Manatee Math Superstars

Grade 4

Spring Semester

MANATEE ELEMENTARY

Name _____ Date _____

Solve using the RDW process.

1. A pair of jeans costs $89. A jean jacket costs twice as much. What is the total cost of a jean jacket and 4 pairs of jeans?

2. Sarah bought a shirt on sale for $35. The original price of the shirt was 3 times that amount. Sarah also bought a pair of shoes on sale for $28. The original price of the shoes was 5 times that amount. Together, how much money did the shirt and shoes cost before they went on sale?

3. All 3,000 seats in a theater are being replaced. So far, 5 sections of 136 seats and a sixth section containing 348 seats have been replaced. How many more seats do they still need to replace?

4. Computer Depot sold 762 reams of paper. Paper Palace sold 3 times as much paper as Computer Depot and 143 reams more than Office Supply Central. How many reams of paper were sold by all three stores combined?

Lesson 14 Problem Set

Name _____ Date _____

Use the RDW process to solve the following problems.

1. There are 19 identical socks. How many pairs of socks are there? Will there be any socks without a match? If so, how many?

2. If it takes 8 inches of ribbon to make a bow, how many bows can be made from 3 feet of ribbon (1 foot = 12 inches)? Will any ribbon be left over? If so, how much?

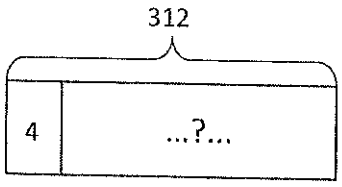
3. The library has 27 chairs and 5 tables. If the same number of chairs is placed at each table, how many chairs can be placed at each table? Will there be any extra chairs? If so, how many?

4. The baker has 42 kilograms of flour. She uses 8 kilograms each day. After how many days will she need to buy more flour?

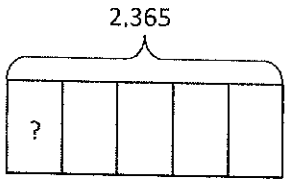
5. Caleb has 76 apples. He wants to bake as many pies as he can. If it takes 8 apples to make each pie, how many apples will he use? How many apples will not be used?

6. Forty-five people are going to the beach. Seven people can ride in each van. How many vans will be required to get everyone to the beach?

1. Monique needs exactly 4 plates on each table for the banquet. If she has 312 plates, how many tables is she able to prepare?



2. 2,365 books were donated to an elementary school. If 5 classrooms shared the books equally, how many books did each class receive?



3. If 1,503 kilograms of rice was packed in sacks weighing 3 kilograms each, how many sacks were packed?

Lesson 23 Homework

Name _____ Date _____

1. Explain your thinking or use division to answer the following.

a. Is 2 a factor of 72?	b. Is 2 a factor of 73?
c. Is 3 a factor of 72?	d. Is 2 a factor of 60?
e. Is 6 a factor of 72?	f. Is 4 a factor of 60?
g. Is 5 a factor of 72?	h. Is 8 a factor of 60?

Name _____ Date _____

1. Explain your thinking or use division to answer the following.

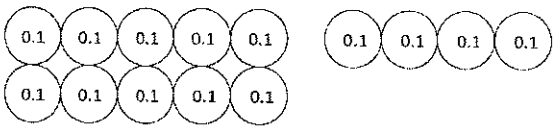
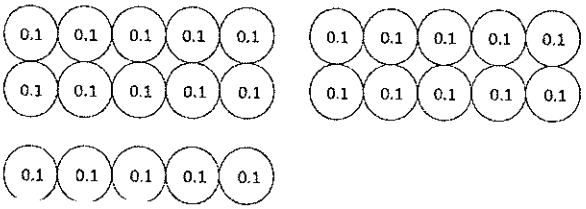
a. Is 2 a factor of 84?	b. Is 2 a factor of 83?
c. Is 3 a factor of 84?	d. Is 2 a factor of 92?
e. Is 6 a factor of 84?	f. Is 4 a factor of 92?
g. Is 5 a factor of 84?	h. Is 8 a factor of 92?

Rita made 5 batches of cookies. There was a total of 2,400 cookies. If each batch contained the same number of cookies, how many cookies were in 4 batches?

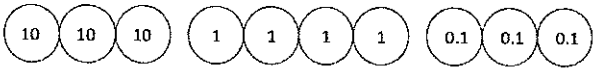
Every day, Sarah drives the same distance to work and back home. If Sarah drove 1,005 miles in 5 days, how far did Sarah drive in 3 days?

Name _____ Date _____

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

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

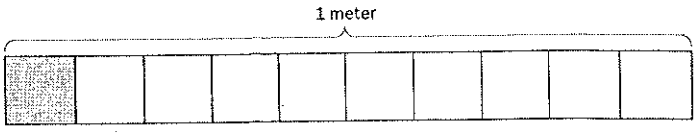
2. Draw disks to represent each number using tens, ones, and tenths. Then, show the expanded form of the number in fraction form and decimal form as shown. The first one has been completed for you.

a. 3 tens 4 ones 3 tenths  Fraction Expanded Form $(3 \times 10) + (4 \times 1) + (3 \times \frac{1}{10}) = 34\frac{3}{10}$ Decimal Expanded Form $(3 \times 10) + (4 \times 1) + (3 \times 0.1) = 34.3$	b. 5 tens 3 ones 7 tenths

Lesson 4 Problem Set

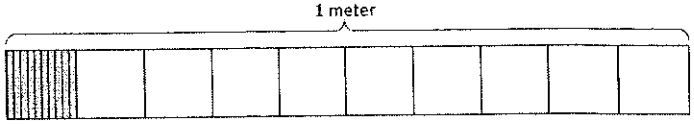
Name _____ Date _____

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



b. What fraction of a meter is 1 centimeter?

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



d. In decimal form, express the length of the shaded portion of the meter stick.

e. What fraction of a meter is 10 centimeters?

2. Fill in the blanks.

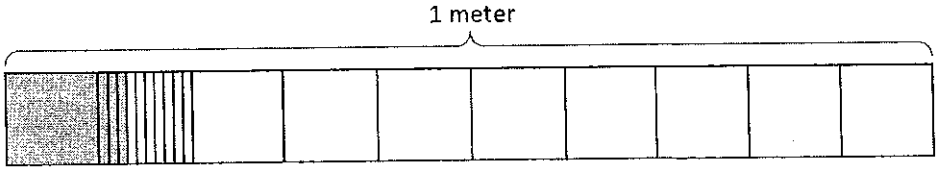
a. 1 tenth = ____ hundredths

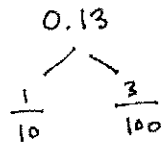
b. $\frac{1}{10}$ m = $\frac{\quad}{100}$ m

c. $\frac{2}{10}$ m = $\frac{20}{\quad}$ 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. The first one has been done for you.

a.

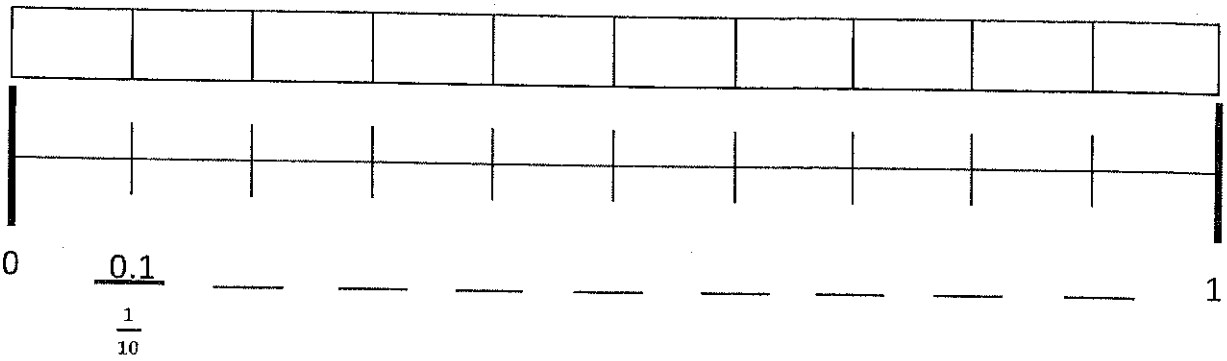




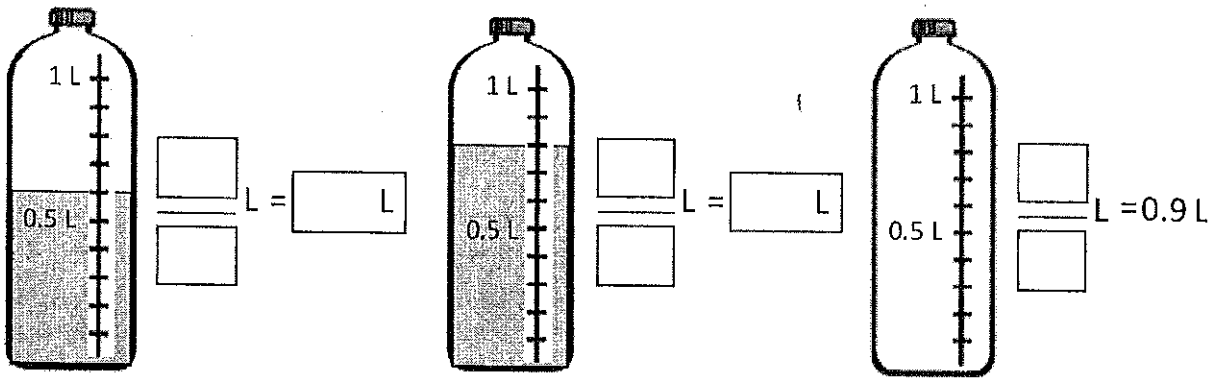
$\frac{1}{10}$ m + $\frac{3}{100}$ m = $\frac{13}{100}$ m = 0.13 m

Name _____ Date _____

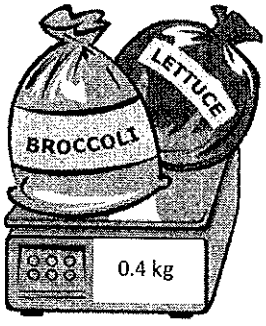
1. Shade the first 7 units of the tape diagram. Count by tenths to label the number line using a fraction and a decimal for each point. Circle the decimal that represents the shaded part.



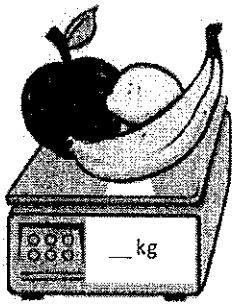
2. Write the total amount of water in fraction form and decimal form. Shade the last bottle to show the correct amount.



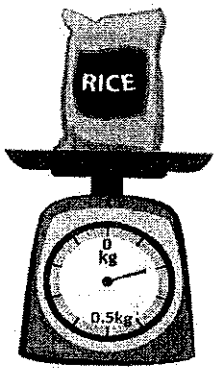
3. Write the total weight of the food on each scale in fraction form or decimal form.



kg

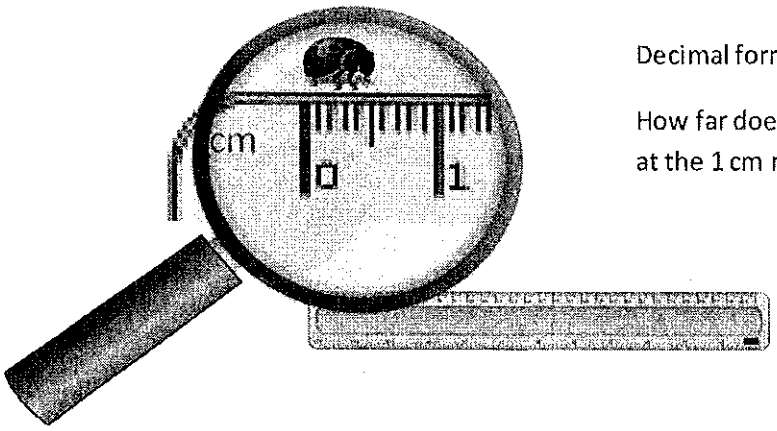


$\frac{8}{10}$ kg



kg

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



Fraction form: _____ cm

Decimal form: _____ cm

How far does the bug need to walk before its nose is at the 1 cm mark? _____ cm

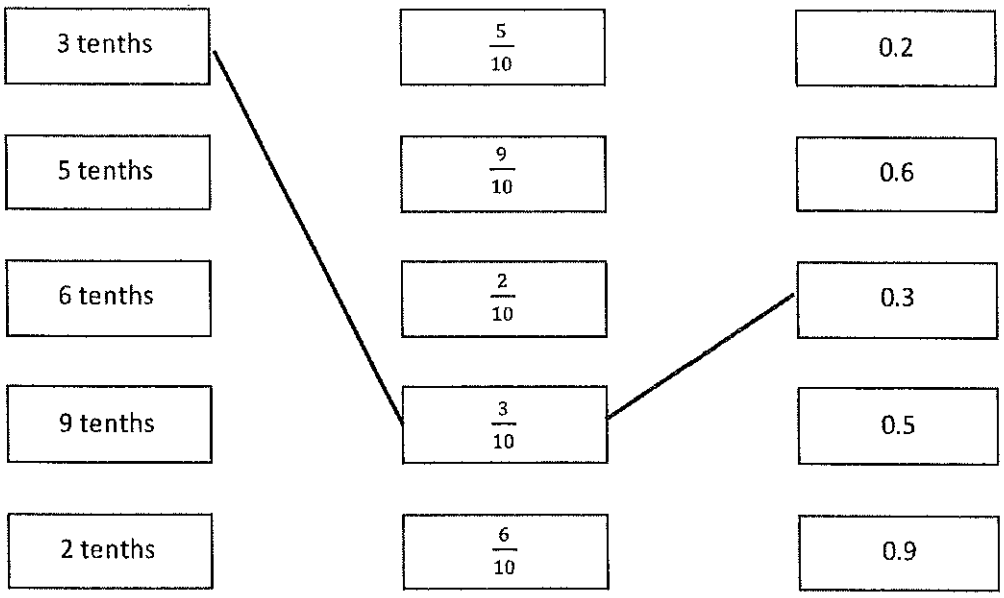
5. Fill in the blank to make the sentence true in both fraction form and decimal form.

a. $\frac{8}{10}$ cm + _____ cm = 1 cm 0.8 cm + _____ cm = 1.0 cm

b. $\frac{2}{10}$ cm + _____ cm = 1 cm 0.2 cm + _____ cm = 1.0 cm

c. $\frac{6}{10}$ cm + _____ cm = 1 cm 0.6 cm + _____ cm = 1.0 cm

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



Name _____ Date _____

Barrel A contains 2.7 liters of water. Barrel B contains 3.09 liters of water. Together, how much water do the two barrels contain?

Alissa ran a distance of 15.8 kilometers one week and 17.34 kilometers the following week. How far did she run in the two weeks?

Name _____ Date _____

Use the following directions to draw a figure in the box to the right.

a. Draw two points: A and B.

b. Use a straightedge to draw $\overrightarrow{AB}$.

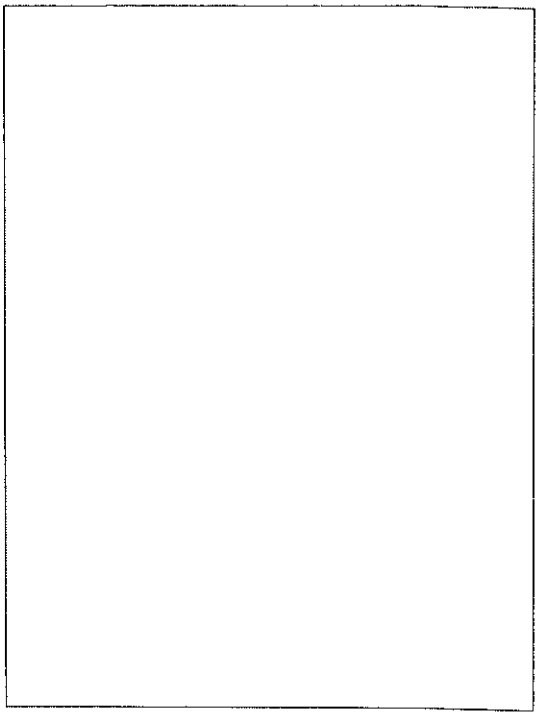
c. Draw a new point that is not on $\overrightarrow{AB}$. Label it C.

d. Draw $\overline{AC}$.

e. Draw a point not on $\overrightarrow{AB}$ or $\overline{AC}$. Call it D.

f. Construct $\overleftrightarrow{CD}$.

g. Use the points you've already labeled to name one angle. _____



Use the following directions to draw a figure in the box to the right.

a. Draw two points: A and B.

b. Use a straightedge to draw $\overline{AB}$.

c. Draw a new point that is not on $\overline{AB}$. Label it C.

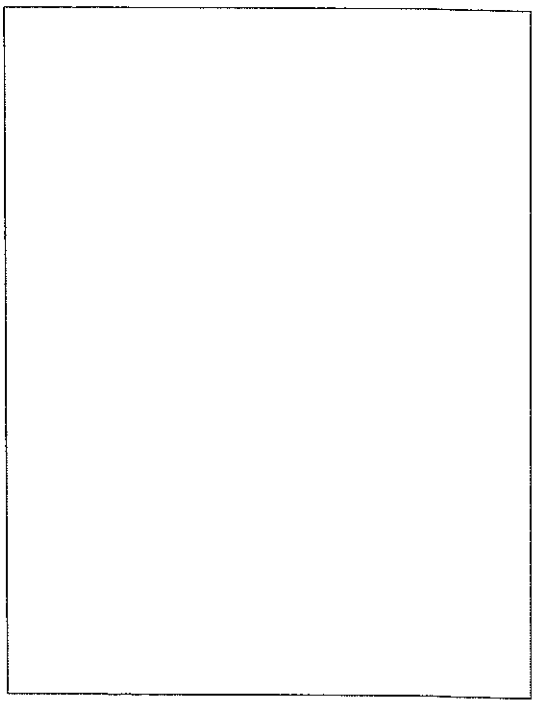
d. Draw $\overrightarrow{BC}$.

e. Draw a new point that is not on $\overline{AB}$ or $\overrightarrow{BC}$. Label it D.

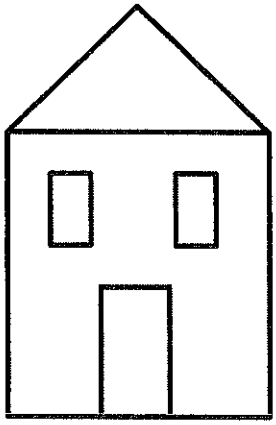
f. Construct $\overleftrightarrow{AD}$.

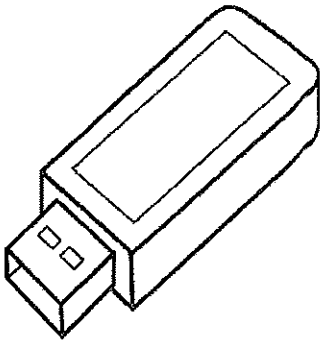
g. Identify $\angle DAB$ by drawing an arc to indicate the position of the angle.

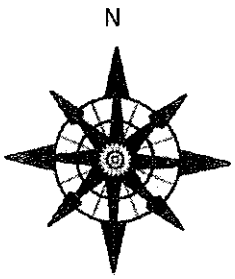
h. Identify another angle by referencing points that you have already drawn. _____



3. a. Observe the familiar figures below. Label some points on each figure.
   b. Use those points to label and name representations of each of the following in the table below: ray, line, line segment, and angle. Extend segments to show lines and rays.





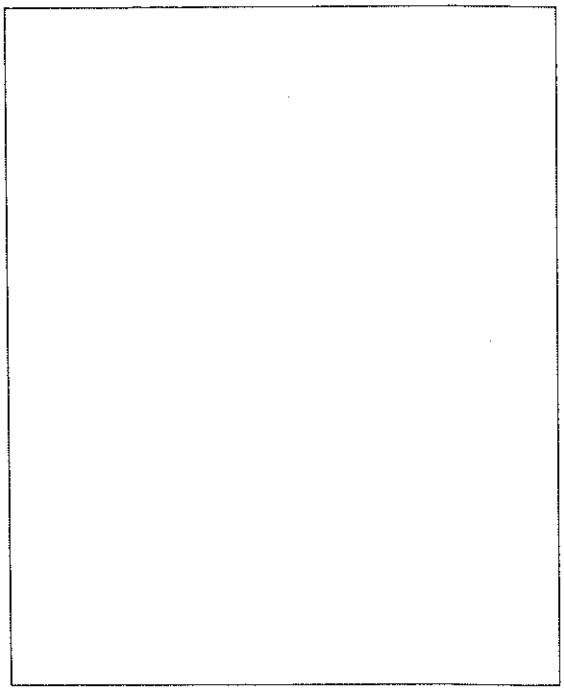


	House	Flash drive	Compass rose
Ray			
Line			
Line segment			
Angle			

Extension: Draw a familiar figure. Label it with points, and then identify rays, lines, line segments, and angles as applicable.

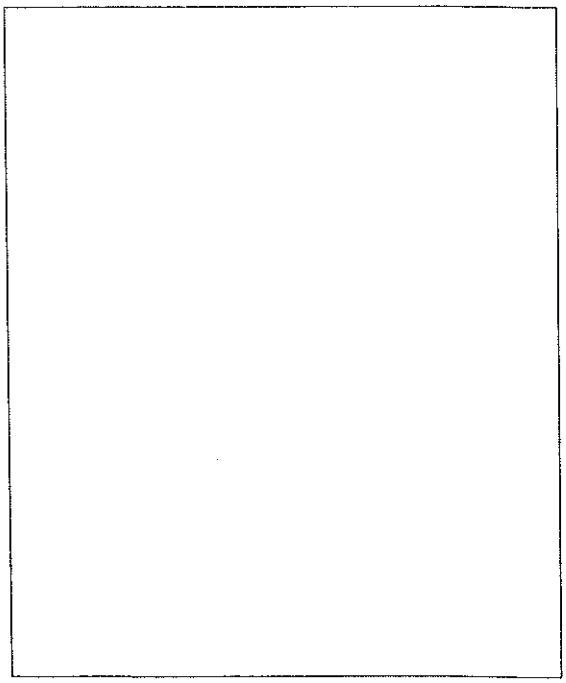
Name _____ Date _____

1. Use the following directions to draw a figure in the box to the right.



   a. Draw two points: W and X.
   b. Use a straightedge to draw $\overrightarrow{WX}$.
   c. Draw a new point that is not on $\overrightarrow{WX}$. Label it Y.
   d. Draw $\overrightarrow{WY}$.
   e. Draw a point not on $\overrightarrow{WX}$ or $\overrightarrow{WY}$. Call it Z.
   f. Construct $\overrightarrow{YZ}$.
   g. Use the points you've already labeled to name one angle. _____

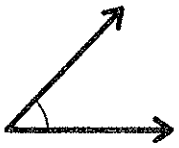
2. Use the following directions to draw a figure in the box to the right.

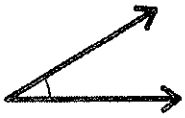


   a. Draw two points: W and X.
   b. Use a straightedge to draw $\overrightarrow{WX}$.
   c. Draw a new point that is not on $\overrightarrow{WX}$. Label it Y.
   d. Draw $\overrightarrow{WY}$.
   e. Draw a new point that is not on $\overrightarrow{WY}$ or on the line containing $\overrightarrow{WX}$. Label it Z.
   f. Construct $\overrightarrow{WZ}$.
   g. Identify $\angle ZWX$ by drawing an arc to indicate the position of the angle.
   h. Identify another angle by referencing points that you have already drawn. _____

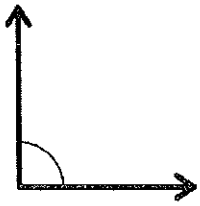
Name _____ Date _____

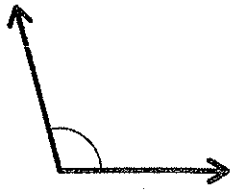
1. Use the right angle template that you made in class to determine if each of the following angles is greater than, less than, or equal to a right angle. Label each as *greater than*, *less than*, or *equal to*, and then connect each angle to the correct label of acute, right, or obtuse.
   The first one has been completed for you.

a. 

b. 

Less than

c. 

d. 

Acute

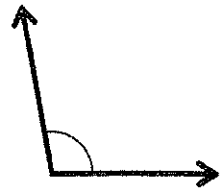
e. 

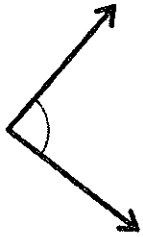
Right

f. 

Obtuse

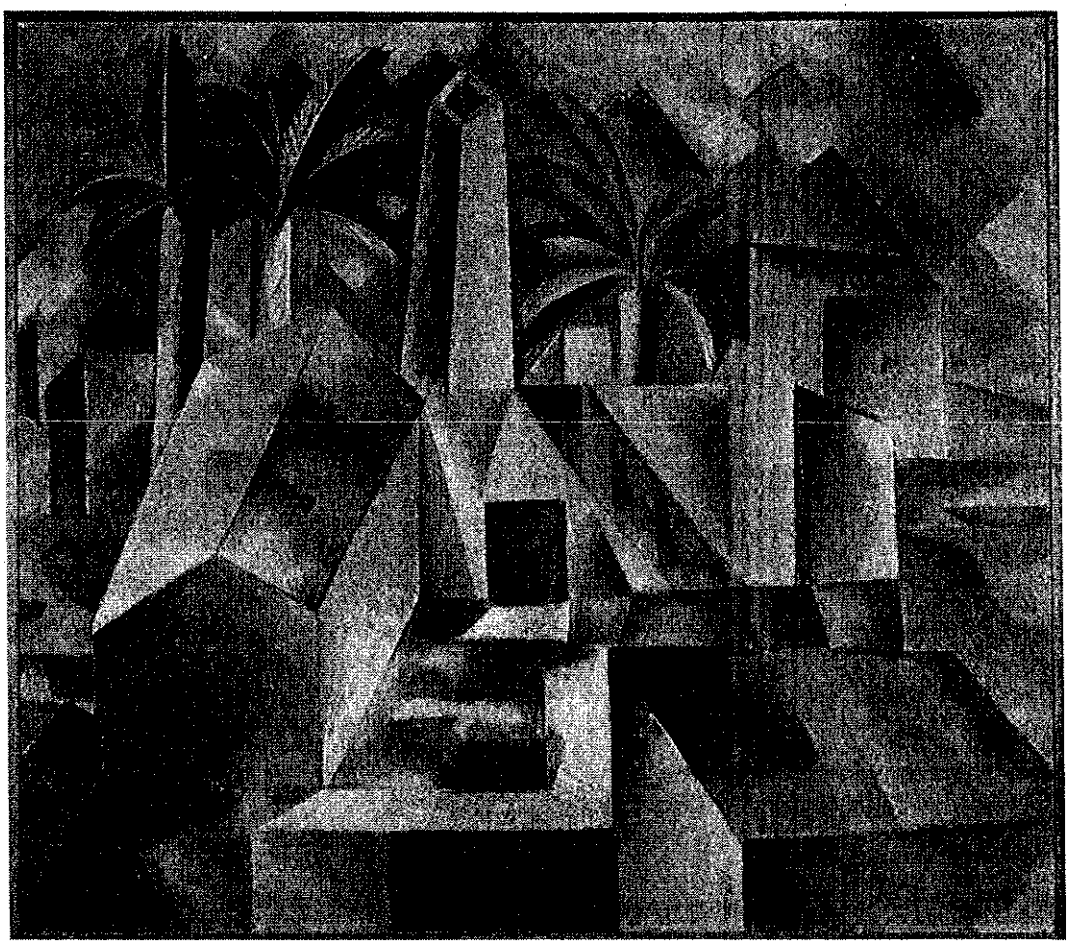
g. 

h. 

i. 

j. 

2. Use your right angle template to identify acute, obtuse, and right angles within Picasso's painting *Factory, Horta de Ebbo*. Trace at least two of each, label with points, and then name them in the table below the painting.

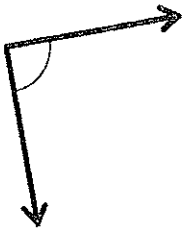


Acute angle		
Obtuse angle		
Right angle		

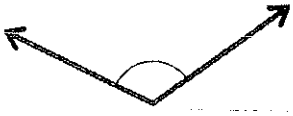
Name _____ Date _____

Use the right angle template that you made in class to determine if each of the following angles is greater than, less than, or equal to a right angle. Label each as *greater than, less than,* or *equal to*, and then connect each angle to the correct label of acute, right, or obtuse. The first one has been completed for you.

a. 

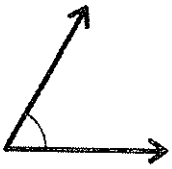
b. 

Less than

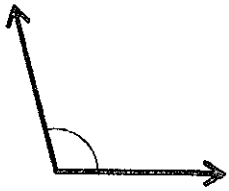
c. 

d. 

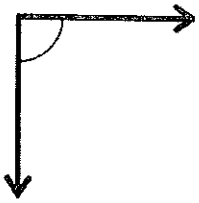
Acute

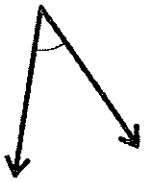
e. 

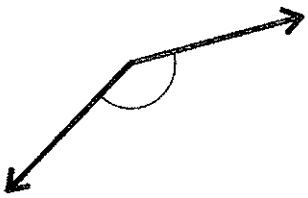
Right

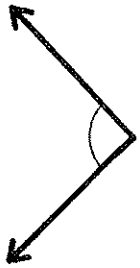
f. 

Obtuse

g. 

h. 

i. 

j. 

Construct each of the following using a straightedge and the right angle template that you created. Explain the characteristics of each by comparing the angle to a right angle. Use the words *greater than, less than,* or *equal to* in your explanations.

a. Acute angle

b. Right angle

c. Obtuse angle

Adapted for Math Superstars
Week 10

Name _____ Date _____

Use RDW to solve the following problems.

1. Sandy took the train to New York City. The trip took 3 hours. Jackie took the bus, which took twice as long. How many minutes did Jackie's trip take?

2. Coleton's puppy weighed 3 pounds 8 ounces at birth. The vet weighed the puppy again at 6 months, and the puppy weighed 7 pounds. How many ounces did the puppy gain?

3. Jessie bought a 2-liter bottle of juice. Her sister drank 650 milliliters. How many milliliters were left in the bottle?

4. Hudson has a chain that is 1 yard in length. Myah's chain is 3 times as long. How many feet of chain do they have in all?

5. A box weighs 8 ounces. A shipment of boxes weighs 7 pounds. How many boxes are in the shipment?

6. Tracy's rain barrel has a capacity of 27 quarts of water. Beth's rain barrel has a capacity of twice the amount of water as Tracy's rain barrel. Trevor's rain barrel can hold 9 quarts of water less than Beth's barrel.

   a. What is the capacity of Trevor's rain barrel?

   b. If Tracy, Beth, and Trevor's rain barrels were filled to capacity, and they poured all of the water into a 30-gallon bucket, would there be enough room? Explain.