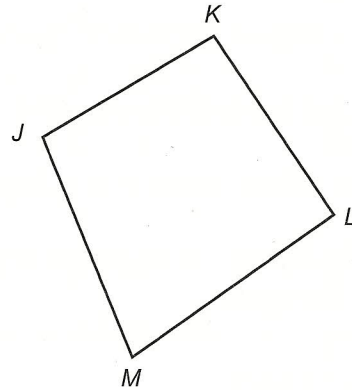


Practice

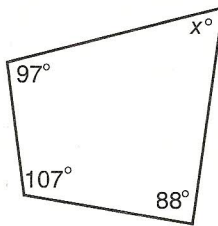
Quadrilaterals

1. Name a side that is consecutive with \overline{JK} .
2. Name the side opposite \overline{KL} .
3. Name the vertex that is opposite L .
4. Name a pair of consecutive vertices.
5. Name the angle opposite $\angle K$.

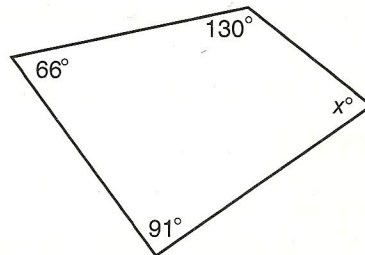


Find the missing measure(s) in each figure.

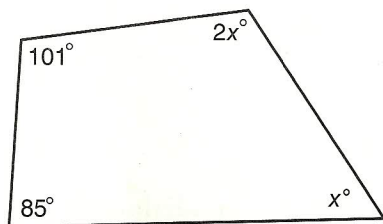
6.



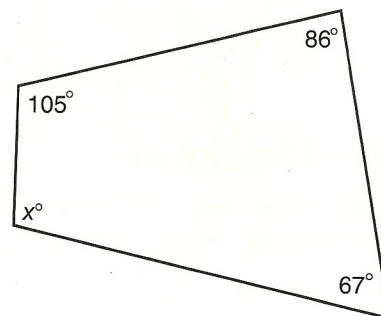
7.



8.



9.



Reading to Learn Mathematics

Quadrilaterals

Key Terms

quadrilateral a closed geometric figure with four sides and four vertices

consecutive sides (con•SEK•yoo•tiv) sides of a polygon that share a vertex

nonconsecutive sides sides of a polygon that do not share a vertex

diagonal (di•AG•en•el) a segment joining two nonconsecutive vertices of a polygon

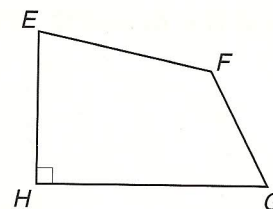
Reading the Lesson

- State whether each statement is *true* or *false*. If the statement is false, explain why.
 - Quadrilaterals are named by listing their vertices in order.
 - The segments that make up a quadrilateral intersect more than once.
 - The sides of a quadrilateral can also be called diagonals.
 - The sum of the measures of the angles of a quadrilateral is 300.

- Use the diagram of quadrilateral $EFGH$. In each exercise, use the given information to find the measure. Explain how you find the measure.

a. If $m\angle E = 70$, $m\angle F = 130$, find $m\angle G$.

b. If $m\angle E = x$, $m\angle F = 124$, and $m\angle G = x + 20$, find $m\angle G$.



Helping You Remember

- To help you remember the characteristics of a quadrilateral, sketch a quadrilateral. Label the vertices. Name the sides, angles, and diagonals of the quadrilateral.

Enrichment**Word Search**

R N B A S C V E S R E Q P O
 G E O M E T R Y U D Z A H B
 A T E J L S A I P T R U G T
 T R I A N G L E P A M E H U
 B A D V M X Y F L C A G B S
 E P C P W I B L E F I L N E
 L E T E S R E S M R D C O C
 A Z U R U L Q V E H G I G W
 C O M P L E M E N T A R Y H
 I I L E A F O W T J N C L G
 T D X N K R F E A M G L O E
 R N T D M A X N R O L E P L
 E E N I L Y Z L Y N E R Q G
 V A U C S B P O L L K P I N
 K S Q U A R E J H E M L J A
 T A P L A N E N T O L E Y T
 N S V A T C W U X Q R E S C
 I K O R P U C T P V M R T E
 O E Z Y Y A X S U B M O H R
 P W Z A D J A C E N T A F S
 S E G M E N T X Q W D G Z I

1. geometry
2. line
3. segment
4. plane
5. point
6. ray
7. angle
8. acute
9. right
10. obtuse
11. adjacent
12. complementary
13. supplementary
14. vertical
15. parallel
16. skew
17. perpendicular
18. triangle
19. polygon
20. rectangle
21. rhombus
22. square
23. trapezoid
24. circle