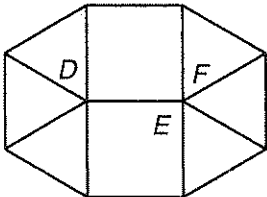


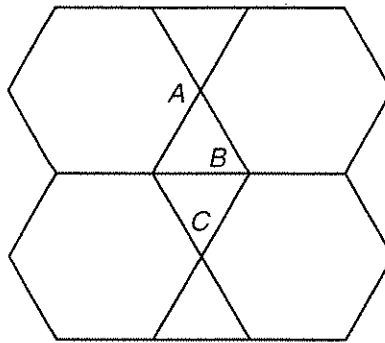
**STUDY LINK**  
**3•3**

# Finding Angle Measures

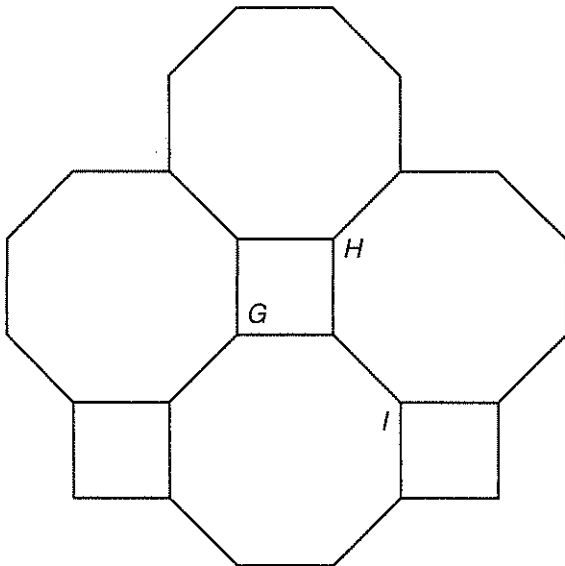


Figure out the angle measures for the labeled angles in the patterns below. Remember that there are  $360^\circ$  in a circle and  $180^\circ$  in a straight line. Use the Geometry Template, or cut out the shapes at the bottom of this page to help you. Do not use a protractor.

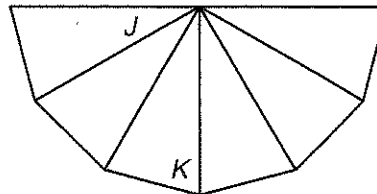
1.   $m\angle D =$  \_\_\_\_\_  
 $m\angle E =$  \_\_\_\_\_  
 $m\angle F =$  \_\_\_\_\_

2. 

$m\angle A =$  \_\_\_\_\_  
 $m\angle B =$  \_\_\_\_\_  
 $m\angle C =$  \_\_\_\_\_

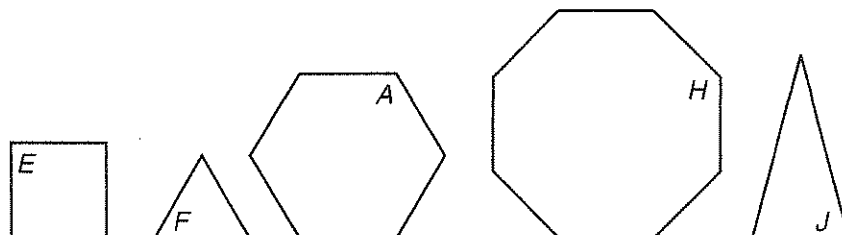
3. 

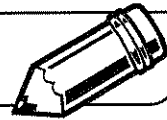
$m\angle G =$  \_\_\_\_\_  
 $m\angle H =$  \_\_\_\_\_  
 $m\angle I =$  \_\_\_\_\_

4. 

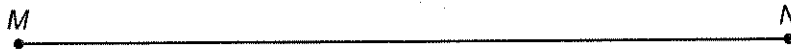
$m\angle J =$  \_\_\_\_\_  
 $m\angle K =$  \_\_\_\_\_

5. On the back of this page, explain how you found the measure of  $\angle I$ .



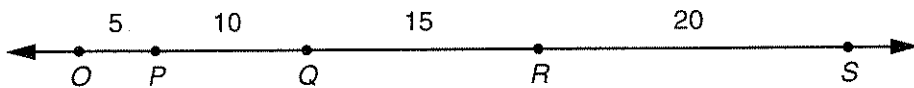
**LESSON**  
**3•3**
**Segments, Lengths, and Collinear Points**


In geometry, there are conventions used to name a figure and to name the measure of that figure. For example,  $\angle N$  names an angle with the vertex  $N$ , while the notation  $m\angle N$  represents the measure of that angle. For line segments, the notation  $\overline{NM}$  names the line segment with the endpoints  $N$  and  $M$ , and the notation  $NM$  represents the length of that line segment.



The notation  $NM = 4$  inches means *line segment  $\overline{NM}$  is 4 inches long.*

Use the points and measures shown on the line below to answer Problems 1 and 2.



1. Which of the following statements show the correct use of these naming conventions for line segments and the measures of line segments? Circle your answer.

a.  $PQ + QR + RS = PS$

b.  $\overline{OP} + \overline{PQ} = \overline{OQ}$

c.  $OP * 2 = \overline{PQ}$

d.  $\overline{OP} + \overline{QR} + \overline{RS} = 35$

2. For each statement with errors, write the corrections.

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3. Points that lie on the same line are called **collinear points**. The points  $H$ ,  $S$ ,  $D$ ,  $K$ ,  $L$ , and  $B$  are collinear. Use the following information to locate them on the line and label the points accordingly.

$$KS + SB = KB$$

$$DH + HS = DS$$

$$DH + HK = DK$$

Points  $L$  and  $B$  are not between any other labeled points on the line.

