

Name: \_\_\_\_\_

Morning Work: March 23 – 27, 2020

**Monday:**

Complete the multiplication problems below:

$$\begin{array}{r} 37 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5,091 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 71 \\ \times 45 \\ \hline \end{array}$$

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

$33 \times 2 = \underline{\hspace{2cm}}$

$7 \times 9 = \underline{\hspace{2cm}}$

$60 \times 50 = \underline{\hspace{2cm}}$

$40 \times 9 = \underline{\hspace{2cm}}$

$80 \times 40 = \underline{\hspace{2cm}}$

$20 \times 70 = \underline{\hspace{2cm}}$

What is 969 divided by 3?

**Tuesday:**

What is 287 divided by 7?

Which number makes the equation true?

$4,824 \div \underline{\hspace{1cm}} = 804$

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.

$108 \div 3$

$104 \div 4$

$224 \div 8$

$168 \div 6$

$216 \div 9$

$182 \div 7$

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

$64 \div 2 = \underline{\hspace{2cm}}$

$84 \div 4 = \underline{\hspace{2cm}}$

$882 \div 2 = \underline{\hspace{2cm}}$

$660 \div 6 = \underline{\hspace{2cm}}$

$9,900 \div 9 = \underline{\hspace{2cm}}$

$8,488 \div 4 = \underline{\hspace{2cm}}$

**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.

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + m = \underline{\hspace{1cm}}$       Answer:  $\underline{\hspace{1cm}}$  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.

$(\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \times d = \underline{\hspace{1cm}}$       Answer:  $\underline{\hspace{1cm}}$  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: \_\_\_\_\_

### Lesson 6.7 Fraction of a Set

What fraction of each set of objects is shaded? Express your answer in simplest form.

1. 

2. 

3. 

4. 

**Use a model to help you answer each question.***Example*

What is  $\frac{3}{4}$  of 24?

$$4 \text{ units} = 24$$

$$1 \text{ unit} = 6$$

$$3 \text{ units} = 6 \times 3 = 18$$

$$\text{So, } \frac{3}{4} \text{ of } 24 = 18.$$



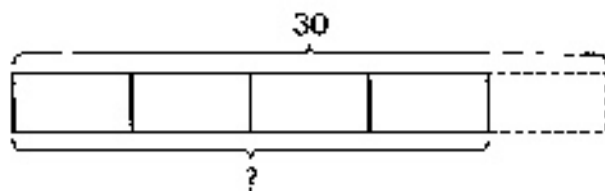
5. What is  $\frac{4}{5}$  of 30?

$$5 \text{ units} = \underline{\hspace{2cm}}$$

$$1 \text{ unit} = \underline{\hspace{2cm}}$$

$$4 \text{ units} = \underline{\hspace{2cm}}$$

$$\text{So, } \frac{4}{5} \text{ of } 30 = \underline{\hspace{2cm}}$$



6. What is  $\frac{5}{6}$  of 48?

7. What is  $\frac{5}{12}$  of 60?

**Solve.**

8.  $\frac{2}{3} \times 45 =$

9.  $\frac{4}{9} \times 36 =$

10.  $\frac{2}{7} \times 35 =$

11.  $\frac{3}{8} \times 32 =$

12.  $\frac{5}{6} \times 60 =$

13.  $\frac{3}{4} \times 36 =$

14.  $\frac{7}{9} \times 45 =$

15.  $\frac{3}{5} \times 40 =$



Name: \_\_\_\_\_

Date: \_\_\_\_\_

3. Mya buys 6 goldfish and 4 angelfish.
- What fraction of the fish are goldfish?
  
  
  
  
  
  
  
  
  
  
  - Mya buys 2 more goldfish. What fraction of the fish are angelfish?
4. Cheryl spends  $\frac{3}{10}$  of her savings on a book, and  $\frac{2}{5}$  on a pen. What fraction of her savings does Cheryl spend?

Name: \_\_\_\_\_

Date: \_\_\_\_\_

5. Of the vehicles on the road,  $\frac{1}{2}$  are cars and  $\frac{1}{8}$  are motorcycles. What fraction of the vehicles are not cars or motorcycles?

6. Allie's plant has a height of 6 meters. Rajon's plant grows  $\frac{3}{10}$  meter higher. How high does Rajon's plant grow?

Name: \_\_\_\_\_

Date: \_\_\_\_\_

7. There are 10 packets of ham. Of the packets,  $\frac{2}{5}$  are turkey ham. Each packet of turkey ham weighs  $\frac{1}{3}$  pound. What is the total weight of the turkey ham?
8. Carla spends  $\frac{6}{4}$  hours exercising every day for 12 days. She spends  $\frac{1}{2}$  of her exercise time every day lifting weights. How much time does Carla spend lifting weights during the 12 days?

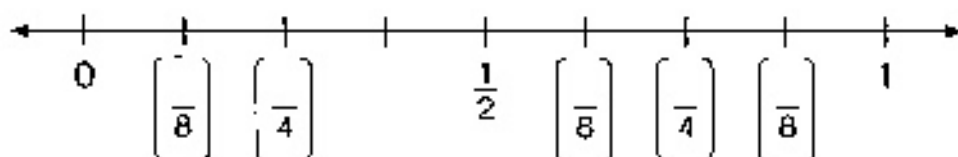


Name: \_\_\_\_\_

Date: \_\_\_\_\_

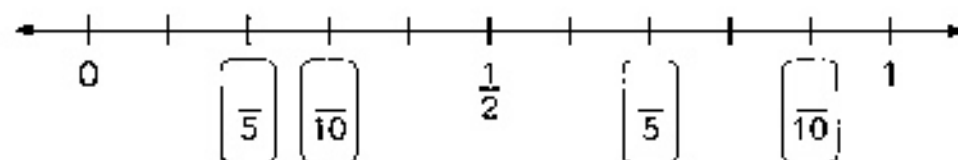
**Lesson 6.9 Line Plots with Fractional Units**

1. This line has 8 equal intervals from 0 to 1. Fill in the missing fractional units.



Fill in the blanks using the above line plot.

2. \_\_\_\_\_ < \_\_\_\_\_
3. \_\_\_\_\_ < \_\_\_\_\_
4. \_\_\_\_\_ > \_\_\_\_\_
5. \_\_\_\_\_ > \_\_\_\_\_
6.  $\frac{1}{2} + \frac{5}{8} =$
7.  $\frac{1}{4} + \frac{7}{8} =$
8.  $\frac{7}{8} - \frac{3}{4} =$
9.  $\frac{3}{4} - \frac{3}{8} =$
10. This line has 10 equal intervals from 0 to 1. Fill in the missing fractional units.



Fill in the blanks using the above line plot.

11. \_\_\_\_\_ < \_\_\_\_\_
12. \_\_\_\_\_ < \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

13. \_\_\_\_\_ > \_\_\_\_\_

14. \_\_\_\_\_ > \_\_\_\_\_

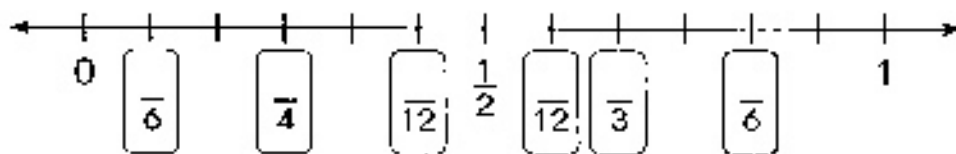
15.  $\frac{3}{10} + \frac{4}{5} =$

16.  $\frac{7}{10} + \frac{1}{2} =$

17.  $\frac{9}{10} - \frac{1}{2} =$

18.  $\frac{4}{5} - \frac{7}{10} =$

19. This line has 12 equal intervals from 0 to 1. Fill in the missing fractional units.



Fill in the blanks using the above line plot.

20. \_\_\_\_\_ < \_\_\_\_\_

21. \_\_\_\_\_ < \_\_\_\_\_

22. \_\_\_\_\_ < \_\_\_\_\_

23. \_\_\_\_\_ > \_\_\_\_\_

24.  $\frac{5}{12} + \frac{5}{6} =$

25.  $\frac{7}{12} + \frac{1}{4} =$

26.  $\frac{2}{3} - \frac{7}{12} =$

27.  $\frac{11}{12} - \frac{1}{2} =$

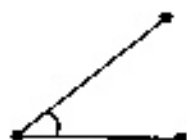
# Recall Prior Knowledge

## Defining a point, line, and a line segment

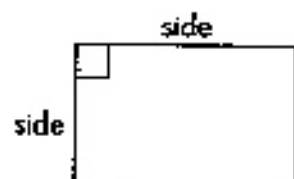
Definition	Example	You Say and Write
Point		
Line		
Line segment		

## Defining angles

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

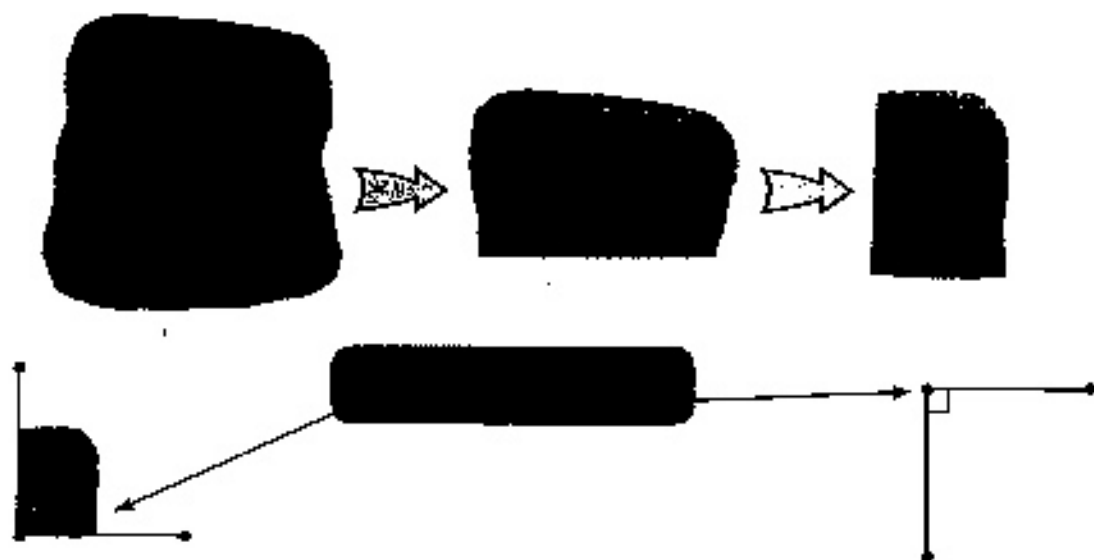


An angle can also be formed when two sides of a figure meet.



## Making a right angle

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



## Comparing angles with a right angle

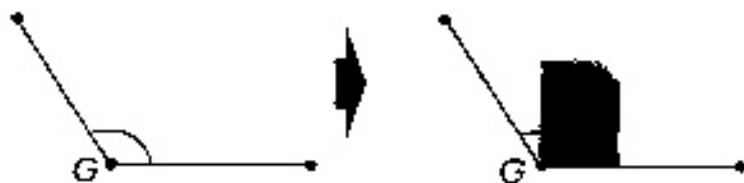
Compare an angle with a right angle.



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.

Use the folded paper to check if the angles are less than or greater than a right angle.



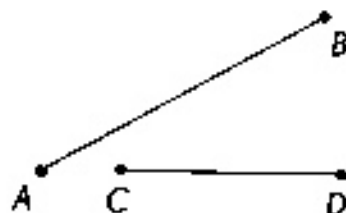
## ✓ Quick Check

Complete with point, line, or line segment.

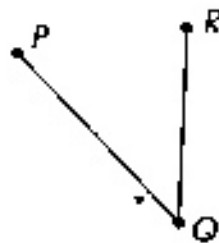
- 1 A \_\_\_\_\_ is an exact location in space.
- 2 A \_\_\_\_\_ is a part of a line with two endpoints.
- 3 A \_\_\_\_\_ is a straight path continuing without end in two opposite directions.

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

4

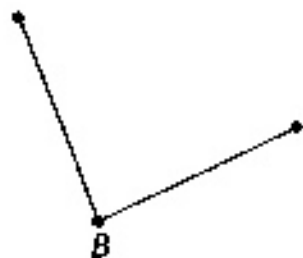


5



Name the angle.

6



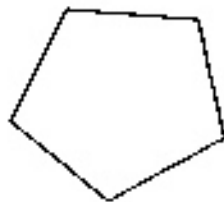
Angle \_\_\_\_\_

**Copy the shapes. Mark an angle in each shape.**

**7** Rectangle

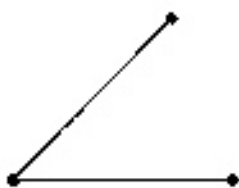


**8** Pentagon

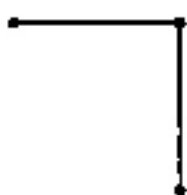


**Decide whether the line segments in each angle form a right angle. Use a piece of folded paper to help you. Explain your answer.**

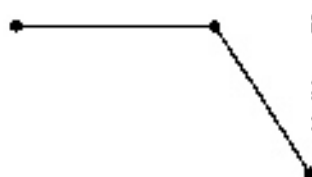
**9**



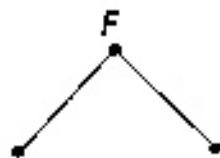
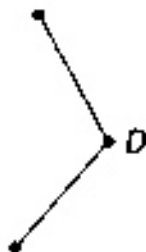
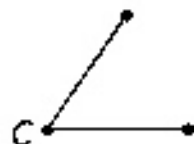
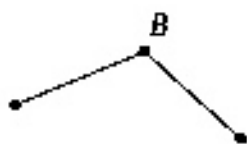
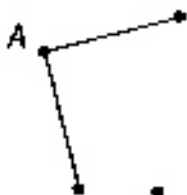
**10**



**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?

# 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 ( $90^\circ$ ).

### Vocabulary

ray  
line  
protractor  
degrees

inner scale  
outer scale  
acute angle  
obtuse angle

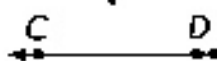
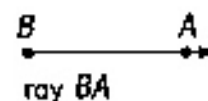
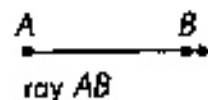
### Use letters to name rays and angles.

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.

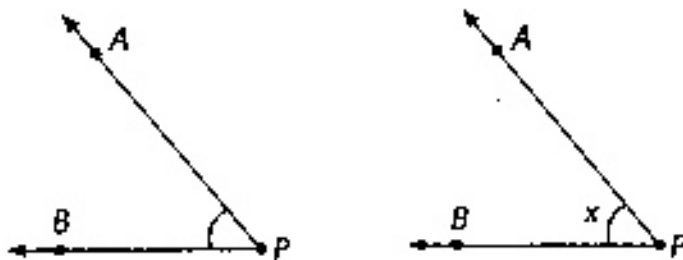
You can write ray  $AB$  as  $\overrightarrow{AB}$ , and ray  $BA$  as  $\overrightarrow{BA}$ .

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.



An angle is also formed by two sides of a shape meeting at a point.



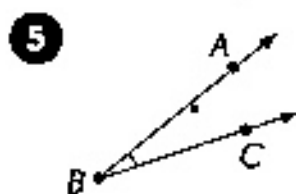
1 Angle at P:  $\angle$

2 Angle at Q:  $\angle$

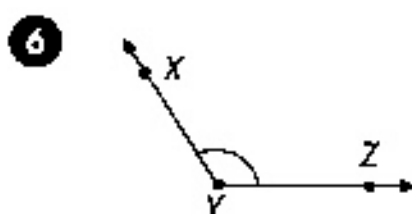
3 Angle at R:  $\angle$

4 Angle at S:  $\angle$

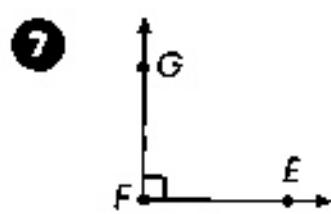
Name the angles.



$\angle$

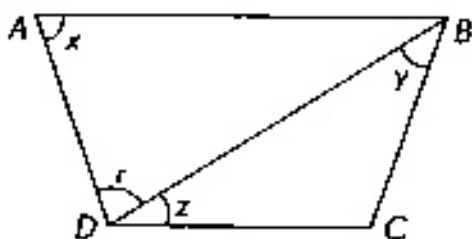


$\angle$



$\angle$

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  $\angle r$ :  $\angle$



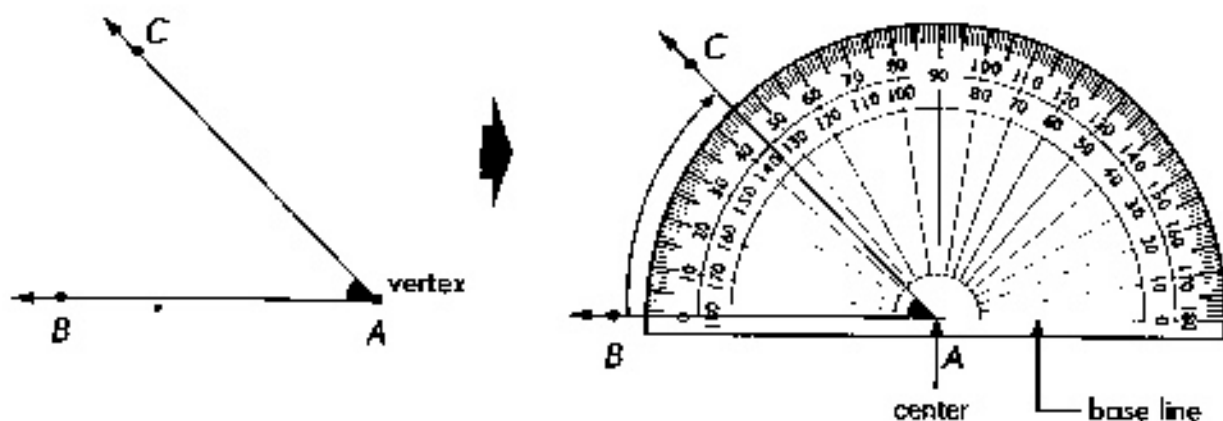
Learn

## 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  $90^\circ$ .

You can use a protractor to measure an angle.



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

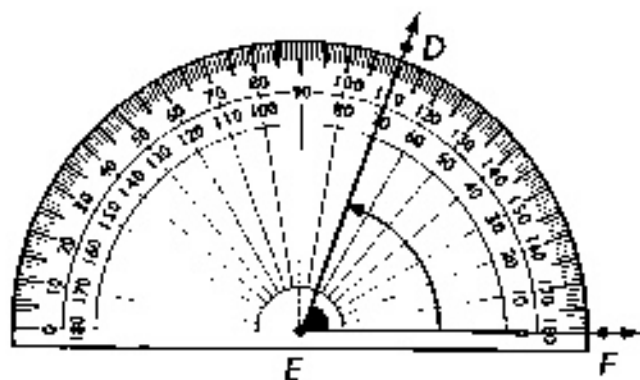
**Step 2** Place the center of the base line of the protractor at the vertex of the angle.

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



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.

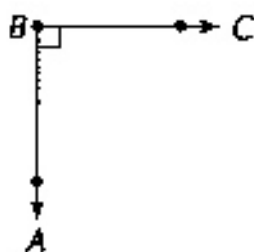
Measure of  $\angle DEF =$   °

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

### Guided Practice

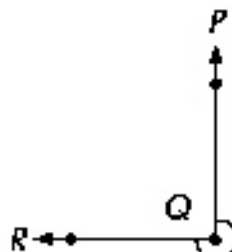
Complete.

12



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

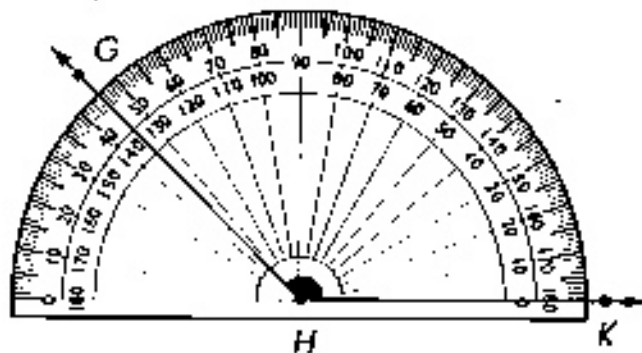
13



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

14

Measure  $\angle GHK$ .



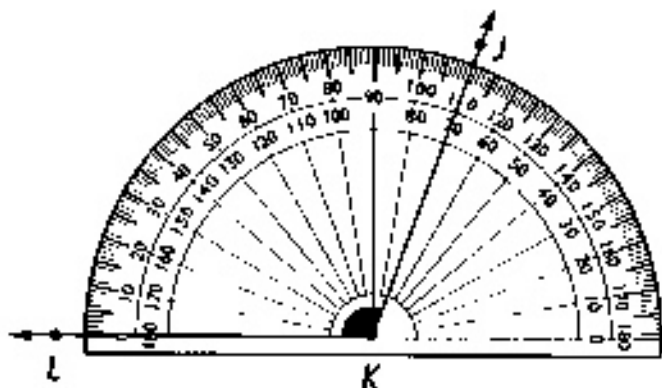
Is the measure of  $\angle GHK$  less than or greater than  $90^\circ$ ?

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  $90^\circ$ ?

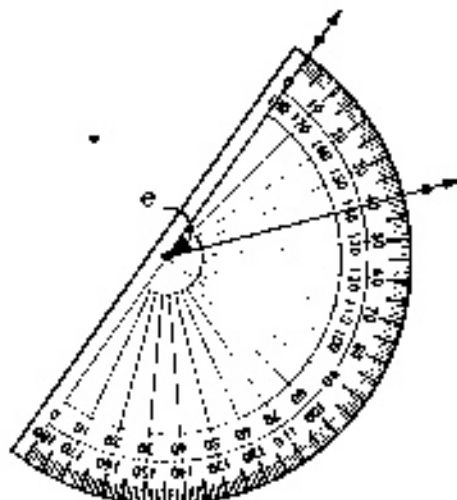
The measure of  $\angle JKL$  is \_\_\_\_\_ degrees.

Measure of  $\angle JKL =$  \_\_\_\_\_  $^\circ$

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

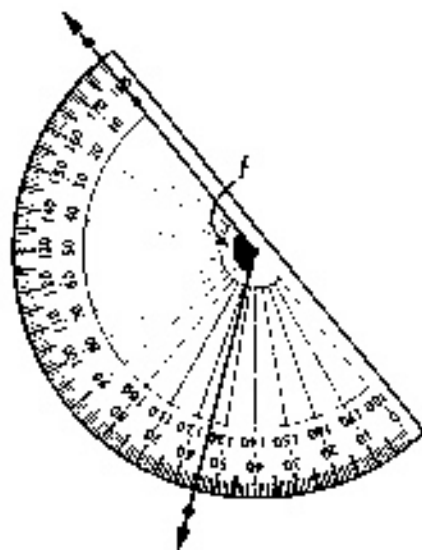
Find the measure of each angle.

16



Measure of  $\angle e =$  \_\_\_\_\_  $^\circ$

17



Measure of  $\angle f =$  \_\_\_\_\_  $^\circ$

**acute angle**

**obtuse angle**

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





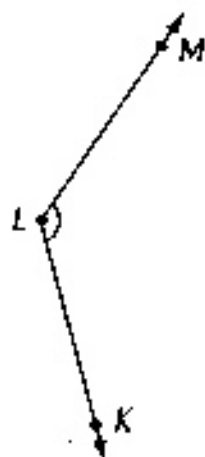
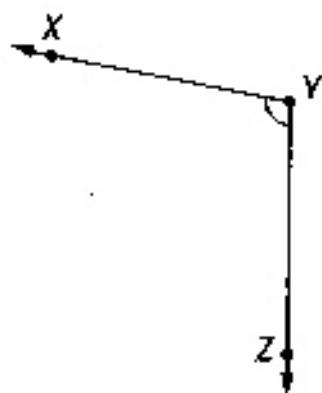
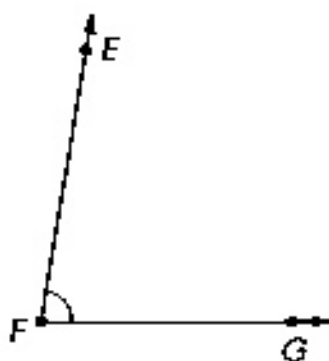
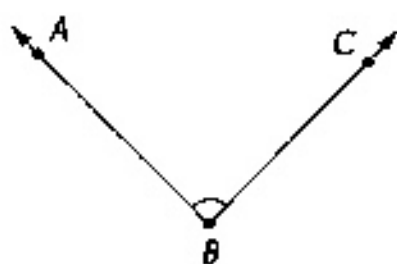
## Hands-On Activity



WORK IN PAIRS

Material:  
• protractor

Estimate the measure of each angle by comparing it to a right angle ( $90^\circ$ ). 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.

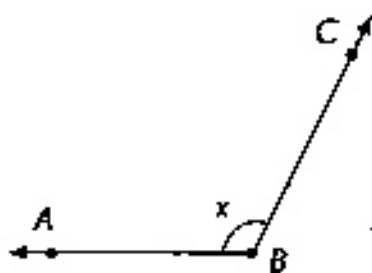
Angle	Estimated Measure	Actual Measure	Type of Angle
$\angle ABC$	$80^\circ$	$90^\circ$	Right Angle



# 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.

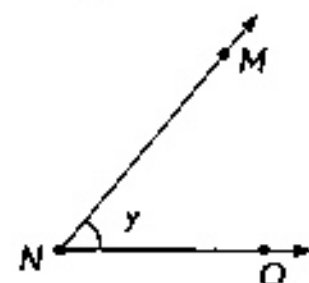
**Step**

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  $116^\circ$ .  
So, the angle measure is  $116^\circ$ .

**2** Acute angle



**Step**

Read the inner scale at the point where ray  $NM$  crosses it.  
The reading is  $50^\circ$ .  
So, the angle measure is  $50^\circ$ .

**Step**

Place the base line of the protractor on ray  $NO$ .

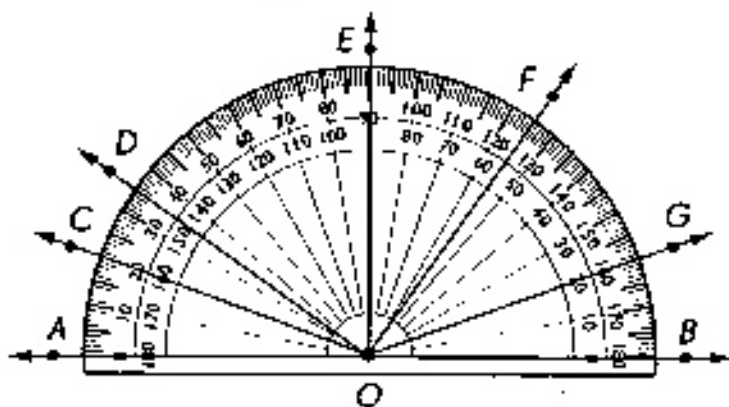
**Step**

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.

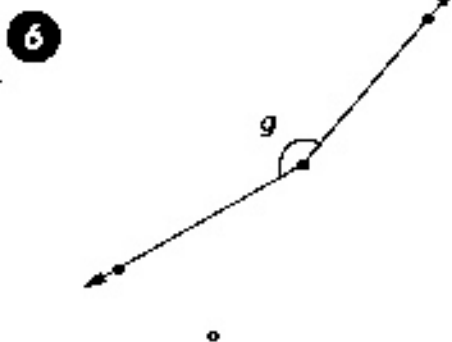
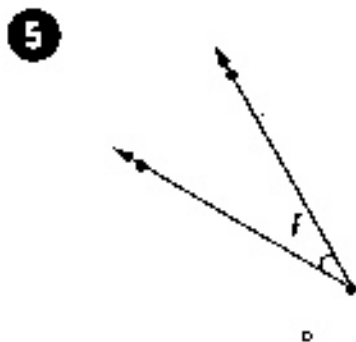
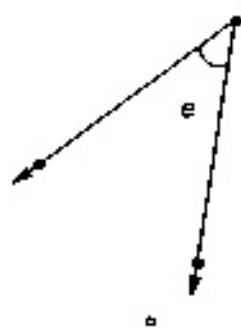
# Let's Practice

Name and measure the angles.

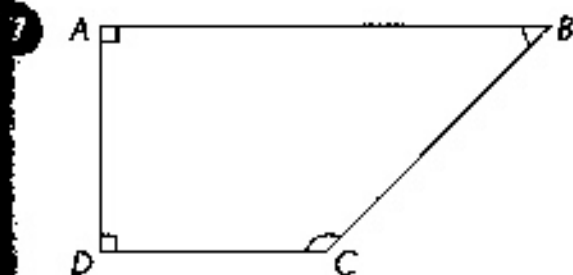


- 1 Name two angles that are right angles.
- 2 Name four angles that are acute angles.  
What are the measures of these angles?
- 3 Name four angles that are obtuse angles.  
What are the measures of these angles?

Use a protractor to find the measure of each angle.



Use a protractor to measure each marked angle.



ON YOUR OWN

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