalent fraction or decimal in Column B.



Write Math **Explain** how you found the match for $\frac{9}{20}$.

Possible answer: I wrote an equivalent fraction by multiplying the numerator and denominator by 5 to get $\frac{45}{100}$. I then found the decimal equivalent, 0.45.

Name _____

Money Matters

For each fraction, write as a money amount and as a decimal in terms of dollars. Then write a combination of quarters, dimes, nickels, and pennies you could use to make that money amount.

Check students' coin combinations.

1. $\frac{56}{100}$ **$0.56; 0.56**

2. $\frac{75}{100}$ **$0.75; 0.75**

3. $\frac{16}{100}$ **$0.16; 0.16**

4. $\frac{5}{100}$ **$0.05; 0.05**

5. $\frac{35}{100}$ **$0.35; 0.35**

6. $\frac{70}{100}$ **$0.70; 0.70**

7. $\frac{68}{100}$ **$0.68; 0.68**

8. $\frac{99}{100}$ **$0.99; 0.99**

9. $\frac{3}{100}$ **$0.03; 0.03**

10. $\frac{33}{100}$ **$0.33; 0.33**

11. Which fraction above can only be represented by one combination of coins? **$\frac{3}{100}$**

12. Write Math Numbers that are represented as hundredths can sometimes also be represented as tenths. Use one of the fractions above to explain this possibility. Use money to support your answer.

Possible answer: 70 pennies is $\frac{70}{100}$ of a dollar or 0.70. The value of 70 pennies is equal to 7 dimes. 7 dimes is $\frac{7}{10}$ of a dollar or 0.7. 70 hundredths is the same as 7 tenths.

Name _____

School Store

You are the cashier at the school store. Find how much change each customer should receive.

1. 1 notebook: $0.70
1 pencil: $0.15

The student pays with a $1 bill.

$0.15

2. 1 pen: $0.75
1 highlighter: $0.40
1 eraser: $0.25

The student pays with a $5 bill.

$3.60

3. 2 notebooks: $0.85 each
1 glue stick: $0.90
1 sheet of stickers: $0.28

The student pays with a $5 bill.

$2.12

4. 1 writing tablet: $1.30
3 pencils: $0.18 each
2 pens: $1.07 each

The student pays with a $10 bill.

$6.02

5. Write Math **Explain** how you found the correct change for the customer in Exercise 3.

Possible answer: I acted out the situation by using coins and bills. I started with $5 and removed each amount spent. I had $2.12 left.

Name _____

Adding Fractions and Decimals

Use the trail information to find the distance each person hiked.

Trail Information	
Nature Center to Eagle's Nest	0.8 miles
Eagle's Nest to Waterfall	$\frac{53}{100}$ miles
Nature Center to Rickety Bridge	$\frac{6}{10}$ miles
Waterfall to Rickety Bridge	0.32 miles

1. Joni hiked from the Nature Center to Rickety Bridge and then from Rickety Bridge to the Waterfall.

$\frac{92}{100}$ mi, or 0.92 mi

2. Aaron hiked from the Nature Center to Eagle's Nest and then from Eagle's Nest to the Waterfall.

$\frac{133}{100}$ mi, or 1.33 mi

3. Iffat hiked from Eagle's Nest to the Waterfall, then to the Rickety Bridge, and then back to the Waterfall.

$\frac{117}{100}$ mi, or 1.17 mi

4. Troy hiked from the Nature Center to Eagle's Nest, then on to the Waterfall, from there to the Rickety Bridge, and then back to the Nature Center.

$\frac{225}{100}$ mi, or 2.25 mi

5. Stretch Your Thinking The Log Cabin is located near the Eagle's Nest, but it is not on the trail. It is a hike of 0.43 mile from Eagle's Nest. If the hiker in Exercise 4 also hiked to the Log Cabin and back to Eagle's Nest, how long would his total hike be?

$\frac{311}{100}$ miles, or 3.11 miles

Name _____

Comparing Decimals

Solve each problem.

1. Abby ran the 50-yard dash in 7.05 seconds. Barb's time was 7.5 seconds. Chris's time was 6.94 seconds. List the runners in order from fastest to slowest.

Chris, Abby, Barb

2. Nick's bag weighs 5.4 kilograms. Amelia's bag weighs 2.26 kilograms. Henrik's bag weighs 4.4 kilograms. List the weights of the bags from lightest to heaviest.

2.26 kg, 4.4 kg, 5.4 kg

3. Jeremy has three lengths of string. One is 8.3 centimeters long. The second string is 8.32 centimeters long and the third string is 8.27 centimeters long. Order the lengths of Jeremy's strings from longest to shortest.

8.32 cm, 8.3 cm, 8.27 cm

4. A science class is testing model planes. Group A's plane flew 9.35 meters. Group B's plane flew 9.6 meters. Group C's plane flew 10.04 meters. Group D's plane flew 9.57 meters. Which group's plane flew the shortest distance? the longest distance?

Group A; Group C

5. Write Math How do you compare decimals when the digits to the left of the decimal point are not 0?

Possible answer: If the digits are the same, then you compare the digits to the right of the decimal point. If the digits to the left of the decimal point are different, then you compare those digits first.