Name: _____ Morning Work: March 23 – 27, 2020

Monday:

Complete the multiplication problems below:

37	68	5,091	71
X 5	x 6	x 5	x 45

Complete the sentence by writing the correct number on the line:

33 x 2 = _____ 7 x 9 = _____

60 x 50 = _____ 40 x 9 = _____

80 x 40 = _____ 20 x 70 = _____

What is 969 divided by 3?

Tuesday:

What is 287 divided by 7?

Which number makes the equation true?

4,824 ÷ _____ = 804

A. 6 B. 7 C. 8 D. 9

Susan gets paid $9 for each hour she works. She earned $414 for one week's work. How many hours did Susan work that week? Show your work.

Which numbers can be evenly divided by 4? Circle all correct answers.

625 408 332 801 190

Wednesday:

Which expressions have a value of 26? Circle all the correct answers.

108 ÷ 3 104 ÷ 4 224 ÷ 8

168 ÷ 6 216 ÷ 9 182 ÷ 7

Complete each number sentence by writing the missing number on the blank line.

64 ÷ 2 = _____ 84 ÷ 4 = _____

882 ÷ 2 = _____ 660 ÷ 6 = _____

9,900 ÷ 9 = _____ 8,488 ÷ 4 = _____

Thursday:

Complete the division problems below:

$9\overline{)639}$ $4\overline{)768}$

$4\overline{)5416}$ $9\overline{)6354}$

Becky counted 3 rainy days in March. She counted 2 times as many rainy days in April as in March. Write an equation to find the number of rainy days (use *r* for rainy days) in March and April. Then solve the equation to find the answer.

Friday:

Samuel wants to finish a hike in 60 minutes. He finished the first section in 17 minutes and the second section in 19 minutes. Complete the equation to show how many minutes, *m*, he must finish the final section in to reach his goal. Then, solve the equation to find the answer.

_____ + _____ + *m* = _____ Answer: _____ minutes

Max has 4 fish. He feeds each fish 5 food pellets a day. Each jar of fish food has 300 pellets in it. Complete the equation to show how many days, *d*, one jar of fish food lasts. Then solve the equation to find the answer.

(_____ x _____) x *d* = _____ Answer: _____ days

Tiffany had $244 in her savings account. After spending $68, she had 4 times as much in her account as Brady. How much does Brady have in his account?

Work Space:

Name: ______________________ Date: Mon. 7/23

Worksheet 7 Fraction of a Set

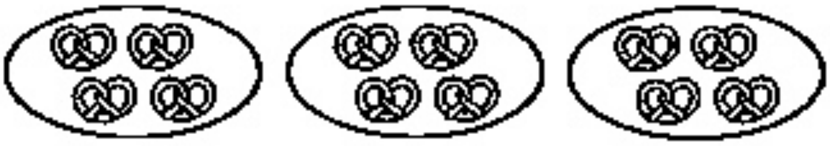
Find the fraction of each set.

Example

$\frac{1}{3}$ of 12 = ?

12 pretzels are divided into 3 equal groups.

$\frac{1}{3}$ of 12 means 1 of the 3 groups of pretzels.



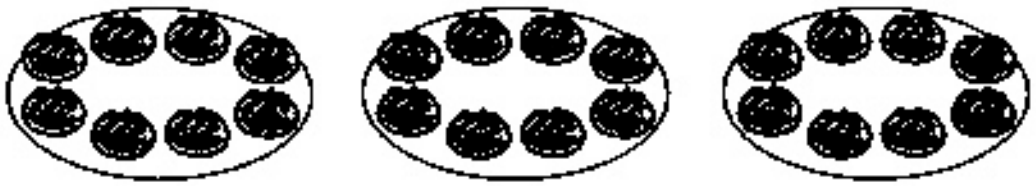
3 groups of pretzels → 12 pretzels
1 group of pretzels → 4 pretzels

So, $\frac{1}{3}$ of 12 is ___4___.

1. $\frac{1}{4}$ of 8 = ☐

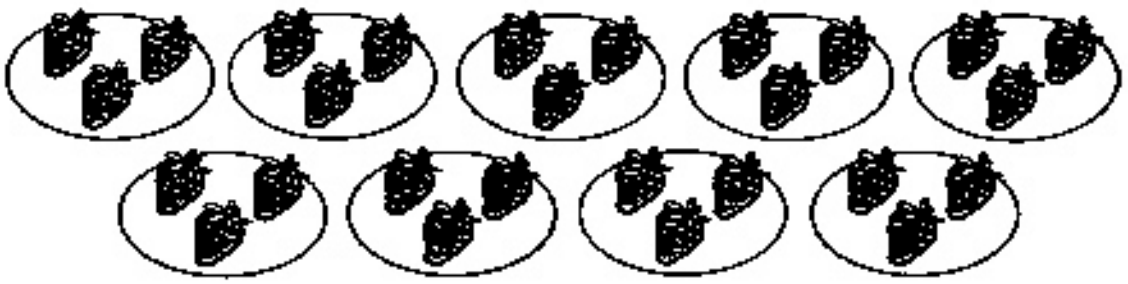
Name: _____ Date: _____

2. $\frac{2}{3}$ of 24 = ☐

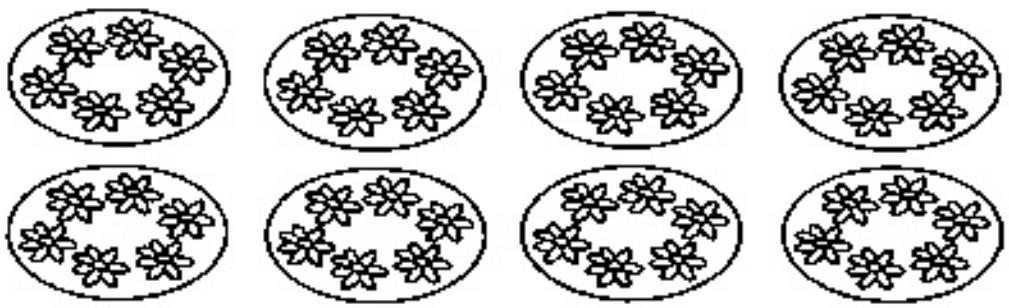


3. $\frac{3}{4}$ of 28 = ☐

4. $\frac{5}{9}$ of 27 = ☐



5. $\frac{3}{8}$ of 48 = ☐



Name: _____ Date: _____

Answer the questions.

Example

How many toys are shaded?

9 toys are shaded.

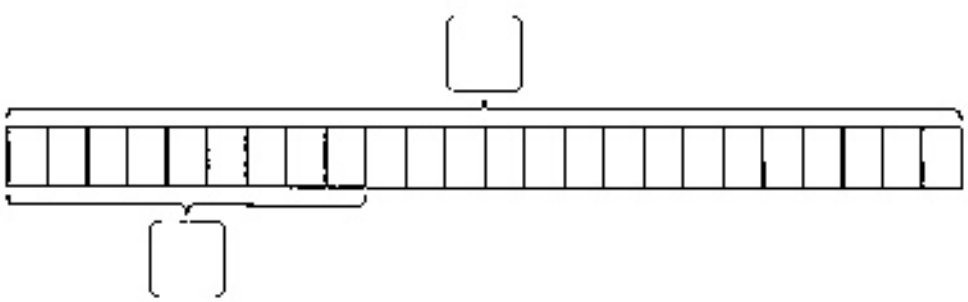
6. 24 toys are divided into equal groups.

There are _____ groups of toys, and _____ groups are shaded.

7. What fraction of the set of toys are shaded?

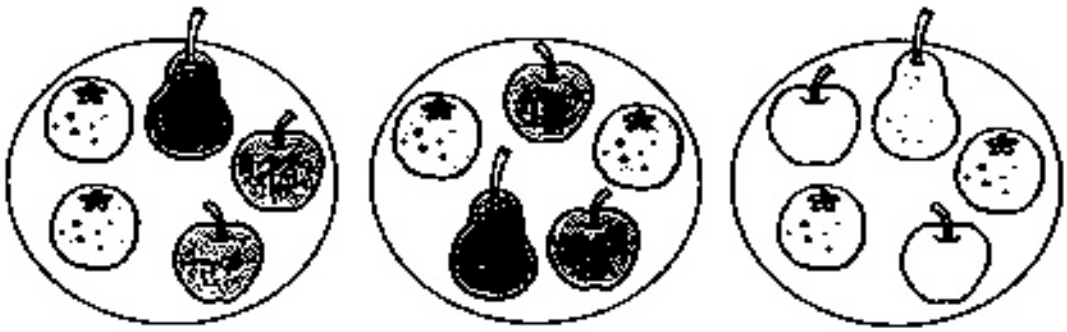
The shaded parts = $\frac{\square}{\square}$ of the set.

8. Write the missing numbers on the model.



Name: _____ **Date:** _____

Write the missing numbers.



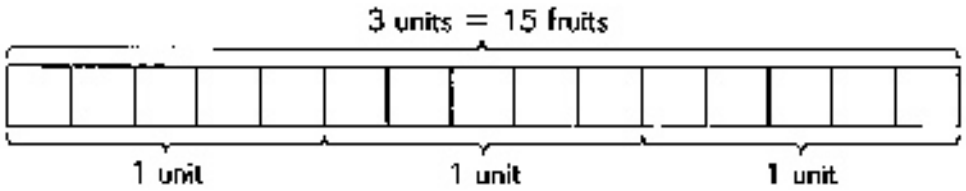
Example

15 fruits are divided into 3 groups.

9. There are _____ fruits in each group.

10. _____ out of the 15 fruits in the set are shaded.

11. Color the parts of the model to show the number of fruits that are shaded.



12. What fraction of the fruits are shaded?

The shaded parts $= \frac{\square}{\square}$ of the set.

13. From the model, 1 unit → _____ fruits

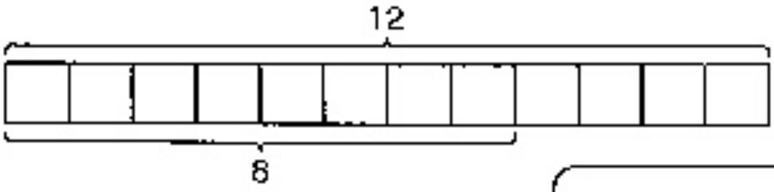
2 units → _____ fruits

Name: ______________________ Date: ______________

Find the fractional part of each number. Use models to help you.

Example

$\frac{2}{3}$ of 12 = ?

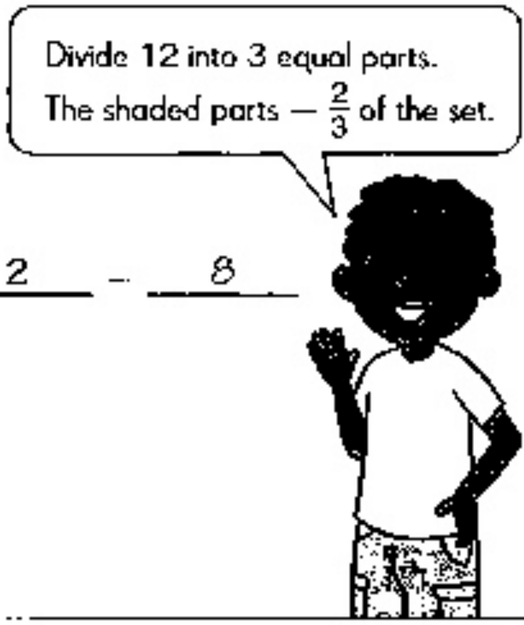


___3___ units = ___12___

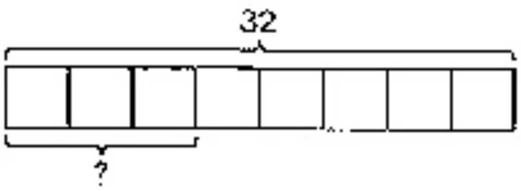
1 unit = ___4___

2 units = ___4___ × ___2___ = ___8___

So, $\frac{2}{3}$ of 12 is ___8___.



14. $\frac{3}{8}$ of 32



________ units = ________

1 unit = ________ ÷ ________ = ________

3 units = ________ × ________ = ________

So, $\frac{3}{8}$ of 32 = ________

Name: _____ **Date:** _____

Find the fractional part of each number. Show your work.

Example

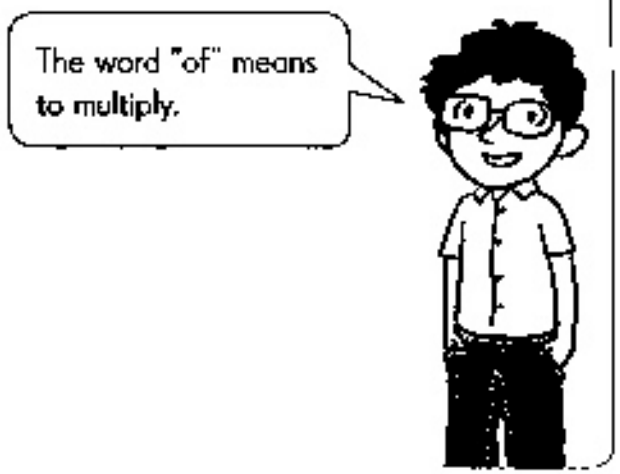
$\frac{3}{5}$ of 35 = ?

$\frac{3}{5} \times 35 = \frac{(3) \times (35)}{5}$

$= \frac{(105)}{5}$

$= (21)$

So, $\frac{3}{5}$ of 35 21.



15. $\frac{3}{4}$ of 28

$\frac{3}{4} \times 28 = \frac{(\quad) \times (\quad)}{4}$

$= \frac{(\quad)}{4}$

$= (\quad)$

16. $\frac{2}{7}$ of 56

$\frac{2}{7} \times 56 = \frac{(\quad) \times (\quad)}{(\quad)}$

$= \frac{(\quad)}{(\quad)}$

$= (\quad)$

17. $\frac{3}{8}$ of 64

18. $\frac{7}{11}$ of 44

Name: _____ Date: Tues. 3/24

Worksheet 8 Real-World Problems: Fractions

Solve. Show your work.

Example

Three friends shared a pie. Susan ate $\frac{1}{4}$ of the pie.

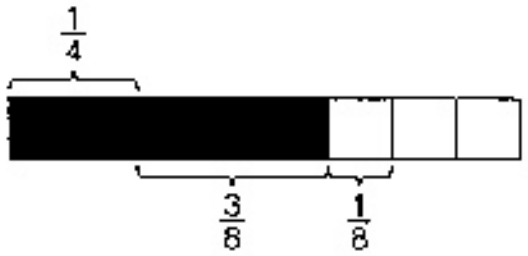
Daniel ate $\frac{3}{8}$ of the pie. Joe ate $\frac{1}{8}$ of the pie.

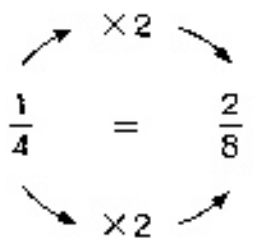
What fraction of the pie did they eat altogether?

$\frac{1}{4} + \frac{3}{8} + \frac{1}{8} = \boxed{\frac{2}{8}} + \frac{3}{8} + \frac{1}{8}$

$= \boxed{\frac{6}{8}} - \boxed{\frac{3}{4}}$

They ate $\frac{3}{4}$ of the pie.





1. Lisa, Sam, and Marco each bought some dried fruit.

Lisa bought $\frac{2}{3}$ pound of dried fruit. Sam and Marco each bought $\frac{5}{6}$ pound of dried fruit. How much dried fruit did they buy altogether?

$\frac{2}{3} + \frac{5}{6} + \frac{5}{6} = \boxed{\quad} + \frac{5}{6} + \frac{5}{6}$

$- \boxed{\quad} = \boxed{\quad} = \boxed{\quad}$

They bought _____ pounds of dried fruit altogether.

Name: _____ **Date:** _____

2. Mrs. Jackson baked muffins one day. She used $\frac{1}{4}$ kilogram of flour to bake the first batch of muffins. She used $\frac{7}{12}$ kilogram of flour to bake the second batch, and another $\frac{11}{12}$ kilogram of flour for the third batch. How much flour did she use altogether?

$$\frac{1}{4} + \frac{7}{12} + \frac{11}{12} = \left(\quad\right) + \frac{7}{12} + \frac{11}{12}$$

$$= \left(\quad\right) = \left(\quad\right)$$

She used _____ kilograms of flour altogether.

3. Edison made a fruit salad. He mixed $\frac{7}{12}$ pound of apples and $\frac{3}{4}$ pound of strawberries. He then added $\frac{5}{12}$ pound of banana. What was the total weight of the fruit salad?

Name: _____ Date: _____

Example

Kathy has 1 loaf of whole grain bread.

She cuts $\frac{2}{3}$ of it for her friend and $\frac{1}{12}$ for herself.

What fraction of the bread is left?

Method 1

$1 - \frac{2}{3} - \frac{1}{12}$

$= \frac{12}{12} - \frac{8}{12} - \frac{1}{12}$

$= \frac{3}{12}$

$= \frac{1}{4}$

$\frac{1}{4}$ loaf of bread is left.

Method 2

$\frac{2}{3} + \frac{1}{12} = \frac{8}{12} + \frac{1}{12}$

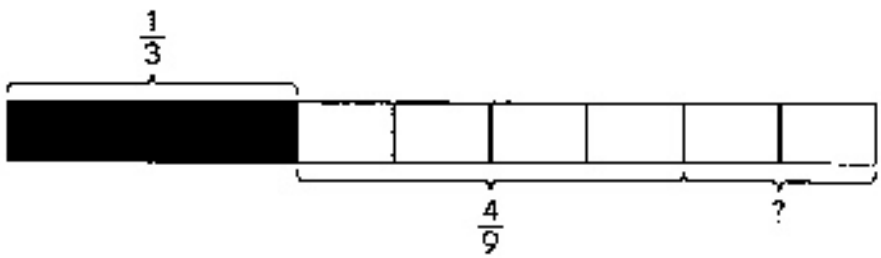
$= \frac{9}{12}$

$\frac{12}{12} - \frac{9}{12} = \frac{3}{12}$

$= \frac{1}{4}$

$\frac{1}{4}$ loaf of bread is left.

4. Sam spent $\frac{1}{3}$ of his time playing soccer and $\frac{4}{9}$ of his time doing homework. He spent the rest of his time playing computer games. How much of his time did Sam spend playing computer games?



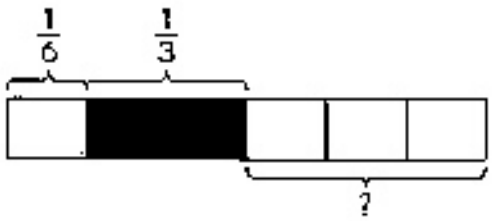
$\frac{1}{3} + \frac{4}{9} = \frac{\square}{9} + \frac{4}{9} = \frac{\square}{9}$

$1 - \square = \frac{9}{9} - \square = \square$

Sam spent _____ of his time playing computer games.

Name: _____ Date: _____

5. Latoya bought a pizza. She ate $\frac{1}{6}$ of the pizza and gave $\frac{1}{3}$ of it to her sister. She kept the rest of the pizza for her grandmother. How much of the pizza did Latoya keep for her grandmother?



$\frac{1}{6} + \frac{1}{3} = \square + \square = \square$

$1 - \square = \square - \square \cdot \square = \square$

Latoya kept _____ of the pizza for her grandmother.

6. Pam made mixed juice from carrot juice and apple juice. She filled a jug with $\frac{7}{8}$ liter of carrot juice and $\frac{3}{4}$ liter of apple juice. Pam then drank $\frac{3}{8}$ liter of the mixed juice. Find the amount of mixed juice that was left in the jug.

$\square \bigcirc \square = \square$

$\square \bigcirc \square = \square = \square$

_____ liters of mixed juice was left in the jug.

Name: _____ Date: _____

Example

Ling bought a total of 12 apples. Of the apples she bought, 8 are red apples and 4 are green apples.

a. What fraction of the apples are red?

b. What fraction of the apples are green?

a. 8 out of 12 is $\frac{8}{12}$.

$\frac{8}{12} = \frac{2}{3}$ $\frac{2}{3}$ of the apples are red.

b. $1 - \frac{2}{3} = \frac{1}{3}$

$\frac{1}{3}$ of the apples are green.

7. Elan has a bag of 10 marbles. He gives 4 marbles to his brother.

a. What fraction of his marbles does Elan give away?

4 out of 10 is $\frac{\square}{\square}$.

$\frac{\square}{\square} = \frac{\square}{\square}$

Elan gives away _____ of his marbles.

b. What fraction of the marbles are left?

$1 - \_\_\_\_\_ = \_\_\_\_\_$

_____ of the marbles are left.

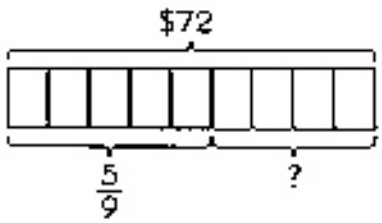
Name: _____ Date: _____

8. Bernice has a ribbon that is 12 centimeters long. She cuts 8 centimeters off the length of the ribbon. What fraction of the ribbon is left?

Example

Dianne has \$72. She uses $\frac{5}{9}$ of it to buy a present for her father.

How much money does Dianne have left?



Method 1

9 units $\rightarrow$ \$72

1 unit $=$ \$72 $\div$ 9

$=$ \$8

4 units $=$ \$8 $\times$ 4

$=$ \$32

Dianne has \$32 left.

Method 2

$\frac{5}{9}$ of \$72 $= \frac{5}{9} \times$ \$72

$= \frac{\$360}{9}$

$=$ \$40

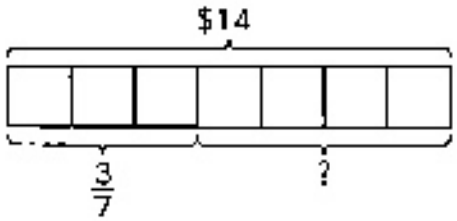
Dianne spent \$40.

\$72 $-$ \$40 \$32

Dianne has \$32 left.

Name: _____ Date: _____

9. Winton was given \$14 to spend at his school fair. He spent $\frac{3}{7}$ of the money playing games. How much money did Winton have left?



Method 1

____ units = \$____

1 unit = \$____

____ units = \$____ × ____

\$____

\$14 − \$____ − \$____

Winton had \$____ left.

Method 2

$\frac{3}{7}$ of \$14 = ____ × \$____

= ____ × \$____

∴ \$____

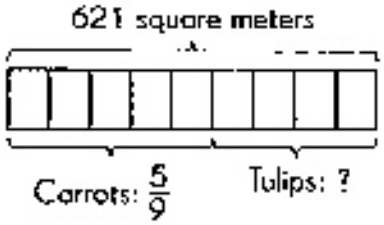
He spent \$____.

\$14 − \$____ = \$____

Winton had \$____ left.

10. Chris planted carrots on $\frac{5}{9}$ of his farm and tulips on the rest of the land. The total area of his farm is 621 square meters.

Find the area of the land on which he planted tulips.



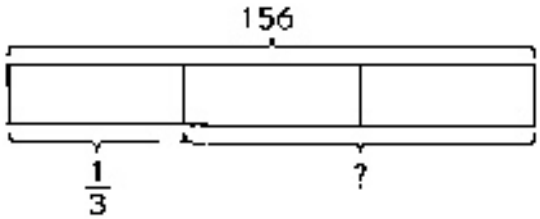
Method 1

Method 2

Name: _____ **Date:** _____

11. Of all the seats in an airplane, $\frac{1}{3}$ are business-class seats, and the rest are economy-class seats.

There are 156 seats in the airplane. Find the number of economy-class seats.



Method 1

Method 2

12. Sally cuts a pear into 8 equal pieces. She gives each of her 6 students one piece each. What fraction of the pear do they eat altogether?

13. Mr. Lee has 12 visitors. He prepares 12 glasses of orange juice for his visitors. Each glass contains $\frac{2}{9}$ liters of orange juice. How many liters of orange juice has Mr. Lee prepared altogether?

Name: _____ Date: Wed. 3/25

Worksheet 9 Line Plots with Fractions of a Unit

Solve.

1. Jeff went to a garden and collected some leaves. He measured the lengths of the leaves and recorded them as follows:
3 cm, 5 cm, 8 cm, 4 cm, 3 cm, 4 cm, 7 cm, 6 cm, 3 cm, 3 cm, 2 cm, 4 cm, 5 cm, 5 cm, 6 cm, 7 cm, 6 cm, 5 cm, 4 cm, 5 cm, 4 cm, 5 cm, 1 cm.

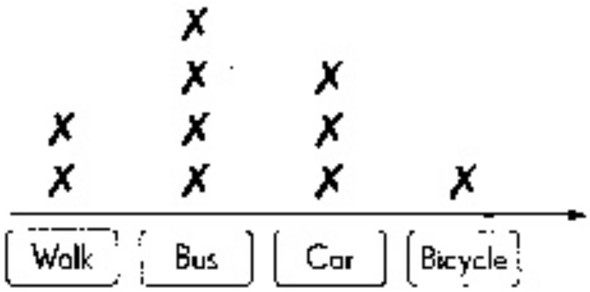
Draw a table and record the data.

Length of Leaves	Tally	Number of Leaves

From the table draw a graph below. Use an ✗ to represent one leaf.

Name: ______________________ Date: ______________

2. The graph shows the mode of transportation of children to school daily.



a. Which is the most common way children go to school?

b. Why do you think so?

c. Which is the least common way children go to school?

d. Why do you think so?

e. How many more children go to school by bus than by bicycle?

Thurs. 3/26

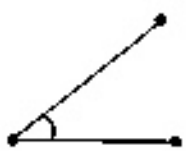
Recall Prior Knowledge

Defining a point, line, and a line segment

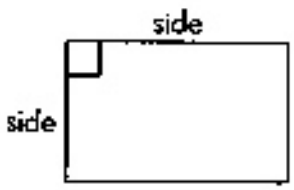
Definition	Example	You Say and Write
A point is an exact location in space.	A	Point B
A line is a straight path continuing without end in two opposite directions.	C D	Line CD
A line segment is a part of a line with two endpoints.	E F	Line segment EF

Defining angles

An angle is formed by two line segments with a common endpoint.

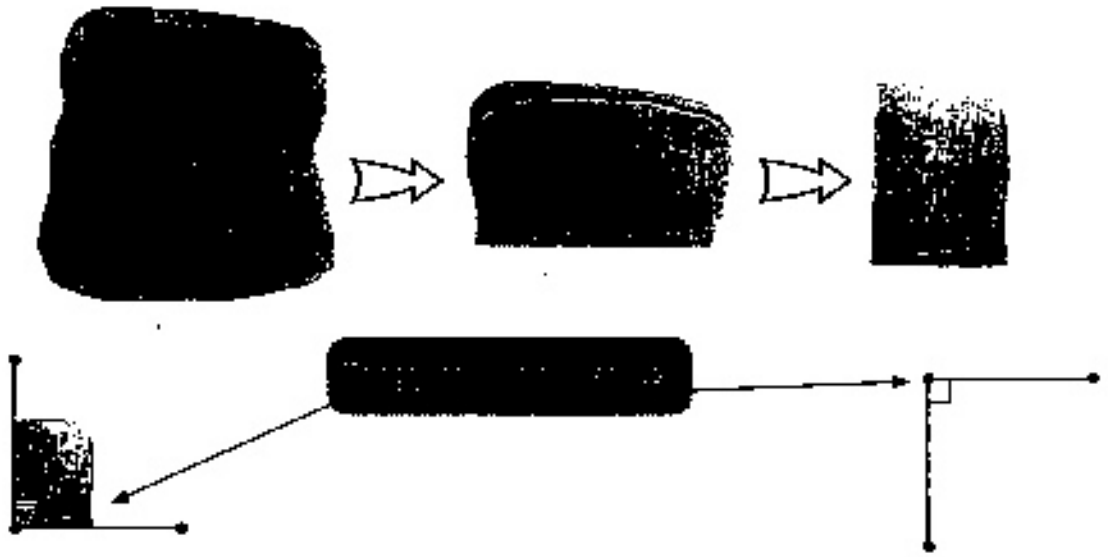


An angle can also be formed when two sides of a figure meet.



Making a right angle

Fold a piece of paper like this to get a right-angled corner.



Comparing angles with a right angle

Compare an angle with a right angle.

Angle E is the same as a right angle.

Angle F is less than a right angle.

Angle G is greater than a right angle.

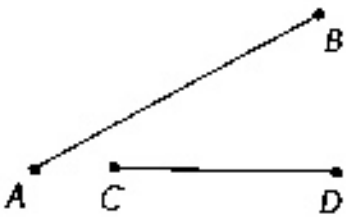
✔Quick Check

Complete with point, line, or line segment.

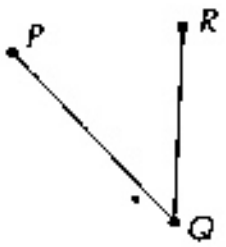
1. A _____ is an exact location in space.
2. A _____ is a part of a line with two endpoints.
3. A _____ is a straight path continuing without end in two opposite directions.

Decide whether each figure forms an angle. Explain your answer.

4.

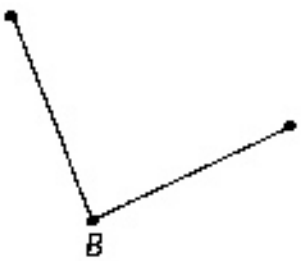


5.



Name the angle.

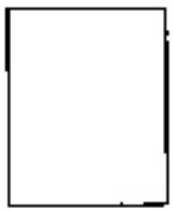
6.



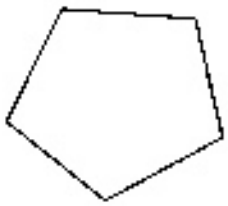
Angle

Copy the shapes. Mark an angle in each shape.

7 Rectangle

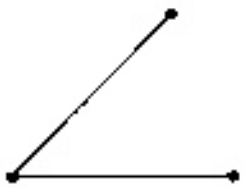


8 Pentagon



Decide whether the line segments in each angle form a right angle. Use a piece of folded paper to help you. Explain your answer.

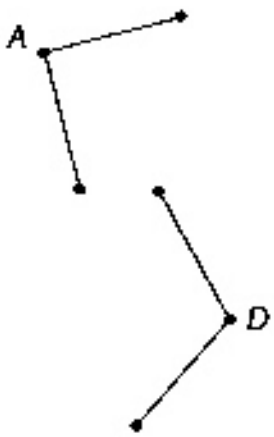
9

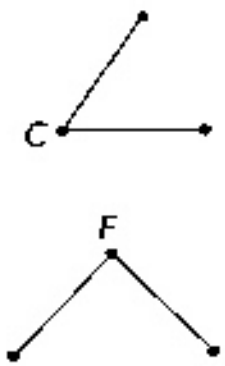


10

11

Look at the angles. Then answer the questions. Use a piece of folded paper to help you.





12 Which angles are right angles?

13 Which angles measure less than a right angle?

14 Which angles measure greater than a right angle?

Lesson

9.1 Understanding and Measuring Angles

Lesson Objectives

- Estimate and measure angles with a protractor.
- Estimate whether the measure of an angle is less than or greater than a right angle (90°).

Vocabulary

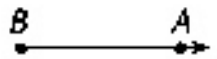
ray	inner scale
vertex	outer scale
protractor	acute angle
degrees	obtuse angle

Learn Use letters to name rays and angles.

A ray is part of a line that continues without end in one direction. It has one endpoint.
You can use two letters to name a ray.
The first letter is always the endpoint.

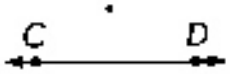
ray AB

You can write ray AB as $\overrightarrow{AB}$, and ray BA as $\overrightarrow{BA}$.



ray BA

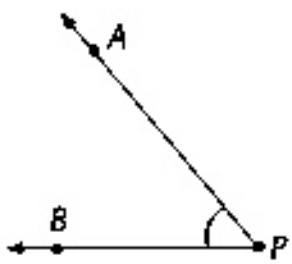
In the same way, you can write:

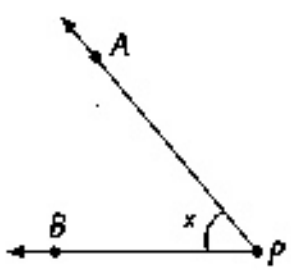


a line CD or DC as $\overleftrightarrow{CD}$ or $\overleftrightarrow{DC}$.

b line segment EF or FE as $\overline{EF}$ or $\overline{FE}$.

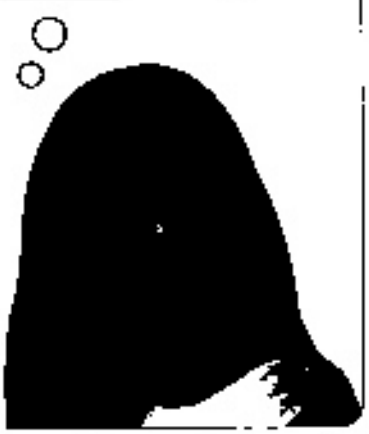
$\overrightarrow{PA}$ and $\overrightarrow{PB}$ are rays meeting at point P.





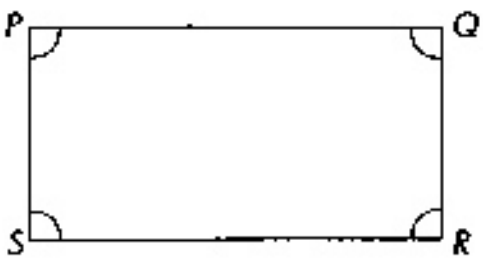
The point P is called the **vertex**.
Name the angle at vertex P $\angle APB$ or $\angle BPA$.
If you label the angle at vertex P as x, you can also name it $\angle x$.

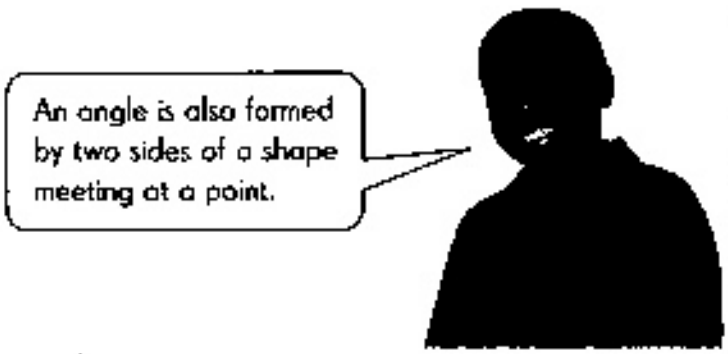
In naming angles using three letters, the vertex is always the middle letter.



Guided Practice

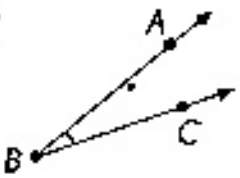
Name the angles.



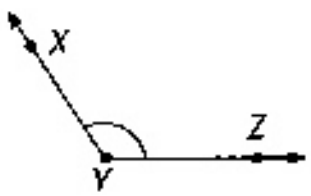


1. Angle at P: $\angle$
2. Angle at Q: $\angle$
3. Angle at R: $\angle$
4. Angle at S: $\angle$

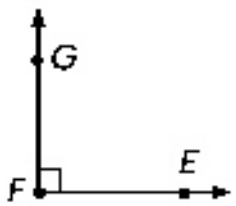
Name the angles.

5. 

$\angle$

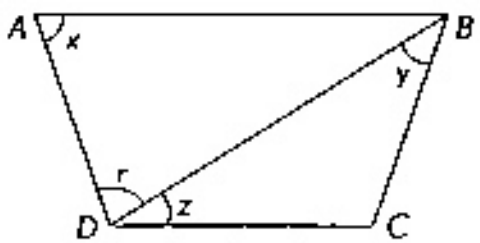
6. 

$\angle$

7. 

$\angle$

Name the angles labeled at the vertices *A*, *B*, *C*, and *D* in another way.



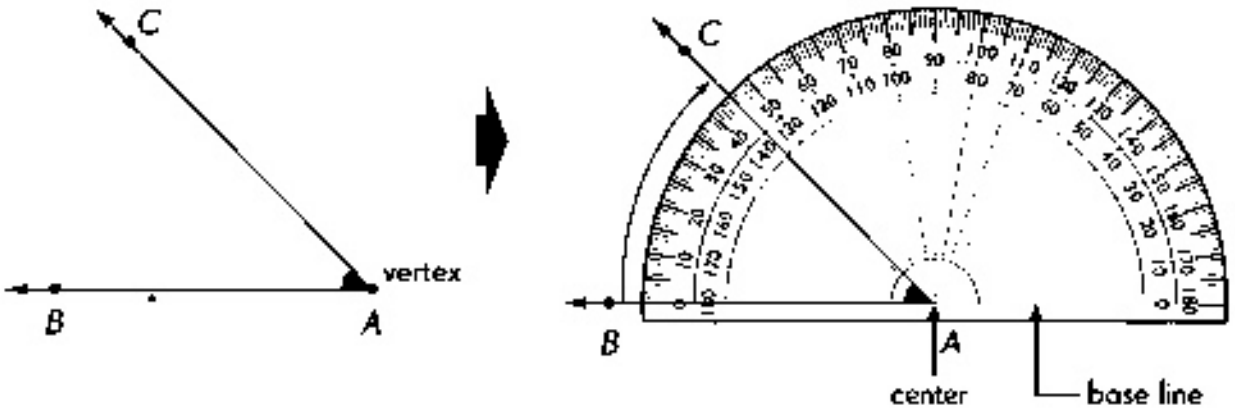
8. $\angle x$: $\angle$
9. $\angle z$: $\angle$
10. $\angle y$: $\angle$
11. $\angle r$: $\angle$

Fri. 3/27

Learn **Use a protractor to measure an angle in degrees.**

An angle measure is a fraction of a full turn. An angle is measured in degrees. For example, a right angle has a measure of 90 degrees. You can write this as 90°.

You can use a protractor to measure an angle.



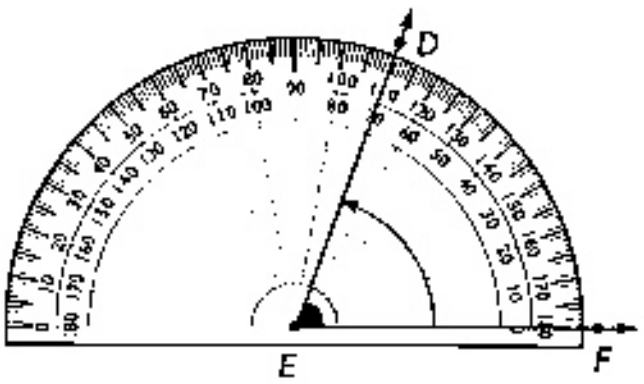
Step 1 Place the base line of the protractor on $\overrightarrow{AB}$.

Step 2 Place the center of the base line of the protractor at the vertex of the angle.

Step 3 Read the **outer scale**. $\overrightarrow{AC}$ passes through the 45° mark. So, the measure of the angle is 45°.

Since $\overrightarrow{AB}$ passes through the zero mark of the outer scale, read the measure on the outer scale.

Measure $\angle DEF$.



The measure of $\angle DEF$ is less than that of a right angle.
It is 70 degrees.

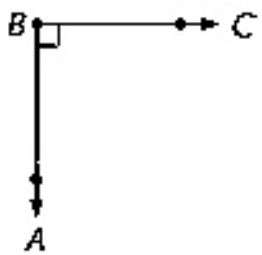
Measure of $\angle DEF$ = °

Since $\overrightarrow{EF}$ passes through the zero mark of the **inner scale**, read the measure on the inner scale.

Guided Practice

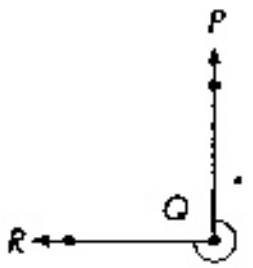
Complete.

12



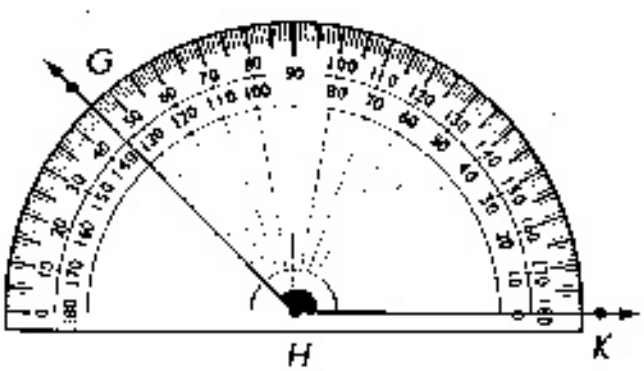
The measure of $\angle ABC$ is of a turn.

13



The measure of $\angle PQR$ is of a turn.

14 Measure $\angle GHK$.



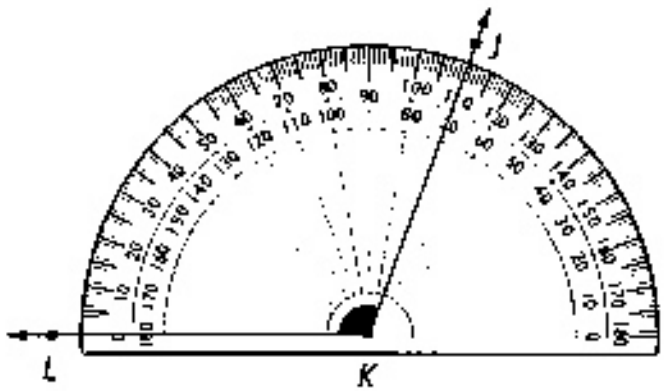
Is the measure of $\angle GHK$ less than or greater than 90°?

The measure of $\angle GHK$ is degrees.

Measure of $\angle GHK$ = °

Explain when to use the inner scale of the protractor.

15 Measure $\angle JKL$.



Is the measure of $\angle JKL$ less than or greater than 90°?

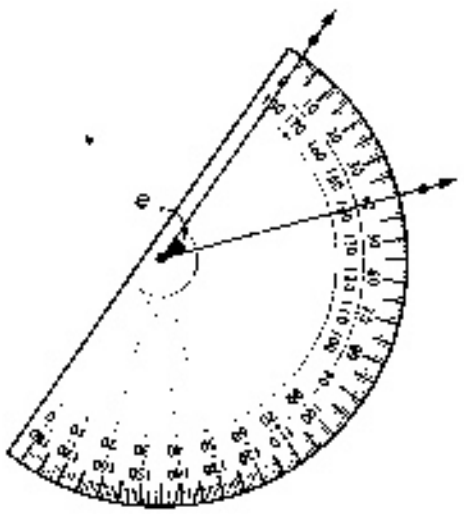
The measure of $\angle JKL$ is degrees.

Measure of $\angle JKL$ = °

Did you read the inner or outer scale? Explain your answer.

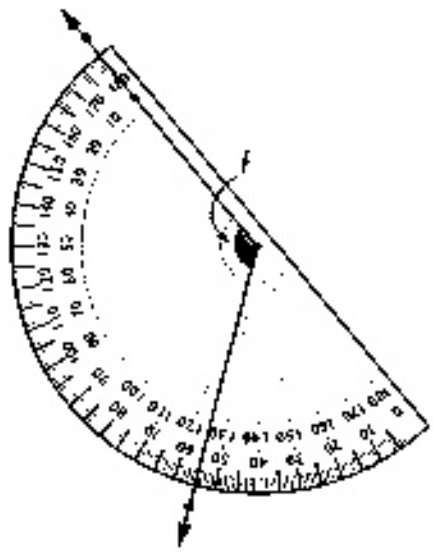
Find the measure of each angle.

16

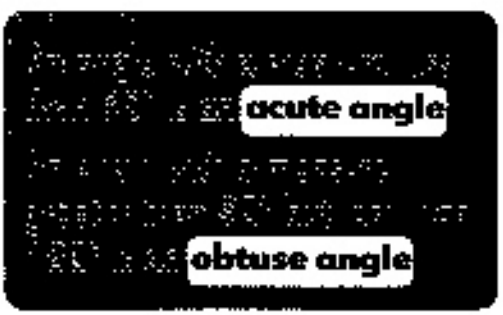


Measure of $\angle e$ = °

17



Measure of $\angle f$ = °



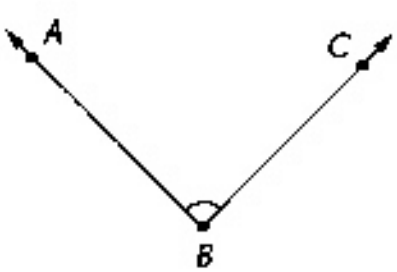
So, $\angle e$ is an angle,
and $\angle f$ is an angle.

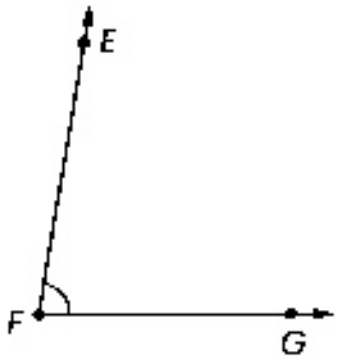
Hands-On Activity

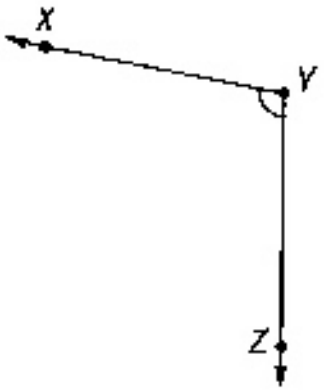
Material:
- protractor

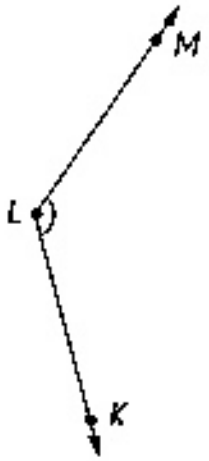
WORK IN PAIRS

Estimate the measure of each angle by comparing it to a right angle (90°). Then measure each one with a protractor. Decide if each angle is an acute angle, an obtuse angle, or a right angle.









Record your answers in a table like this.

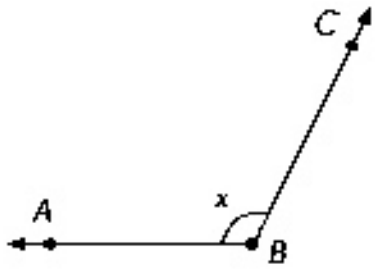
Angle	Estimated Measure	Actual Measure	Type of Angle
$\angle ABC$	80°	90°	Right Angle

READING AND WRITING MATH

Math Journal

The steps for measuring these angles are not in order.
Arrange the steps in order by using 1, 2, or 3 in each box.

1 Obtuse angle

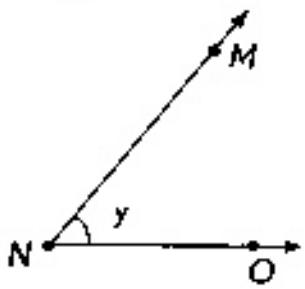


Step Place the center of the base line of the protractor at vertex *B* of the angle.

Step Place the base line of the protractor on ray *BA*.

Step Read the outer scale at the point where ray *BC* crosses it.
The reading is 116°.
So, the angle measure is 116°.

2 Acute angle



Step Read the inner scale at the point where ray *NM* crosses it.
The reading is 50°.
So, the angle measure is 50°.

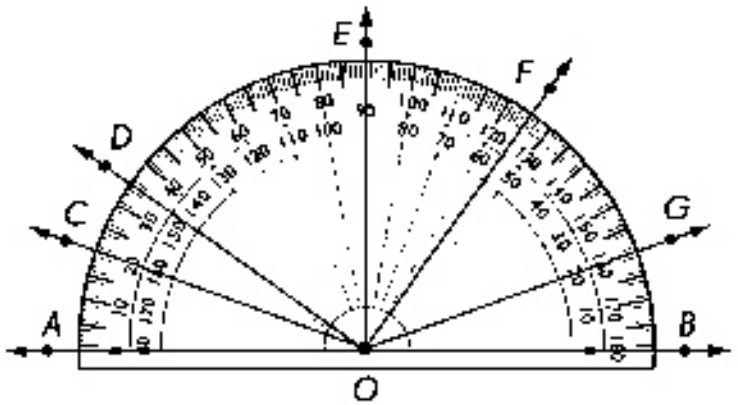
Step Place the base line of the protractor on ray *NO*.

Step Place the center of the base line of the protractor at vertex *N* of the angle.

3 **Compare the measures of the two angles in Exercises 1 and 2. Use < and > in your answers.**

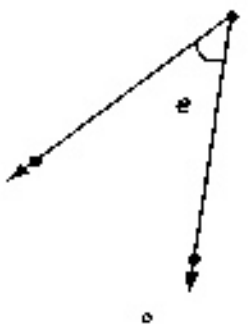
Let's Practice

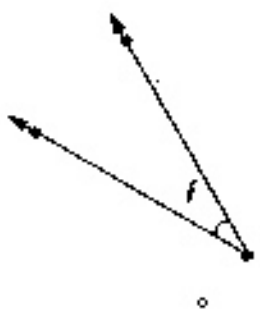
Name and measure the angles.

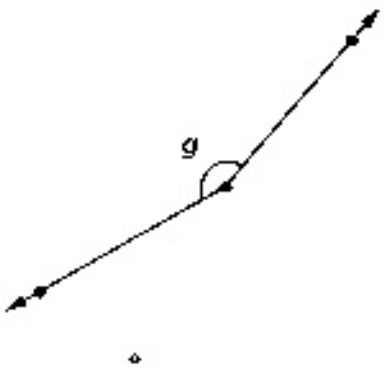


1. Name two angles that are right angles.
2. Name four angles that are acute angles.
   What are the measures of these angles?
3. Name four angles that are obtuse angles.
   What are the measures of these angles?

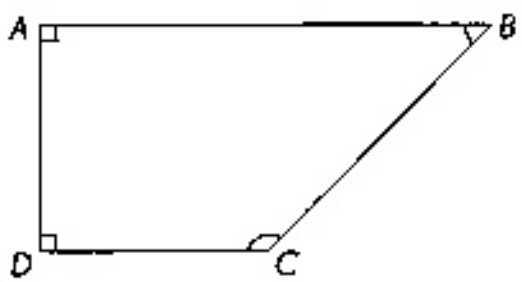
Use a protractor to find the measure of each angle.

4.


5.


6.


Use a protractor to measure each marked angle.

7.


ON YOUR OWN

Go to Workbook B: Practice 1, pages 45–50