

## ANSWERS FOR 8.1

For use with pages 378–379

### 8.1 Practice and Problem Solving

6.  $34^\circ$   
8.  $m\angle 1 = 80^\circ$ ,  
 $m\angle 2 = m\angle 3 = 100^\circ$   
10.  $m\angle 2 = 58^\circ$ ,  
 $m\angle 3 = 122^\circ$ ,  
 $m\angle 4 = 58^\circ$   
12. No; parallel lines never intersect.  
14.  $m\angle 1 = m\angle 3 = m\angle 6 = m\angle 8 = 136^\circ$ ;  
 $m\angle 2 = m\angle 4 = m\angle 5 = m\angle 7 = 44^\circ$   
16.  $x = 5$ ;  $m\angle 1 = 40^\circ$ ,  
 $m\angle 2 = 140^\circ$   
18.  $n = 13$ ;  $m\angle 4 = 130^\circ$ ,  
 $m\angle 5 = 130^\circ$

### 8.1 Mixed Review

20.  $\frac{13}{200}$       22.  $6\frac{1}{50}$   
24.  $18\text{ cm}^2$

### 8.1 Test-Taking Practice

26. B

## ANSWERS FOR 8.2

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### 8.2 Practice and Problem Solving

6. acute      8. obtuse  
10. equilateral  
12. 58; acute  
14. 32; obtuse  
16. No; the sum of the measures of the angles is  $181^\circ$ .  
18. Yes; the sum of the measures of the angles is  $180^\circ$ .  
20.  $25^\circ$ ,  $70^\circ$ ,  $85^\circ$   
22. Each angle measures  $60^\circ$ .  
24. No. *Sample Answer:* The sum of two supplementary angles is  $180^\circ$ , which is the same as the sum of all three angles of any triangle.

### 8.2 Mixed Review

26. 50 m,  $156\text{ m}^2$   
28.  $161^\circ$

### 8.2 Test-Taking Practice

30. F

## ANSWERS FOR 8.3

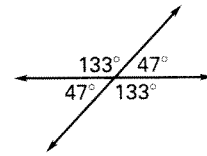
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### 8.3 Practice and Problem Solving

8. 1.3 cm, 2.5 cm; parallelogram  
10. 1.3 cm; parallelogram, rhombus, rectangle, square  
12. 105  
14.  $x = 140$ ,  $y = 40$   
16.  $x = 72$ ,  $y = 73$   
18. always  
20. always  
22. sometimes  
24. 40;  $m\angle J = 40^\circ$ ,  $m\angle K = 133^\circ$ ,  
 $m\angle L = 41^\circ$ ,  $m\angle M = 146^\circ$   
26.  $x = 88$ ,  $y = 58$ . *Sample Answer:* Because the sum of the angles in a quadrilateral is  $360^\circ$ ,  $x = 360 - (60 + 122 + 90) = 88$ , and  $y = 360 - [90 + (180 - 60) + (180 - 88)] = 58$ .

### 8.3 Mixed Review

28. 5  
30.



32. always

### 8.3 Test-Taking Practice

34. D