



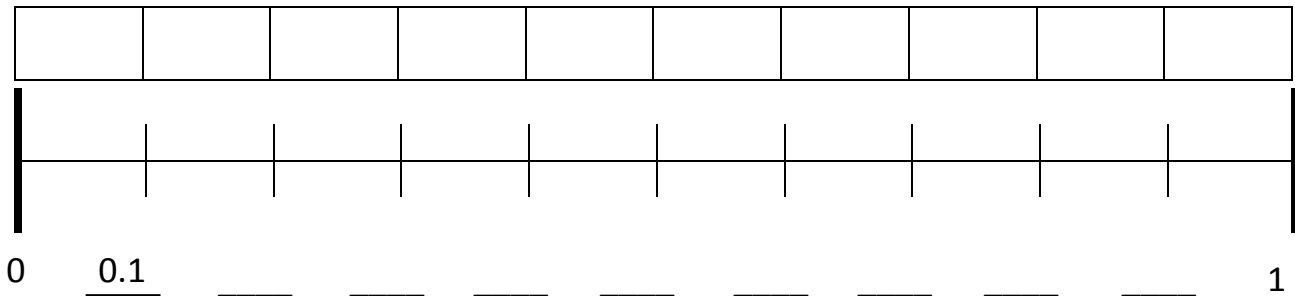
Name _____

Date _____

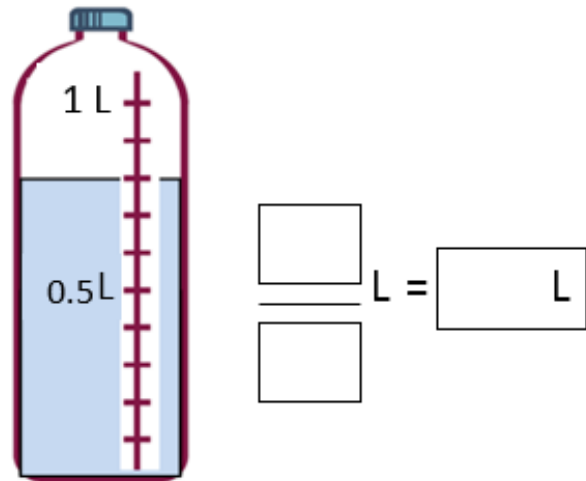
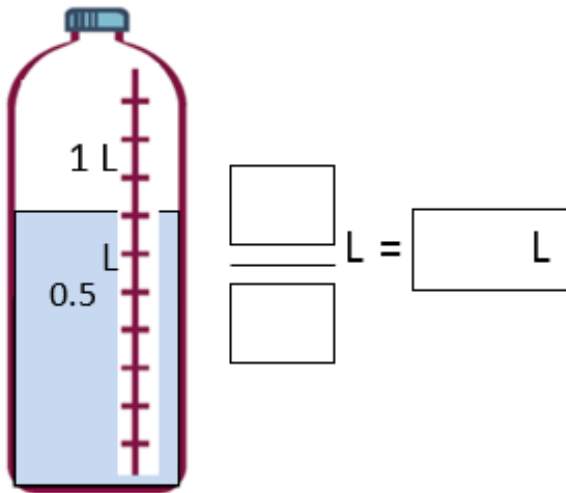
1. Shade the first 4 units of the tape diagram.

Count by tenths to label the number line using a fraction and a decimal for each point.

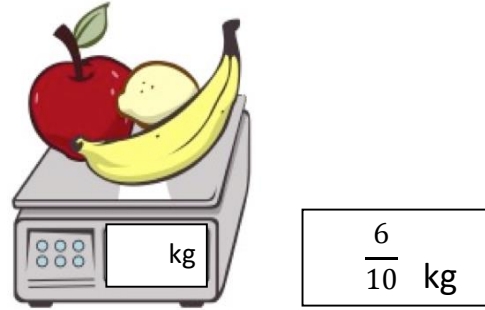
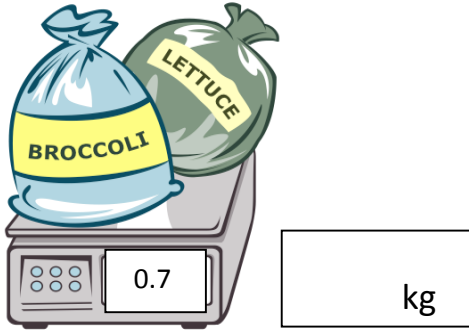
Circle the decimal that represents the shaded part.



2. Write the total amount of water in fraction form and decimal form.



3. Write the total weight of the food on each scale in fraction form or decimal form.



4. Write the length of the bug in centimeters. (Drawing is not to scale.)



Fraction form: _____ cm

Decimal form: _____ cm

If the bug walks 0.5 cm farther, where will its nose be? _____ cm

5. Fill in the blank to make the sentence true in both fraction and decimal form.

a. $\frac{4}{10}$ cm + _____ cm = 1 cm

0.4 cm + _____ cm = 1.0 cm

b. $\frac{3}{10}$ cm + _____ cm = 1 cm

0.3 cm + _____ cm = 1.0 cm

c. $\frac{8}{10}$ cm + _____ cm = 1 cm

0.8 cm + _____ cm = 1.0 cm

6. Match each amount expressed in unit form to its equivalent fraction and decimal.

2 tenths	$\frac{4}{10}$	0.4
4 tenths	$\frac{7}{10}$	0.6
6 tenths	$\frac{5}{10}$	0.2
7 tenths	$\frac{2}{10}$	0.5
5 tenths	$\frac{6}{10}$	0.7



Name _____

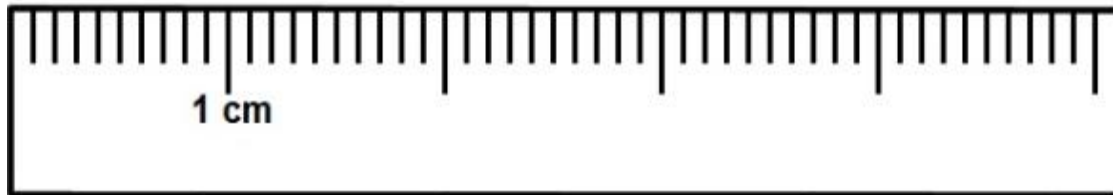
Date _____

1. Write each decimal as a mixed number.

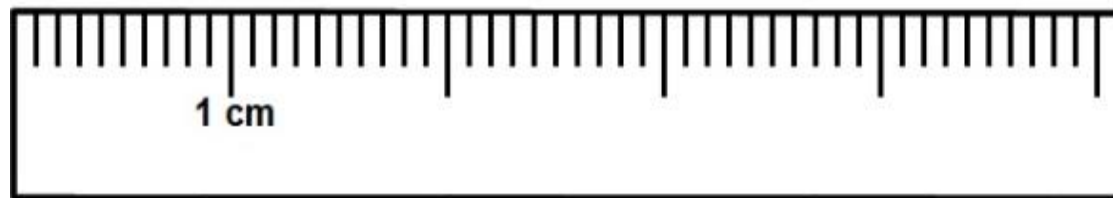
Put an arrow where the number is found on the ruler.

(The centimeter ruler is not to scale.)

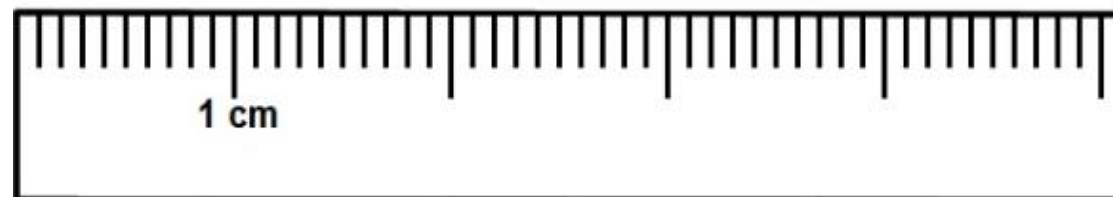
a. 2.6 cm = _____



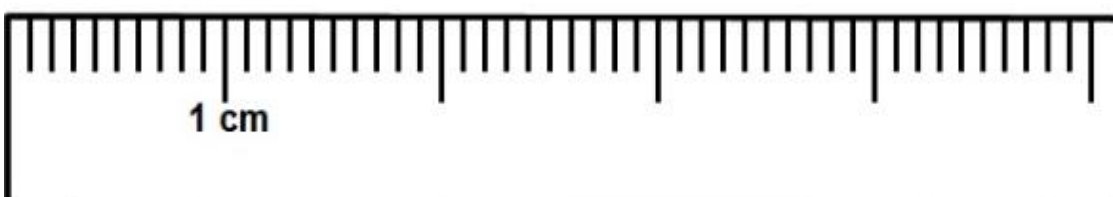
b. 3.5 cm = _____



d. 1.7 cm = _____

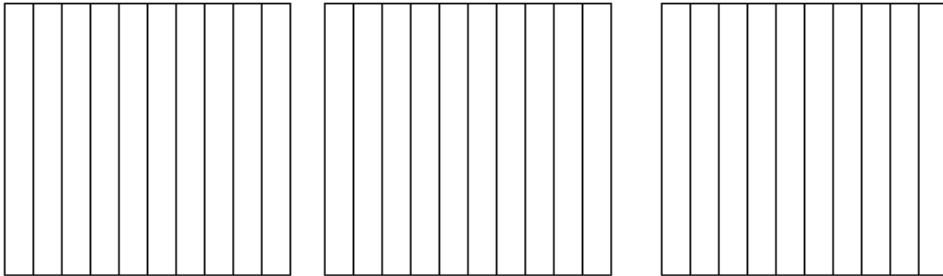


e. 4.3 cm = _____

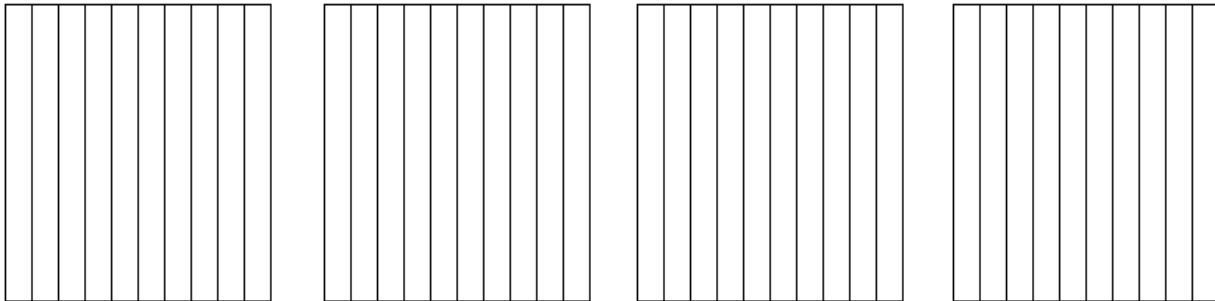


2. Write the following as a mixed number and/or a decimal.
Shade the models to show each number.

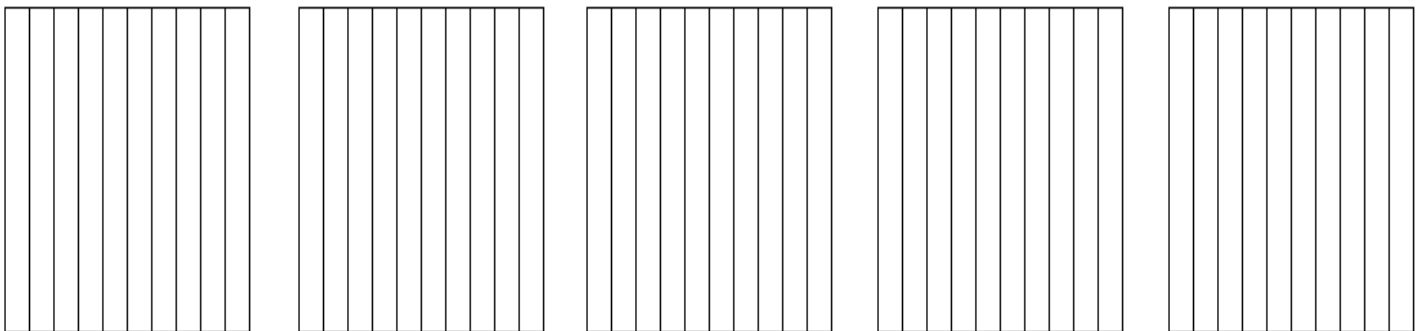
a. 2 ones and 6 tenths = _____ = _____



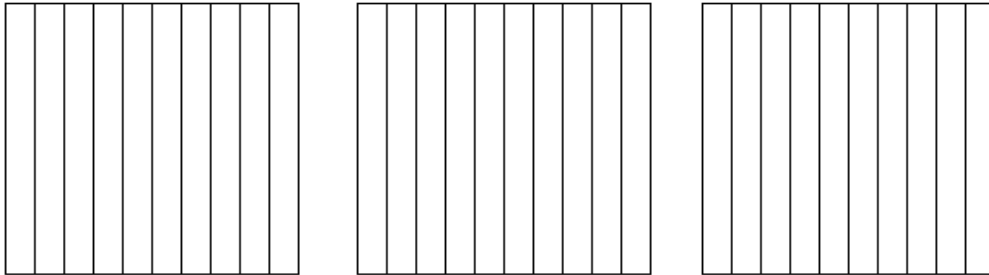
b. 3 ones and 8 tenths = _____ = _____



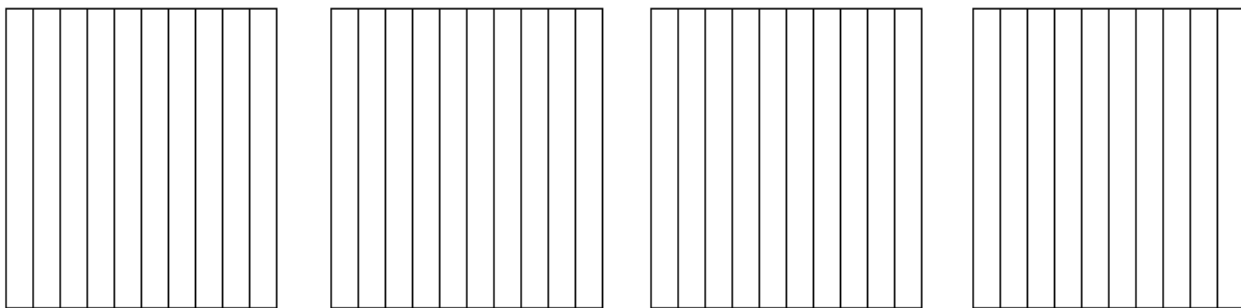
c. $4\frac{1}{10}$ = _____



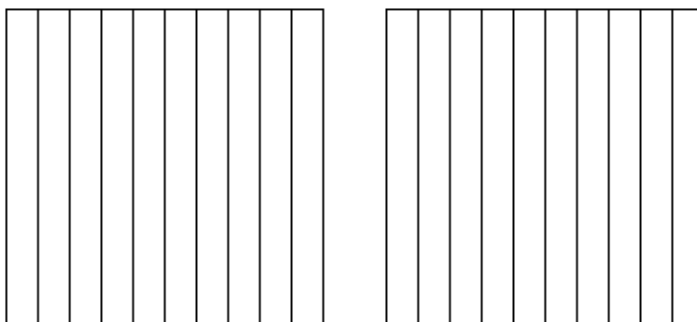
d. $1\frac{4}{10} =$ _____ How much is needed to get to 2? _____



e. $\frac{33}{10} =$ _____ How much is needed to get to 4? _____



f. $\frac{18}{10} =$ _____ How much is needed to get to 2? _____

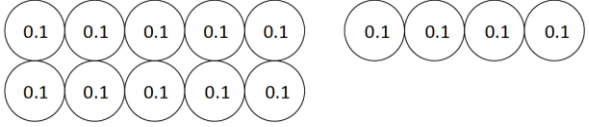
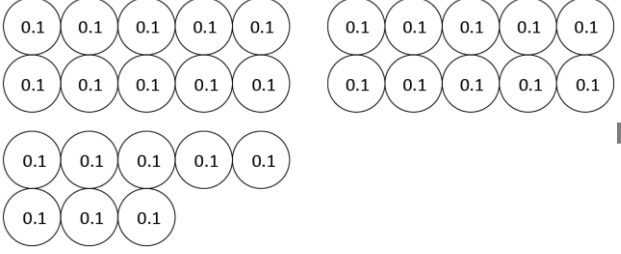




Name _____

Date _____

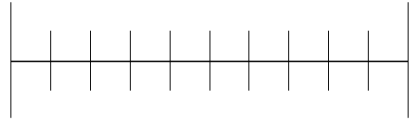
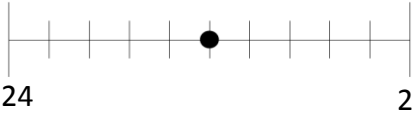
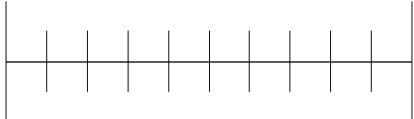
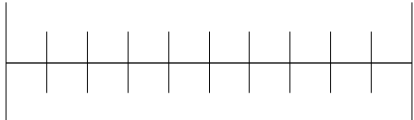
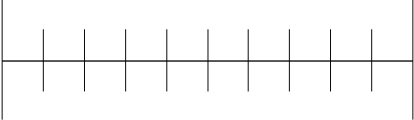
1. Circle groups of tenths to make as many ones as possible.

<p>a. How many tenths in all?</p>  <p>There are _____ tenths.</p>	<p>Write and draw the same number using ones and tenths.</p> <p>Decimal Form: _____</p> <p>How much more is needed to get to 2? _____</p>
<p>b. How many tenths in all?</p>  <p>There are _____ tenths.</p>	<p>Write and draw the same number using ones and tenths.</p> <p>Decimal Form: _____</p> <p>How much more is needed to get to 3? _____</p>

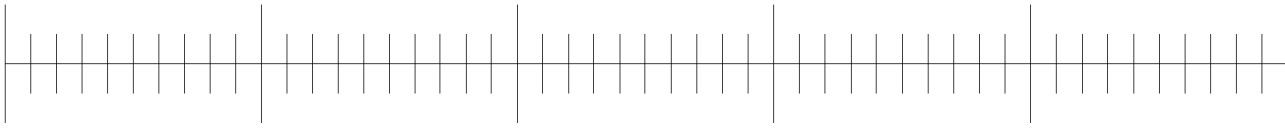
2. Show the expanded form of the number in fraction form and decimal form.

<p>a. 3 tens 4 ones 3 tenths</p> <p>Fraction Expanded Form $(3 \times 10) + (4 \times 1) + (3 \times \frac{1}{10}) = 34\frac{3}{10}$</p> <p>Decimal Expanded Form $(3 \times 10) + (4 \times 1) + (3 \times 0.1) = 34.3$</p>	<p>b. 5 tens 3 ones 7 tenths</p> <p>Fraction Expanded Form</p> <hr/> <p>Decimal Expanded Form</p> <hr/>
<p>c. 3 tens 2 ones 3 tenths</p> <p>Fraction Expanded Form</p> <hr/> <p>Decimal Expanded Form</p> <hr/>	<p>d. 8 tens 4 ones 8 tenths</p> <p>Fraction Expanded Form</p> <hr/> <p>Decimal Expanded Form</p> <hr/>

3. Complete the chart.

	Point on Number Line	Decimal Form	Mixed Number	Expanded Form (fraction or decimal form)	How much to get to the next one?
a.			$4\frac{6}{10}$		
b.					0.5
c.				$(6 \times 10) + (3 \times 1) + (6 \times \frac{1}{10})$	
d.			$71\frac{3}{10}$		
e.				$(9 \times 10) + (9 \times 0.1)$	

Number Line and Chart Template



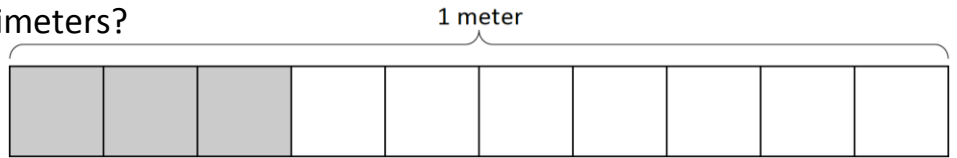
	Point on Number Line	Decimal Form	Mixed Number	Expanded Form (fraction or decimal form)	How much more is needed to get to the next one?
a.					
b.					
c.					
d.					



Name _____

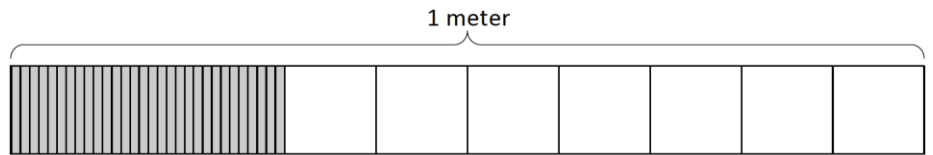
Date _____

1. a. What is the length of the shaded part of the meter stick in centimeters?



- b. What fraction of a meter is 3 centimeters? _____

- c. In fraction form, express the length of the shaded portion of the meter stick.



- d. In decimal form, what is the length of the shaded portion of the meter stick in Problem C?

- e. What fraction of a meter is 30 centimeters? _____

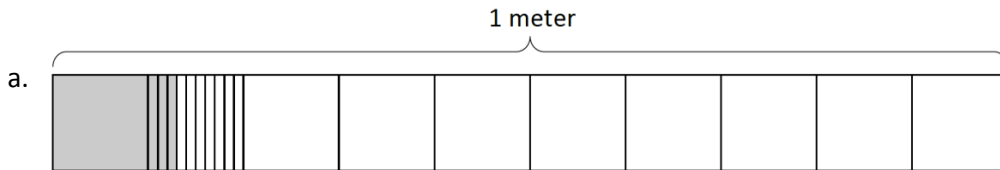
2. Fill in the blanks.

a. 5 tenths = _____ hundredths

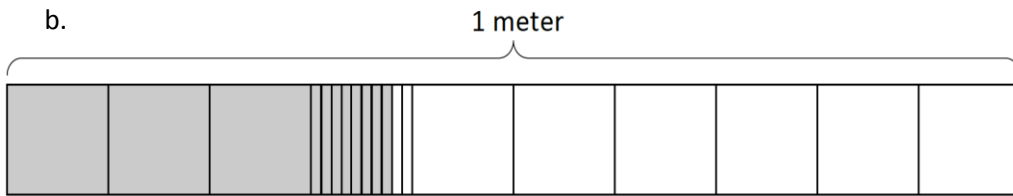
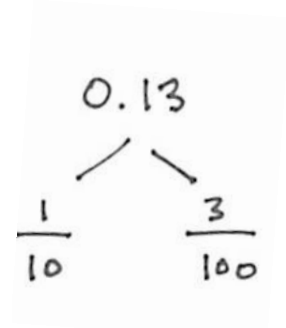
b. $\frac{5}{10} \text{ m} = \frac{?}{100} \text{ m}$
 _____ = ?

c. $\frac{4}{10} \text{ m} = \frac{40}{?} \text{ m}$
 _____ = ?

3. Use the model to add the shaded parts as shown. Write a number bond with the total written in decimal form and the parts written as fractions.

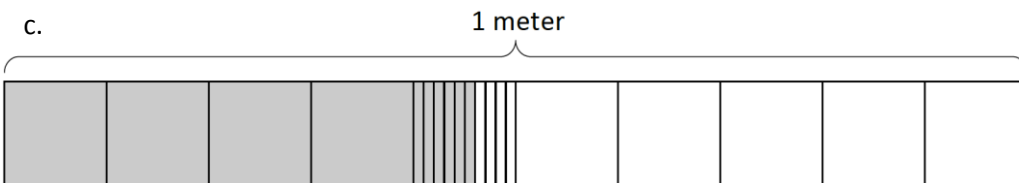


$$\frac{1}{10} \text{ m} + \frac{3}{100} \text{ m} = \frac{13}{100} \text{ m} = 0.13 \text{ m}$$



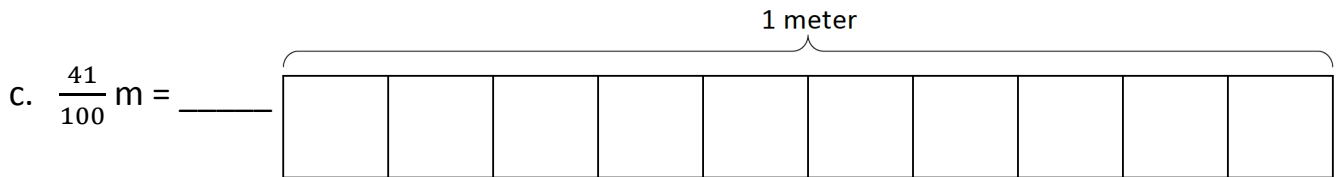
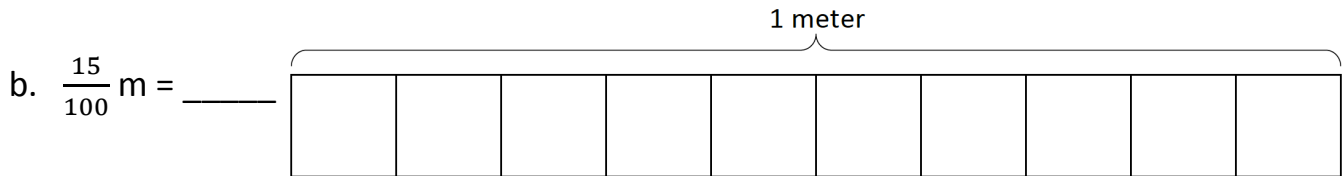
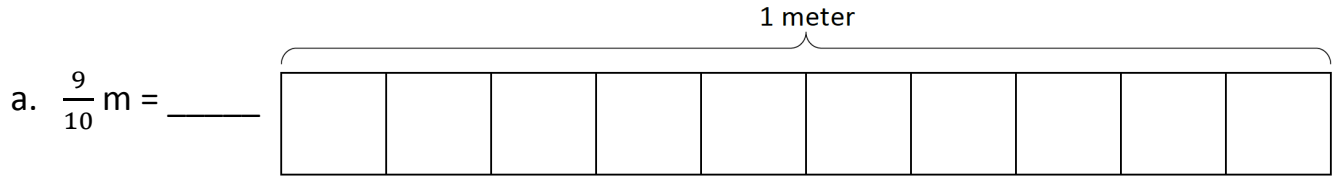
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Number Bond



$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

4. On each meter stick, shade in the amount shown. Write the equivalent decimal.



6. Write each fraction as a decimal.

Write each decimal as a number bond showing tenths and hundredths.

a. $\frac{23}{100}$ m = _____

Number Bond

b. $\frac{38}{100}$ m = _____

Number Bond

c. $\frac{82}{100}$ m = _____

d. $\frac{76}{100}$ m = _____



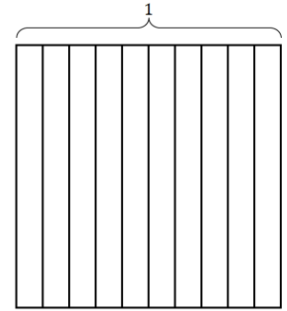
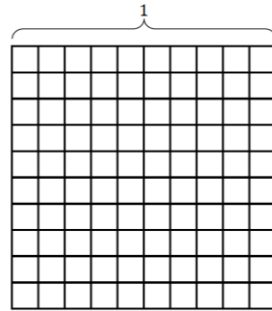
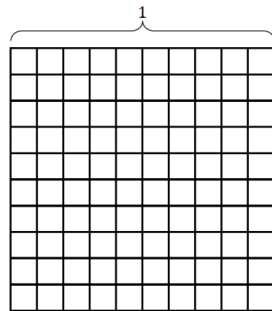
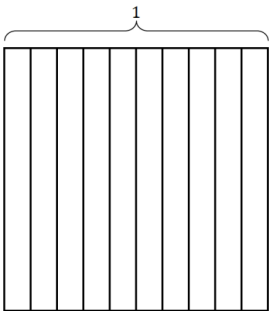
Name _____

Date _____

1. Find the equivalent fraction using multiplication or division. Shade the area models to show the equivalency. Record it as a decimal.

a. $\frac{4 \times \underline{\quad}}{10 \times \underline{\quad}} = \frac{\quad}{100}$

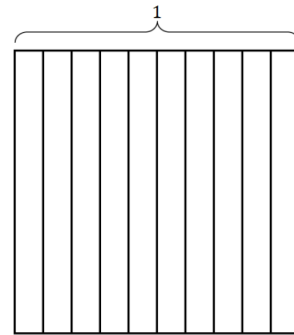
b. $\frac{60 \div \underline{\quad}}{100 \div \underline{\quad}} = \frac{\quad}{10}$



2. Complete the number sentences. Shade the equivalent amount on the area model, drawing horizontal lines to make hundredths.

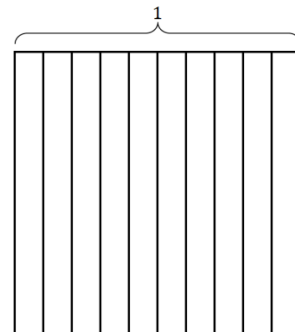
a. 36 hundredths = _____ tenths + _____ hundredths

Decimal form: _____ Fraction form: _____

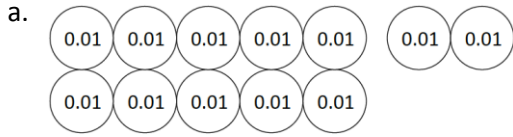


b. 82 hundredths = _____ tenths + _____ hundredths

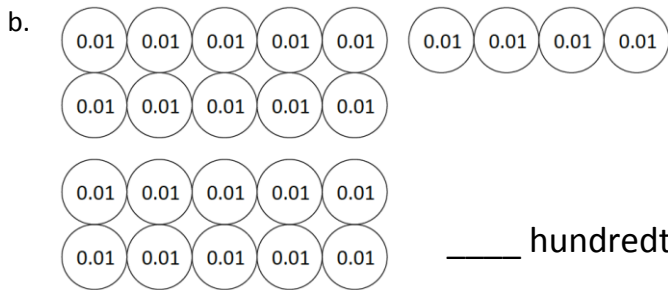
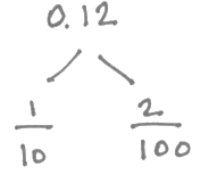
Decimal form: _____ Fraction form: _____



3. Circle hundredths to compose as many tenths as you can. Complete the number sentences. Represent each with a number bond as shown.



_____ hundredths = _____ tenth + _____



_____ hundredths = _____ tenths + _____ hundredths

Number Bond:

4. Write the equivalent number in decimal, fraction, and unit form.

<p>a. $\frac{4}{100} = 0.$ _____</p> <p>_____ hundredths</p>	<p>b. $\frac{13}{100} = 0.$ _____</p> <p>_____ tenth _____ hundredths</p>
<p>c. _____ = 0.41</p> <p>_____ hundredths</p>	<p>d. _____ = 0.90</p> <p>_____ tenths</p>

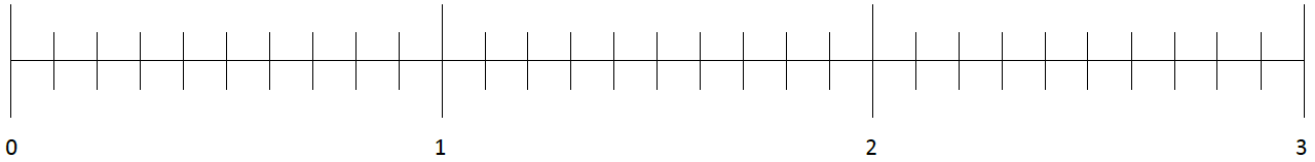
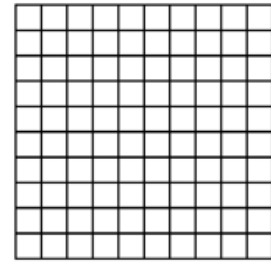
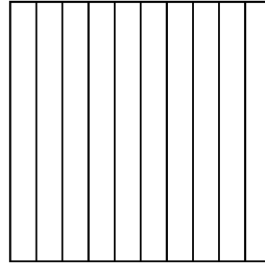
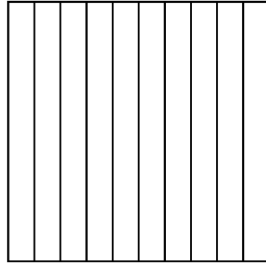


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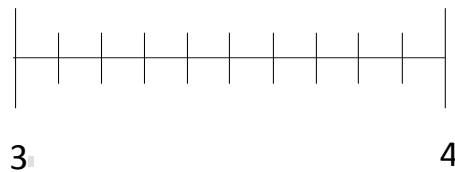
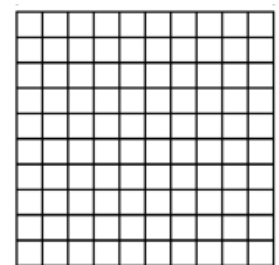
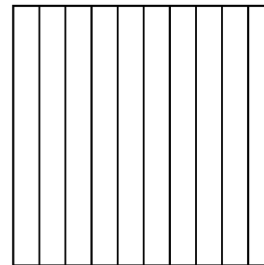
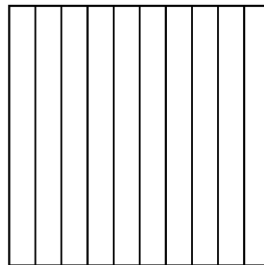
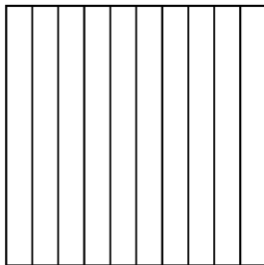
Date _____

1. Shade the area models to represent the number. Write the fraction as a decimal.
 Estimate to locate the point on the number line.

a. $2\frac{35}{100} = \underline{\quad}.\underline{\quad}$



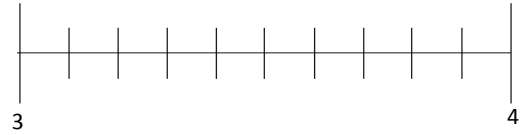
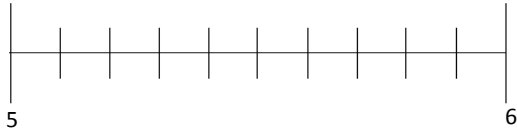
b. $3\frac{17}{100} = \underline{\quad}.\underline{\quad}$



2. Estimate to locate the points on the number lines.

a. $5 \frac{90}{100}$

b. $3 \frac{25}{100}$



3. Write the equivalent fraction and decimal for each of the following numbers.

<p>a. 2 ones 2 hundredths</p>	<p>b. 2 ones 16 hundredths</p>
<p>c. 3 ones 7 hundredths</p>	<p>d. 1 one 18 hundredths</p>
<p>e. 9 ones 62 hundredths</p>	<p>f. 6 ones 20 hundredths</p>

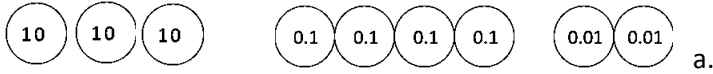
4. Draw lines from dot to dot to match the decimal form to both the unit form and fraction form. All unit forms and fractions have at least one match, and some have more than one match.

4 ones 18 hundredths ●	●	4.80	●	●	$4\frac{18}{100}$
4 ones 8 hundredths ●	●	4.8	●	●	48
4 ones 8 tenths ●	●	4.18	●	●	$4\frac{8}{100}$
4 tens 8 ones ●	●	4.08	●	●	$4\frac{80}{100}$
	●	48	●		



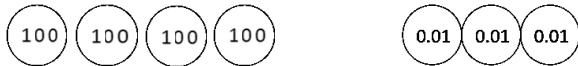
Name _____

1. Write a decimal number sentence to identify the total value of the number disks.



3 tens 4 tenths 2 hundredths

_____ + _____ + _____ = _____



4 hundreds 3 hundredths

_____ + _____ = _____

2. Use the place value chart to answer the following questions.

Express the value of the digit in unit form.

hundreds	tens	ones	.	tenths	hundredths
8	2	7		6	4

- a. The digit _____ is in the hundreds place. It has a value of _____.
- b. The digit _____ is in the tens place. It has a value of _____.
- c. The digit _____ is in the tenths place. It has a value of _____.
- d. The digit _____ is in the hundredths place. It has a value of _____.

hundreds	tens	ones	.	tenths	hundredths
3	4	5		1	9

- e. The digit _____ is in the hundreds place. It has a value of _____.
- f. The digit _____ is in the tens place. It has a value of _____.
- g. The digit _____ is in the tenths place. It has a value of _____.
- h. The digit _____ is in the hundredths place. It has a value of _____.

3. Write each number in expanded form, using both decimal and fraction notation. The first one has been done for you.

Decimal and Fraction Form	Expanded Form	
	Fraction Notation	Decimal Notation
$14.23 = 14\frac{23}{100}$	$(1 \times 10) + (4 \times 1) + (2 \times \frac{1}{10}) + (3 \times \frac{1}{100})$ $10 + 4 + \frac{2}{10} + \frac{3}{100}$	$(1 \times 10) + (4 \times 1) + (2 \times 0.1) + (3 \times 0.01)$ $10 + 4 + 0.2 + 0.03$
25.3 =		
39.07 =		
40.6 =		

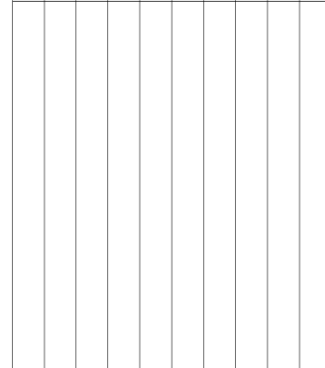
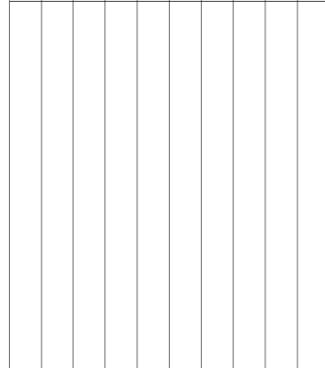
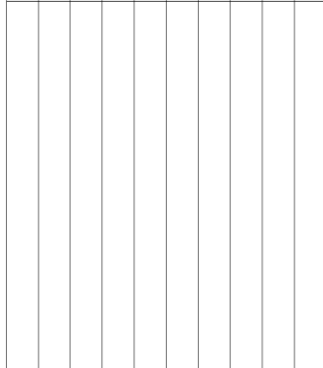


Name _____

Date _____

1. Use the area model to represent $\frac{220}{100}$. Complete the number sentence.

a. $\frac{220}{100} =$ _____ tenths = _____ ones _____ tenths = ____.



2. Draw number disks to represent the following decompositions:

5 ones = _____ tenths

7 tenths = _____ hundredths

ones	.	tenths	hundredths

ones	.	tenths	hundredths

2 ones 4 tenth = _____ tenths

8 tenths 3 hundredths = _____ hundredths

ones	.	tenths	hundredths

ones	.	tenths	hundredths

3. Decompose the units to represent each number as tenths.

a. $1 = \underline{\hspace{2cm}}$ tenths

b. $2 = \underline{\hspace{2cm}}$ tenths

c. $1.3 = \underline{\hspace{2cm}}$ tenths

d. $2.6 = \underline{\hspace{2cm}}$ tenths

e. $10.3 = \underline{\hspace{2cm}}$ tenths

f. $20.6 = \underline{\hspace{2cm}}$ tenths

4. Decompose the units to represent each number as hundredths.

a. $1 = \underline{\hspace{2cm}}$ hundredths

b. $2 = \underline{\hspace{2cm}}$ hundredths

c. $1.3 = \underline{\hspace{2cm}}$ hundredths

d. $2.6 = \underline{\hspace{2cm}}$ hundredths

e. $10.3 = \underline{\hspace{2cm}}$ hundredths

f. $20.6 = \underline{\hspace{2cm}}$ hundredths

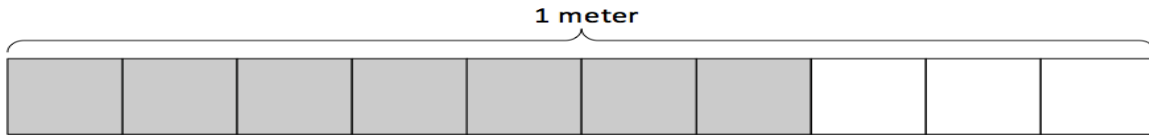
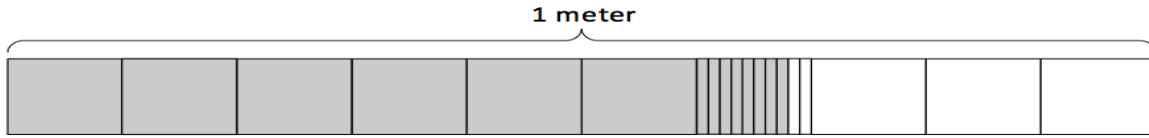


Name _____

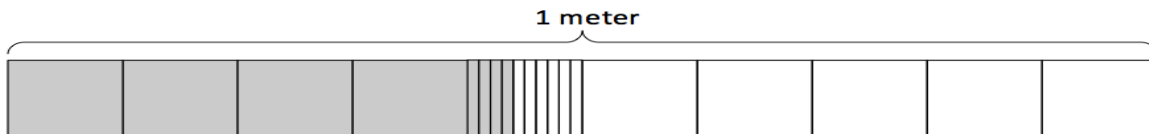
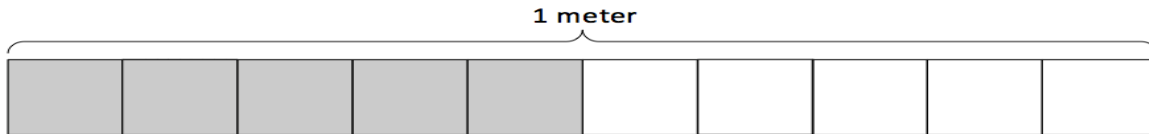
Date _____

1. Express the lengths of the shaded parts in decimal form. Write a sentence that compares the two lengths. Use the expression *shorter than* or *longer than*.

a.

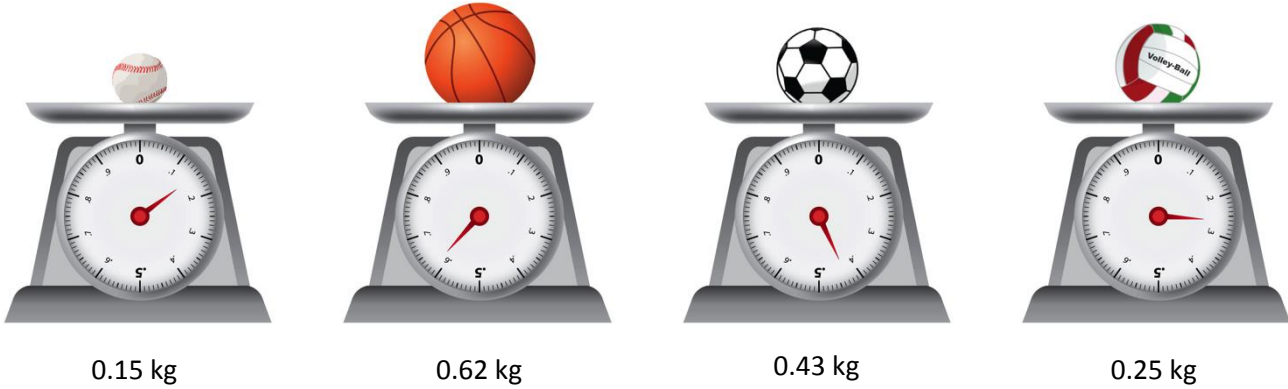


b.



c. List all four lengths from least to greatest.

- 2.
- a. Examine the mass of each item as shown below on the 1 kilogram scales.
Put an X over the items that are heavier than the volleyball.



- b. Express the mass of each item on the place value chart.

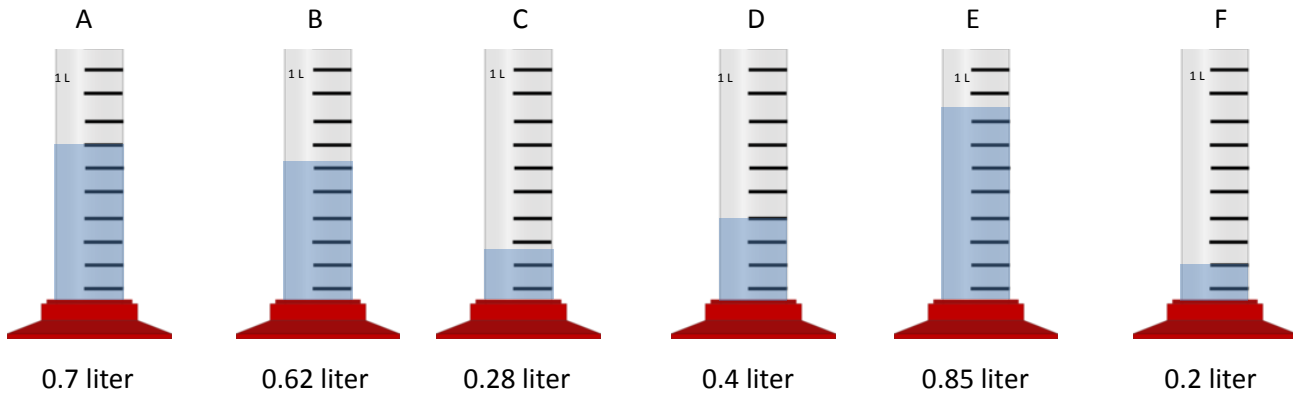
	ones (kilograms)		tenths	hundredths
baseball		●		
volleyball				
basketball				
soccer ball				

- c. Complete the statements below using the words *heavier than* or *lighter than*.

The soccer ball is _____ the baseball.

The volleyball is _____ the basketball.

3. Record the volume of water in each cylinder on the place value chart below.



Cylinder	ones (liters)	.	tenths	hundredths
A				
B				
C				
D				
E				
F				

Compare the values using $>$, $<$, or $=$.

0.4 L _____ 0.2 L

0.62 L _____ 0.7 L

0.2 L _____ 0.28 L

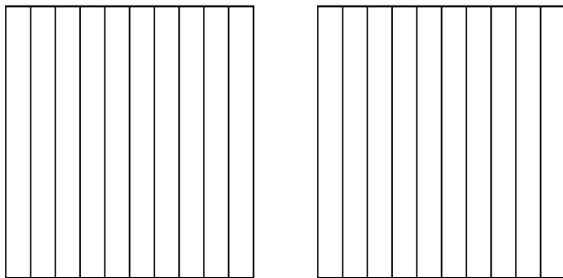


Name _____

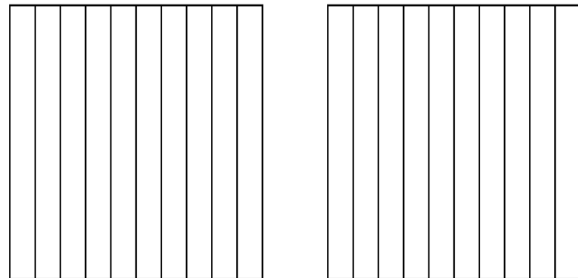
Date _____

1. Shade the parts of the area models below, decomposing tenths as needed, to represent the pairs of decimal numbers. Fill in the blank with $<$, $>$, or $=$ to compare the decimal numbers.

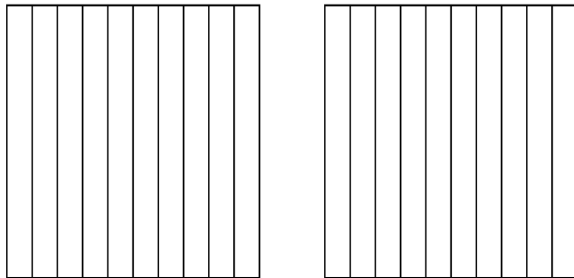
a. 0.19 _____ 0.3



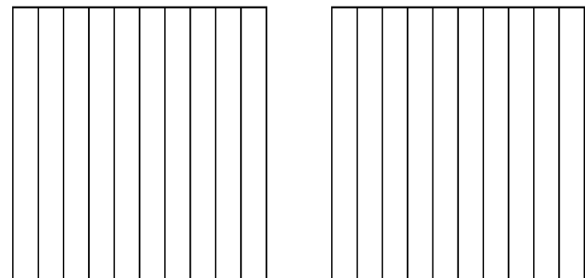
b. 0.6 _____ 0.06



c. 0.8 _____ 0.53



d. 0.38 _____ 0.7

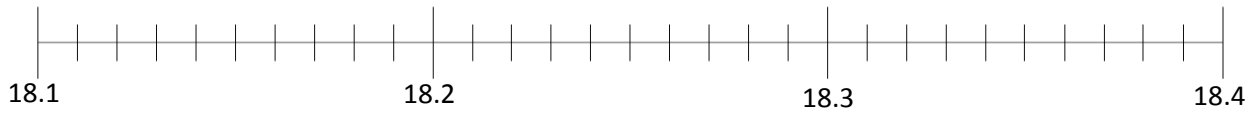


2. Locate and label the points for each of the decimal numbers on the number line. Fill in the blank with $<$, $>$, or $=$ to compare the decimal numbers.

a. 7.2 _____ 7.02



b. 18.19 _____ 18.3

3. Use the symbols $<$, $>$, or $=$ to compare.

a. 2.68 _____ 2.54

b. 6.37 _____ 6.73

c. 9.28 _____ 7.28

d. 3.02 _____ 3.2

e. 13.1 _____ 13.10

f. 5.8 _____ 5.92

4. Use the symbols $<$, $>$, or $=$ to compare.

a. 57 tenths _____ 5.7

b. 6.2 _____ 6 ones and 2 hundredths

c. 33 tenths _____ 33 hundredths

d. 8.39 _____ $8\frac{39}{10}$

e. $\frac{236}{100}$ _____ 2.36

f. 3 tenths _____ 22 hundredths



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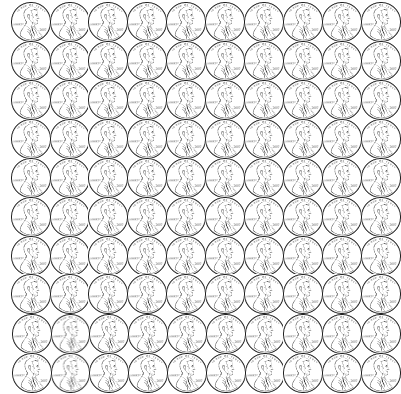
1. 100 pennies = \$____._____ $100\text{¢} = \frac{\quad}{100}$ dollar

2. 1 penny = \$____._____ $1\text{¢} = \frac{\quad}{100}$ dollar

3. 3 pennies = \$____._____ $3\text{¢} = \frac{\quad}{100}$ dollar

4. 20 pennies = \$____._____ $20\text{¢} = \frac{\quad}{100}$ dollar

5. 37 pennies = \$____._____ $37\text{¢} = \frac{\quad}{100}$ dollar



6. 10 dimes = \$____._____ $100\text{¢} = \frac{\quad}{10}$ dollar

7. 2 dimes = \$____._____ $20\text{¢} = \frac{\quad}{10}$ dollar

8. 4 dimes = \$____._____ $40\text{¢} = \frac{\quad}{10}$ dollar

9. 6 dimes = \$____._____ $60\text{¢} = \frac{\quad}{10}$ dollar

10. 9 dimes = \$____._____ $90\text{¢} = \frac{\quad}{10}$ dollar

11. 3 quarters = \$____._____ $75\text{¢} = \frac{\quad}{100}$ dollar

12. 2 quarters = \$____._____ $50\text{¢} = \frac{\quad}{100}$ dollar

13. 4 quarters = \$____._____ $100\text{¢} = \frac{\quad}{100}$ dollar

Solve. Give the total amount of money in fraction and decimal form.

14. 5 dimes and 8 pennies

15. 3 quarters and 13 pennies

16. 3 quarters, 7 dimes, and 16 pennies

17. 187 cents is what fraction of a dollar?



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Use the RDW process to solve. Write your answer as a decimal.

1. Maria had 2 dollars, 3 dimes, and 4 pennies. Lisa had 1 dollar and 5 quarters. How much money did the two girls have in all?

2. Mary needed 5 dollars 35 cents to buy a ticket to a show. In her wallet, she found 2 dollar bills, 11 dimes, and 5 pennies. How much more money does Mary need to buy the ticket?

3. Joe had 5 dimes and 4 pennies. Jack had 2 dollars, 4 dimes, and 5 pennies. Jimmy had 6 dollars and 4 dimes. They wanted to put their money together to buy a book that costs \$10.00. Did they have enough? If not, how much more did they need?
4. A package of mechanical pencils costs \$4.99. A package of pens costs twice as much as a package of pencils. How much does a package of pens and a package of pencils cost together?