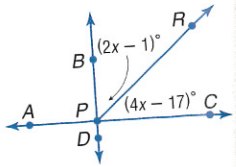
Extra Practice, see pages 754–755.
Mixed Problem Solving, see page 782.

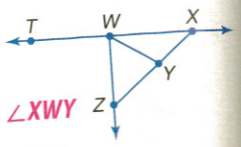
adjacent angles, vertical

ndicular.



6.

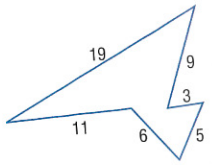
t the right.



x W. ∠TWY, ∠XWY
WZ. 27
11, find k so that ∠ZWX is a

egments.
he lengths of its sides.

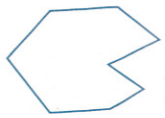
of perimeter
on



ber of sides. Then classify it as *convex*
ample 1 on page 46.

not a polygon

44.



octagon; concave; irregular

Example 3 on page 47.

≈ 22.5 units

), B(5, 1), C(9, 2), D(9, 5), E(5, 6), F(1, 5)
5), X(7, 1), Y(5, −4), Z(−5, 0) ≈ 32.3 units

Chapter 1

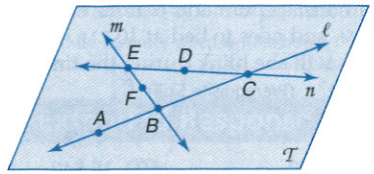
Practice Test

Determine whether each statement is *true* or *false*.

1. A plane contains an infinite number of lines. true
2. If two angles are congruent, then their measures are equal. true
3. The sum of two complementary angles is 180. false
4. Two angles that form a linear pair are supplementary. true

Skills and Applications

For Exercises 5–7, refer to the figure at the right.



5. Name the line that contains points B and F. m
6. Name a point not contained in lines ℓ or m. D
7. Name the intersection of lines ℓ and n. C

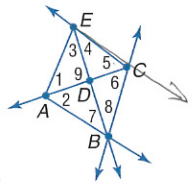
Find the value of the variable and VW if V is between U and W.

8. $UV = 2$, $VW = 3x$, $UW = 29$ $x = 9$; $VW = 27$
9. $UV = r$, $VW = 6r$, $UW = 42$ $r = 6$; $VW = 36$
10. $UV = 4p - 3$, $VW = 5p$, $UW = 15$ $p = 2$; $VW = 10$
11. $UV = 3c + 29$, $VW = -2c - 4$, $UW = -4c$ $c = -5$; $VW = 6$

Find the distance between each pair of points.

12. $G(0, 0)$, $H(-3, 4)$ 5
13. $N(5, 2)$, $K(-2, 8)$ $\sqrt{85} \approx 9.2$
14. $A(-4, -4)$, $W(-2, 2)$ $\sqrt{40} \approx 6.3$

For Exercises 15–18, refer to the figure at the right. 17. ∠ABD or ∠ABE



15. Name the vertex of ∠6. C
16. Name the sides of ∠4. $\overrightarrow{EC}$, $\overrightarrow{ED}$
17. Write another name for ∠7.
18. Write another name for ∠ADE. ∠9

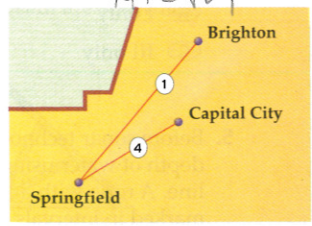
19. **ALGEBRA** The measures of two supplementary angles are $4r + 7$ and $r - 2$. Find the measures of the angles. 147, 33
20. Two angles are complementary. One angle measures 26 degrees more than the other. Find the measures of the angles. 32, 58

Find the perimeter of each polygon.

21. triangle PQR with vertices $P(-6, -3)$, $Q(1, -1)$, and $R(1, -5)$ ≈ 18.6 units
22. pentagon $ABCDE$ with vertices $A(-6, 2)$, $B(-4, 7)$, $C(0, 4)$, $D(0, 0)$, and $E(-4, -3)$ ≈ 24.8 units

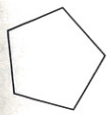
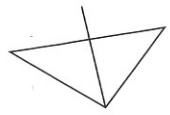
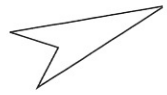
DRIVING **For Exercises 23 and 24, use the following information and the diagram.**

The city of Springfield is 5 miles west and 3 miles south of Capital City, while Brighton is 1 mile east and 4 miles north of Capital City. Highway 1 runs straight between Brighton and Springfield; Highway 4 connects Springfield and Capital City.



23. Find the length of Highway 1. ≈ 9.2 mi
24. How long is Highway 4? ≈ 5.8 mi

25. **STANDARDIZED TEST PRACTICE** Which of the following figures is *not* a polygon? C

Ⓐ 
Ⓑ
Ⓒ 
Ⓓ 

www.geometryonline.com/chapter_test

Chapter 1

Practice Test

Assessment Options

Vocabulary Test A vocabulary test/review for Chapter 1 can be found on p. 50 of the *Chapter 1 Resource Masters*.

Chapter Tests There are six Chapter 1 Tests and an Open-Ended Assessment task available in the *Chapter 1 Resource Masters*.

Chapter 1 Tests			
Form	Type	Level	Pages
1	MC	basic	37–38
2A	MC	average	39–40
2B	MC	average	41–42
2C	FR	average	43–44
2D	FR	average	45–46
3	FR	advanced	47–48

MC = multiple-choice questions
FR = free-response questions

Open-Ended Assessment
Performance tasks for Chapter 1 can be found on p. 49 of the *Chapter 1 Resource Masters*. A sample scoring rubric for these tasks appears on p. A25.

ExamView® Pro

Use the networkable **ExamView® Pro** to:

- Create **multiple versions** of tests.
- Create **modified** tests for Inclusion students.
- **Edit** existing questions and **add** your own questions.