LESSON 10.5

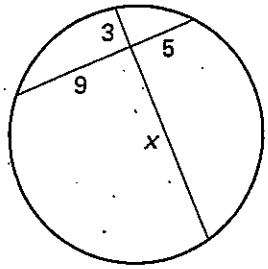
NAME _____ DATE _____

Practice A

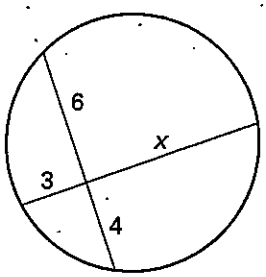
For use with pages 629–635

Fill in the blanks. Then find the value of x.

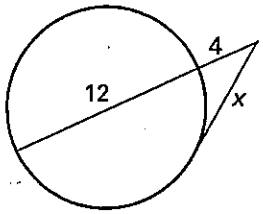
1. $x \cdot \underline{?} = 5 \cdot \underline{?}$



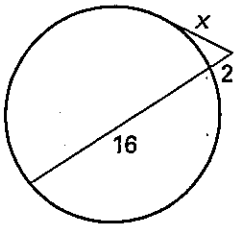
2. $6 \cdot \underline{?} = 3 \cdot \underline{?}$



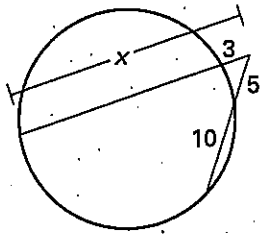
3. $x^2 = 4 \cdot \underline{?}$



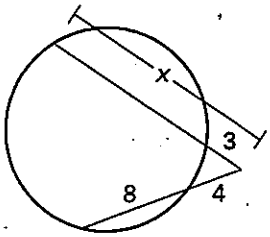
4. $x^2 = 2 \cdot \underline{?}$



5. $3 \cdot \underline{?} = 5 \cdot \underline{?}$

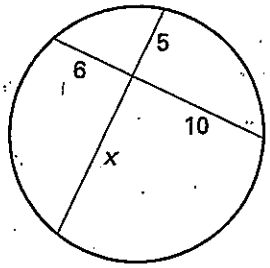


6. $3 \cdot \underline{?} = 4 \cdot \underline{?}$

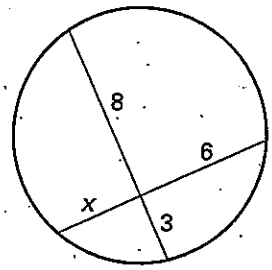


Find the value of x.

7.



8.



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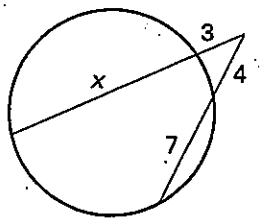

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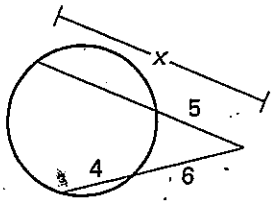

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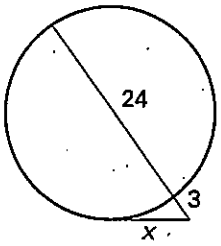

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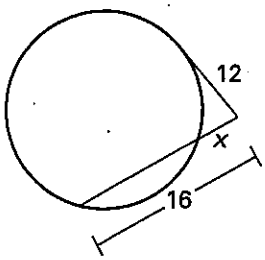
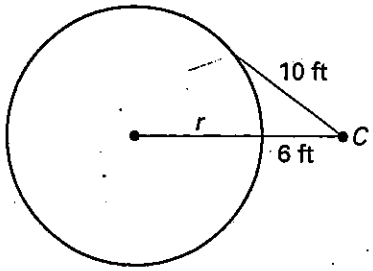


Use the diagram at the right and the given information.

13. *Water Tank* You want to estimate the radius of the town's circular water tank. You stand at point C, about 6 feet from the circular tank. The distance from you to a point of tangency on the tank is about 10 feet. Estimate the radius of the tank.



LESSON 10.5

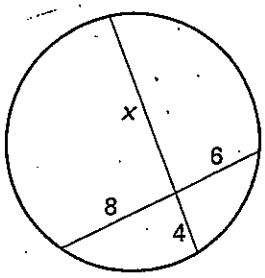
NAME _____ DATE _____

Practice B

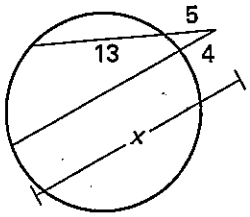
For use with pages 629–635

Fill in the blanks. Then find the value of x.

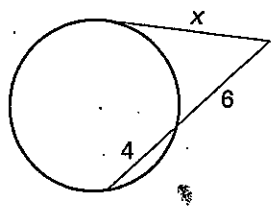
1. $x \cdot$? $= 8 \cdot$?



2. $4 \cdot$? $= 5 \cdot$?

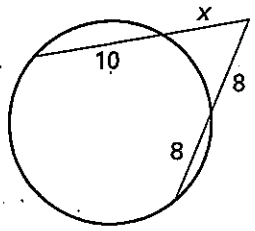


3. $x^2 = 6 \cdot$?



Find the value of x. Round to the nearest tenth, if necessary.

4.



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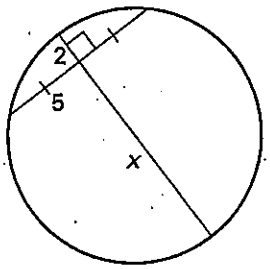

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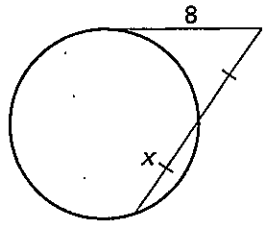

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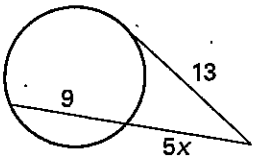

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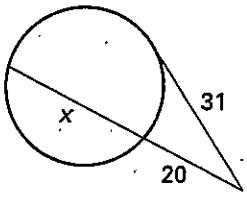

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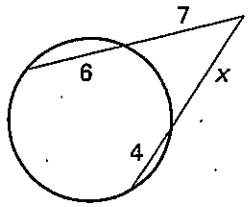

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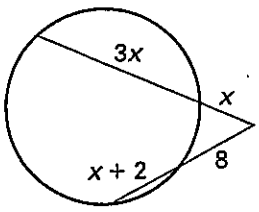

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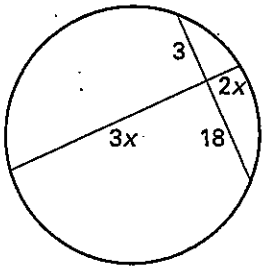

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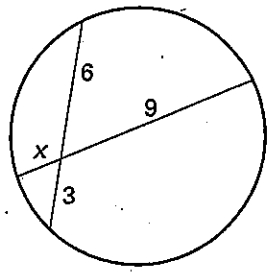
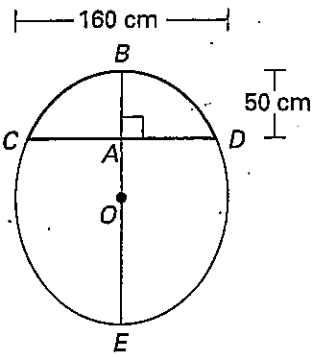


Use the diagram at the right and the given information.



13. *Doorway* An arch over a doorway is 160 centimeters wide and 50 centimeters high. You want to determine the radius of the circle that contains the arch. Follow the steps below.

   a. $AB =$?

   b. $AC =$?, $AD =$?

   c. $EA =$?

   d. $EB =$?

   e. $EO =$?

LESSON 10.4

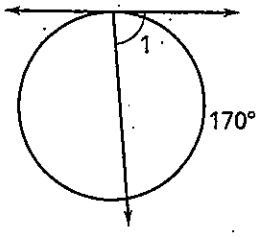
NAME _____ DATE _____

Standardized Test Practice

For use with pages 621–627

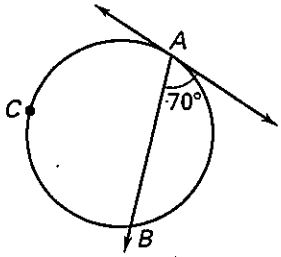
TEST TAKING STRATEGY **The mathematical portion of the SAT is based on material taught in your high school mathematics courses. One of the best ways to prepare for the SAT is to keep up with your regular studies and do your homework.**

1. *Multiple Choice* Find $m\angle 1$.



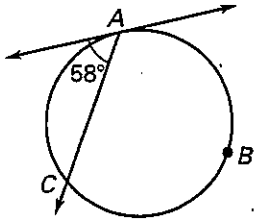
Ⓐ 170° Ⓑ 85° Ⓒ 190° Ⓓ 95° Ⓔ 340°

2. *Multiple Choice* Find $m\overset{\frown}{AB}$.



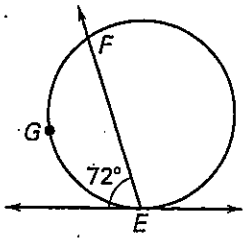
Ⓐ 110° Ⓑ 70° Ⓒ 140° Ⓓ 220° Ⓔ 35°

3. *Multiple Choice* Find $m\overset{\frown}{ABC}$.



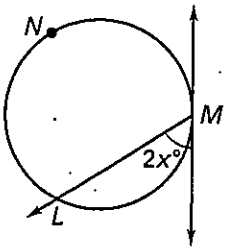
Ⓐ 58° Ⓑ 116° Ⓒ 122° Ⓓ 29° Ⓔ 244°

4. *Multiple Choice* If $m\overset{\frown}{EGF} = (6x + 12)°$, find the value of x.



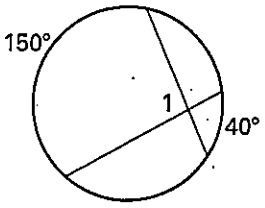
Ⓐ 22 Ⓑ 11 Ⓒ 16 Ⓓ 10 Ⓔ 20

5. *Multiple Choice* If $m\overset{\frown}{LNM} = (8x + 12)°$, find the value of x.



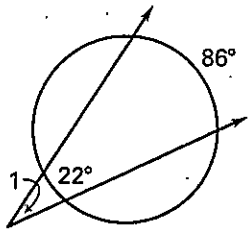
Ⓐ 14 Ⓑ 16.8 Ⓒ 28 Ⓓ 29 Ⓔ 34.8

6. *Multiple Choice* Find $m\angle 1$.



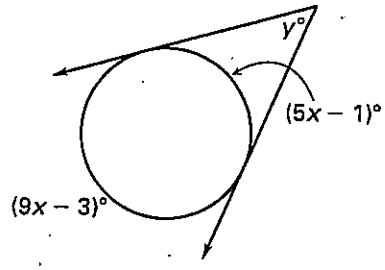
Ⓐ 75° Ⓑ 190° Ⓒ 95° Ⓓ 150° Ⓔ 40°

7. *Multiple Choice* Find $m\angle 1$.



Ⓐ 64° Ⓑ 32° Ⓒ 108° Ⓓ 54° Ⓔ 86°

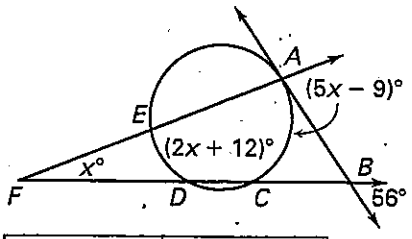
8. *Multiple Choice* Find the value of y.



Ⓐ 26 Ⓑ 77 Ⓒ 102 Ⓓ 51 Ⓔ 52

Quantitative Comparison In Exercises 9 and 10, choose the statement that is true.

Ⓐ The value in column A is greater.
Ⓑ The value in column B is greater.
Ⓒ The two values are equal.
Ⓓ The relationship cannot be determined from the given information.



	Column A	Column B
9.	$m\angle EAB$	$m\overset{\frown}{AC}$
10.	$m\overset{\frown}{CD}$	$m\overset{\frown}{AE}$

LESSON 10.3

NAME _____ DATE _____

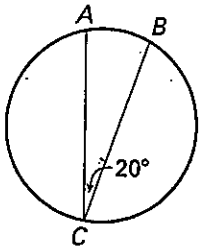
Standardized Test Practice

For use with pages 613–620

TEST TAKING STRATEGY **If you find yourself spending too much time on one test question and getting frustrated, move on to the next question. You can revisit a difficult problem later with a fresh perspective.**

1. *Multiple Choice* What is $m\overset{\frown}{AB}$?

Ⓐ 10° Ⓑ 20°
Ⓒ 30° Ⓓ 40°
Ⓔ 60°

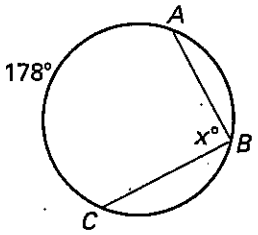


2. *Multiple Choice* If an inscribed angle has a measure of 100°, what is the measure of the intercepted arc?

Ⓐ 100° Ⓑ 200° Ⓒ 50°
Ⓓ 0° Ⓔ 180°

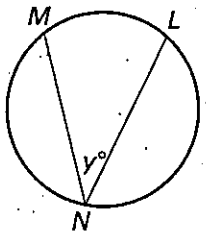
3. *Multiple Choice* Find the value of x.

Ⓐ 178 Ⓑ 356
Ⓒ 89 Ⓓ 182
Ⓔ 91



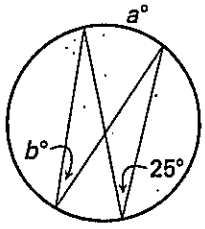
4. *Multiple Choice* If $m\overset{\frown}{LNM} = 280°$, find the value of y.

Ⓐ 40 Ⓑ 80
Ⓒ 160 Ⓓ 140
Ⓔ 280



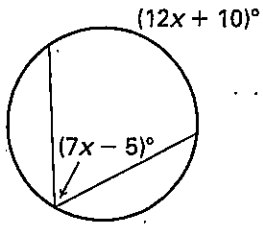
5. *Multiple Choice* Find the values of a and b.

Ⓐ $a = 50, b = 50$
Ⓑ $a = 25, b = 50$
Ⓒ $a = 50, b = 25$
Ⓓ $a = 25, b = 25$
Ⓔ $a = 100, b = 25$



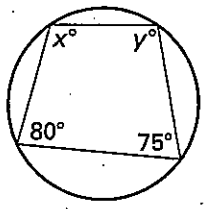
6. *Multiple Choice* Find the value of x.

Ⓐ 5 Ⓑ 3
Ⓒ 8 Ⓓ 10
Ⓔ 7.5



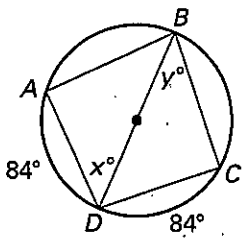
7. *Multiple Choice* Find the values of x and y.

Ⓐ $x = 80, y = 75$
Ⓑ $x = 105, y = 100$
Ⓒ $x = 75, y = 80$
Ⓓ $x = 100, y = 105$
Ⓔ $x = 90, y = 115$

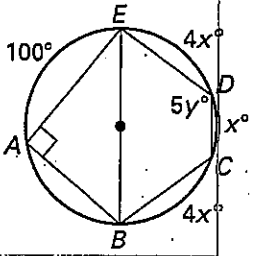


8. *Multiple Choice* Find the values of x and y.

Ⓐ $x = 6, y = 84$
Ⓑ $x = 42, y = 48$
Ⓒ $x = 42, y = 42$
Ⓓ $x = 90, y = 84$
Ⓔ $x = 48, y = 42$



Quantitative Comparison In Exercises 9 and 10, use the diagram to choose the statement below that is true.

Ⓐ The value in column A is greater.
Ⓑ The value in column B is greater.
Ⓒ The two values are equal.
Ⓓ The relationship cannot be determined from the given information.

	Column A	*Column B*
9.	$m\overset{\frown}{AB}$	$m\overset{\frown}{ED}$
10.	x	y